



**AGENDA**  
**CITY COUNCIL OF THE CITY OF MORENO VALLEY**  
**MORENO VALLEY COMMUNITY SERVICES DISTRICT**  
**CITY AS SUCCESSOR AGENCY FOR THE**  
**COMMUNITY REDEVELOPMENT AGENCY OF**  
**THE CITY OF MORENO VALLEY**  
**MORENO VALLEY HOUSING AUTHORITY**  
**BOARD OF LIBRARY TRUSTEES**

**October 13, 2015**

**REGULAR MEETING – 6:00 PM**

**City Council Study Sessions**

First & Third Tuesdays of each month – 6:00 p.m.

**City Council Meetings**

Special Presentations – 5:30 P.M.

Second & Fourth Tuesdays of each month – 6:00 p.m.

**City Council Closed Session**

*Will be scheduled as needed at 4:30 p.m.*

City Hall Council Chamber – 14177 Frederick Street

Teleconference: Agenda Item G.2

TownePlace Suites Boston North/Danvers

238 Andover Street

Danvers, MA 01923

*Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities, in compliance with the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to Guy Pegan, ADA Coordinator, at 951.413.3120 at least 48 hours before the meeting. The 48-hour notification will enable the City to make reasonable arrangements to ensure accessibility to this meeting.*

Dr. Yxstian A. Gutierrez, Mayor Pro Tem  
Jeffrey J. Giba, Council Member

Jesse L. Molina, Mayor

George E. Price, Council Member  
D. LaDonna Jempson, Council Member

**AGENDA**  
**CITY COUNCIL OF THE CITY OF MORENO VALLEY**  
**October 13, 2015**

**CALL TO ORDER - 5:30 PM**

**SPECIAL PRESENTATIONS**

1. Moreno Valley Police Department - Officer of the 2nd Quarter – Officer Jason Vickers
  
2. Employee of the Quarter, 2nd Quarter, 2015 - Timothy Carroll, Media & Production Coordinator
  
3. Business Spotlight 1. Z&M Tailoring (District 5) 2. Marshall Scott State Farm Insurance and Financial Services Agency (District 5)

**AGENDA  
JOINT MEETING OF THE  
CITY COUNCIL OF THE CITY OF MORENO VALLEY  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
CITY AS SUCCESSOR AGENCY FOR THE  
COMMUNITY REDEVELOPMENT AGENCY OF THE  
CITY OF MORENO VALLEY  
MORENO VALLEY HOUSING AUTHORITY  
AND THE BOARD OF LIBRARY TRUSTEES**

**\*THE CITY COUNCIL RECEIVES A SEPARATE STIPEND FOR CSD  
MEETINGS\***

**REGULAR MEETING – 6:00 PM  
OCTOBER 13, 2015**

**CALL TO ORDER**

Joint Meeting of the City Council, Community Services District, City as Successor Agency for the Community Redevelopment Agency, Housing Authority and the Board of Library Trustees - actions taken at the Joint Meeting are those of the Agency indicated on each Agenda item.

**PLEDGE OF ALLEGIANCE**

**INVOCATION**

Minister Sam King, Church of Christ Moreno Valley

**ROLL CALL**

**INTRODUCTIONS**

**PUBLIC COMMENTS ON MATTERS ON THE AGENDA WILL BE TAKEN UP AS THE ITEM IS CALLED FOR BUSINESS, BETWEEN STAFF'S REPORT AND CITY COUNCIL DELIBERATION (SPEAKER SLIPS MAY BE TURNED IN UNTIL THE ITEM IS CALLED FOR BUSINESS.)**

**PUBLIC COMMENTS ON ANY SUBJECT NOT ON THE AGENDA UNDER THE JURISDICTION OF THE CITY COUNCIL**

Those wishing to speak should complete and submit a BLUE speaker slip to the Bailiff. There is a three-minute time limit per person. All remarks and questions shall be addressed to the presiding officer or to the City Council.

**JOINT CONSENT CALENDARS (SECTIONS A-D)**

All items listed under the Consent Calendars, Sections A, B, C, and D are considered to be routine and non-controversial, and may be enacted by one motion unless a member of the City Council, Community Services District, City as Successor Agency for the Community Redevelopment Agency, Housing Authority or the Board of Library Trustees

requests that an item be removed for separate action. The motion to adopt the Consent Calendars is deemed to be a separate motion by each Agency and shall be so recorded by the City Clerk. Items withdrawn for report or discussion will be heard after public hearing items.

#### **A. CONSENT CALENDAR-CITY COUNCIL**

- A.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- A.2. MINUTES - CITY COUNCIL - REGULAR MEETING - SEP 22, 2015 6:00 PM

**Recommendation:** Approve as submitted.

- A.3. CITY COUNCIL REPORTS ON REIMBURSABLE ACTIVITIES (Report of: City Clerk)

**Recommendation:**

1. Receive and file the Reports on Reimbursable Activities for the period of September 2 – October 6, 2015.

- A.4. PAYMENT REGISTER - AUGUST 2015 (Report of: Financial & Management Services)

**Recommendation:**

1. Receive and file the Payment Register.

- A.5. AUTHORIZATION TO SUBMIT SUSTAINABLE TRANSPORTATION PLANNING GRANT APPLICATION TO CALTRANS AND RESOLUTION NO. 2015-64 AUTHORIZING THE CITY MANAGER TO EXECUTE AGREEMENTS WITH CALTRANS FOR TRANSPORTATION PLANNING GRANTS (Report of: Public Works)

**Recommendations:**

1. Authorize staff to submit an application for a Sustainable Transportation Planning Grant.
2. Adopt Resolution No. 2015-64. A Resolution of the City Council of the City of Moreno Valley, California, Authorizing the City Manager to Execute Agreements with Caltrans for the Moreno Valley Dracaea Avenue Corridor Master Plan.

- A.6. FUNDING APPROPRIATION AND AUTHORIZATION TO AWARD AGREEMENT FOR PROFESSIONAL CONSULTANT SERVICES FOR THE

HUBBARD STREET STORM DRAIN PROJECT PROJECT NO. 804 0010 70  
77 (Report of: Public Works)

**Recommendations:**

1. Approve the appropriation of \$200,000 from the unencumbered General Fund fund balance to the Hubbard Street Storm Drain design: GL Account No. 1010-70-77-80004-720199, Project No. 804 0010-1010-99.
2. Authorize the City Manager to award and execute a Professional Consultant Services Agreement for the Hubbard Street Storm Drain design, if it is within the project budget, subject to approval by the City Attorney.
3. Authorize the issuance of a Purchase Order in an amount not to exceed \$175,000.00 when the Agreement has been signed by all parties.
4. Authorize the Public Works Director/City Engineer to execute any subsequent amendments to the Agreement for Professional Consultant Services, not to exceed the Purchase Order amount, subject to the approval of the City Attorney.

A.7. LIST OF PERSONNEL CHANGES (Report of: Administrative Services)

**Recommendation:**

1. Ratify the list of personnel changes as described.

A.8. THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES FOR REGULATORY PARTICIPATION IN SCE'S 2015 GENERAL RATE CASE (Report of: Public Works)

**Recommendation:**

1. Approve a Third Amendment to Agreement for Legal Services for Regulatory Participation in SCE's 2015 General Rate Case.

A.9. PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL NUMBER ASSOCIATED WITH TENTATIVE TRACT 31592 (P13-078 - EAST OF PERRIS BLVD., NORTH OF MANZANITA AVE. ) INTO COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES) — AS AMENDMENT NO. 8 (Report of: Public Works)

**Recommendation:**

1. That the City Council acting as the legislative body of Community

Facilities District No. 2014-01 (Maintenance Services) approve and adopt Resolution No. 2015-65, a Resolution of the City Council of the City of Moreno Valley, California, Ordering the Annexation of Territory to City of Moreno Valley Community Facilities District No. 2014-01 (Maintenance Services) and Approving the Amended Map for said District.

## **B. CONSENT CALENDAR-COMMUNITY SERVICES DISTRICT**

- B.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- B.2. MINUTES - REGULAR MEETING OF SEPTEMBER 22, 2015 (See A.2)

**Recommendation:** Approve as submitted.

- B.3. PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONES 01 AND E-7 (Report of: Public Works)

### **Recommendations:**

1. Authorize Participation in Metropolitan Water District's (MWD) Turf Removal Program for a Rebate of up to \$372,252 (\$88,192 for the benefit of Community Services District (CSD) Zone E-7 (E-7) and up to \$284,060.00 for the benefit of CSD Landscape Maintenance District (LMD) 2014-02 Zone 01(01) landscape maintenance districts.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement (2015/16 Agreement) for Project No. SD-2015-01 for Landscape Maintenance Services (First Amendment) with Landcare, 1616 Marlborough Avenue, Building S, Riverside, CA 92507 to replace turf with drought tolerant landscape and irrigation materials (Additional Work) in those areas listed on Exhibits A and B of the First Amendment.
3. Approve budget adjustments to the CSD Zones E-7 and 01 budgets as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Landcare, which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, and the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.

5. Authorize the issuance of a change order for fiscal year 2015/16 to Landcare from the current not-to-exceed amount of \$201,768.56 to a new not-to-exceed amount of \$740,173.56 for an increase of \$538,405.00 (\$498,243.00 \$142,600.00 for Zone E-7 and \$395,805.00 for Zone 01 for Additional Work services).

**B.4. PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONE D (Report of: Public Works)**

**Recommendations:**

1. Authorize participation in Metropolitan Water District's (MWD) Turf Removal Program for a rebate of up to \$529,058.00 for the benefit of Community Services District (CSD) Zone D landscape maintenance district.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement (2015/16 Agreement) for Project No. DSG-2/12-13 for Landscape Maintenance Services (First Amendment) with Mariposa Landscape Services, Inc., 15529 Arrow Highway, Irwindale, CA 91706 to: 1) replace turf with drought tolerant landscape and irrigation materials (Additional Work) in those areas listed on Exhibits A and B of the First Amendment and 2) increase the frequency of routine landscape maintenance (Base Work) for Tract 20715.
3. Approve a budget adjustment to the CSD Zone D budget as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Mariposa Landscapes, Inc., which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, which may include future Amendments to capture unforeseen costs associated with the turf conversion that may be performed to receive available rebate allowance, and the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.
5. Authorize the issuance of a change order for fiscal year 2015/16 to Mariposa Landscapes, Inc. from the current not-to-exceed amount of \$279,888.44 to a new not-to-exceed amount of \$779,355.21 for an increase of \$499,466.77 (\$498,243.00 for Additional Work services and an annual increase of \$1,223.77 for Base Work services).
6. Authorize the City Manager to execute subsequent change orders up to a not-to-exceed 10% contingency amount of \$49,824.30 should the need arise.

**B.5. PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONE M (Report of: Public Works)**

**Recommendations:**

1. Authorize Participation in Metropolitan Water District's ("MWD") Turf Removal Program for a Rebate of up to \$125,592.00 for the benefit of Community Services District ("CSD") Zone M landscape maintenance district.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement for Project No. M/12-13 for Landscape Maintenance Services ("First Amendment") with Landcare (formerly TruGreen Landcare), 1616 Marlborough Avenue, Suite S, Riverside, CA 92507 to: 1) replace turf with drought tolerant landscape and irrigation materials ("Additional Work") in those areas listed on Exhibits A and B of the First Amendment and 2) accept for routine landscape maintenance ("Base Work") the Alessandro Boulevard landscaped median located between Indian Avenue and Perris Boulevard.
3. Approve a budget adjustment to the CSD Zone M budget as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Landcare, which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, including the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.
5. Authorize the issuance of a change order for fiscal year 2015/16 to Landcare from the current not-to-exceed amount of \$78,949.71 to a new not-to-exceed amount of \$344,443.76, for an increase of \$265,494.05 (\$263,195.00 for Additional Work services and an increase of \$2,299.05 for Base Work services for eight months of service starting November 1, 2015).
6. Authorize the City Manager to execute subsequent change orders up to a not-to-exceed 10% contingency amount of \$26,319.50 should the need arise.

**B.6. CERTIFICATION OF SPECIAL ELECTION RESULTS FOR ANNEXATION NO. 2015-35 AND 2015-36 TO COMMUNITY FACILITIES DISTRICT NO. 1 (PARK MAINTENANCE) (Report of: Public Works)**

**Recommendation:**



1. That the Community Services District (CSD) of the City of Moreno Valley acting as the legislative body of Community Facilities District No. 1 (Park Maintenance) approve and adopt Resolution No. CSD 2015-30, a Resolution of the Community Services District of the City of Moreno Valley, Certifying the Results of two Elections and Adding Property to Community Facilities District No. 1 (Park Maintenance) for Annexation No. 2015-35 and 2015-36.

### **C. CONSENT CALENDAR - HOUSING AUTHORITY**

- C.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- C.2. MINUTES - REGULAR MEETING OF SEPTEMBER 22, 2015 (See A.2)

**Recommendation:** Approve as submitted.

### **D. CONSENT CALENDAR - BOARD OF LIBRARY TRUSTEES**

- D.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- D.2. MINUTES - REGULAR MEETING OF SEPTEMBER 22, 2015 (See A.2)

**Recommendation:** Approve as submitted.

### **E. PUBLIC HEARINGS - NONE**

Questions or comments from the public on a Public Hearing matter are limited to five minutes per individual and must pertain to the subject under consideration. Those wishing to speak should complete and submit a GOLDENROD speaker slip to the Bailiff.

### **F. ITEMS REMOVED FROM CONSENT CALENDARS FOR DISCUSSION OR SEPARATE ACTION**

### **G. REPORTS**

#### **G.1. CITY COUNCIL REPORTS ON REGIONAL ACTIVITIES**

(Informational Oral Presentation - not for Council action)

March Joint Powers Commission (JPC)

Riverside County Habitat Conservation Agency (RCHCA)

Riverside County Transportation Commission (RCTC)

Riverside Transit Agency (RTA)

Western Riverside Council of Governments (WRCOG)

Western Riverside County Regional Conservation Authority (RCA)

School District/City Joint Task Force

Southern California Association of Governments (SCAG)

**G.2. PROPOSED BUDGET ADJUSTMENTS - CROSSING GUARD PROGRAM  
(Report of: City Manager)**

**Recommendations: That the City Council:**

1. Approve the amendments to the Position Control Roster as detailed in Table 1 of this staff report.
2. Approve the budget adjustments to the Gas Tax Fund budget as set forth in Table 2 in the Fiscal Impact section of this report.

**G.3. APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING LOGISTICS INDUSTRY TRAINING AND EDUCATION (Report of: City Clerk)**

**Recommendations: That the City Council:**

1. Approve Resolution No. 2015-66, a Resolution of the City Council of the City of Moreno Valley, California, Establishing a Logistics Industry Training / Education Ad Hoc Committee of the City Council.
2. Appoint two members of the City Council to serve as the Ad Hoc Committee tasked with working with community stakeholders to guide the development of Logistics Industry Training / Education.

**G.4. ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 2015-68 CONFIRMING CONSIDERATION OF THE ADOPTED PROGRAM ENVIRONMENTAL IMPACT REPORT AND ITS ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM (Report of: Public Works)**

**Recommendations: That the City Council:**

1. Adopt Resolution No. 2015-67, a Resolution of the City Council of the City of Moreno Valley, California, adopting the Moreno Master

Drainage Plan (Revision No. 2).

2. Adopt Resolution No. 2015-68, a Resolution of the City Council of the City of Moreno Valley, California, to consider as a Responsible Agency the Certified Program Environmental Impact Report for the Moreno Master Drainage Plan (Revision No. 2) and its associated Mitigation Monitoring and Reporting Program.

**G.5. APPOINTMENTS TO THE LIBRARY COMMISSION AND THE RECREATIONAL TRAILS BOARD (Report of: City Clerk)**

**Recommendations: That the City Council:**

1. Appoint one applicant to the Library Commission with a term expiring June 30, 2017.
2. Appoint one applicant to the Recreational Trails Board with a term expiring June 30, 2018 and two applicants with terms expiring June 30, 2016.
3. If vacancies are not filled by a majority vote of the City Council, authorize the City Clerk to re-advertise the positions as vacant and carry over the current applications for reconsideration of appointment at a future date.

**G.6. SELECT A FUNDING AND FINANCING ALTERNATIVE FOR THE \$25.1 MILLION IN IDENTIFIED INFRASTRUCTURE PROJECTS FOR THE MORENO VALLEY UTILITY AND DIRECT STAFF TO IMPLEMENT THE SELECTED ALTERNATIVE (Report of: Financial & Management Services)**

**Recommendations: That the City Council:**

1. Select a funding and financing alternative for the \$25.1 million in identified infrastructure projects for the Moreno Valley Utility (MVU).
2. Direct staff to implement the selected alternative.

**G.7. CITY MANAGER'S REPORT**

(Informational Oral Presentation - not for Council action)

**G.8. CITY ATTORNEY'S REPORT**

(Informational Oral Presentation - not for Council action)

**H. LEGISLATIVE ACTIONS**

**H.1. ORDINANCES - 1ST READING AND INTRODUCTION**

H.1.1. INTRODUCE ORDINANCE NO. 907, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, REPEALING ORDINANCE NO. 860 AND DELETING CHAPTER 2.4 OF TITLE 2 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO THE JULY 4TH ADVISORY BOARD. (Report of: Parks & Community Services)

**Recommendation: That the City Council:**

1. Introduce Ordinance No. 907. An Ordinance of the City Council of the City of Moreno Valley, California, Repealing Ordinance No. 860 and Deleting Chapter 2.64 of Title 2 of the City of Moreno Valley Municipal Code Relating to the July 4<sup>th</sup> Advisory Board.

**H.2. ORDINANCES - 2ND READING AND ADOPTION**

H.2.1. ADOPT ORDINANCE EMERGENCY FLOODING – SINGLE SOURCE AND SOLE SOURCE (RECEIVED INTRODUCTION AND FIRST READING ON SEPTEMBER 22, 2015 ON A 4-0-1 VOTE, GUTIERREZ ABSENT) (Report of: City Attorney) **Second reading of Ordinance**

**Recommendations: That the City Council:**

1. Adopt Ordinance No. 903. An Ordinance of the City Council of the City of Moreno Valley, California, which allows the City to purchase goods, materials, and services through single and/or sole sourcing in response to and in preparation of the impending threat of flooding which is anticipated to be caused by El Niño.

H.2.2. ADOPT ORDINANCE NO. 904. AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, AMENDING SECTION 6.04.040 OF CHAPTER 6.04 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO PUBLIC NUISANCES (RECEIVED INTRODUCTION AND FIRST READING ON SEPTEMBER 22, 2015 ON A 4-0-1 VOTE, GUTIERREZ ABSENT) (Report of: Public Works) **Second reading of Ordinance**

**Recommendation: That the City Council:**

1. Adopt Ordinance No. 904. An Ordinance of the City Council of the City of Moreno Valley, California, amending section 6.04.040 of Chapter 6.04 of the Moreno Valley Municipal Code relating to Public Nuisances.

**H.3. ORDINANCES - URGENCY ORDINANCES - NONE**

**H.4. RESOLUTIONS - NONE**

**CLOSING COMMENTS AND/OR REPORTS OF THE CITY COUNCIL, COMMUNITY SERVICES DISTRICT, CITY AS SUCCESSOR AGENCY FOR THE COMMUNITY REDEVELOPMENT AGENCY OR HOUSING AUTHORITY**

**ADJOURNMENT**

The contents of the agenda packet are available for public inspection on the City's website at [www.moval.org](http://www.moval.org) and in the City Clerk's office at 14177 Frederick Street during normal business hours.

Any written information related to an open session agenda item that is known by the City to have been distributed to all or a majority of the City Council less than 72 hours prior to this meeting will be made available for public inspection on the City's website at [www.moval.org](http://www.moval.org) and in the City Clerk's office at 14177 Frederick Street during normal business hours.

## **CERTIFICATION**

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, certify that 72 hours prior to this Regular Meeting, the City Council Agenda was posted on the City's website at: [www.moval.org](http://www.moval.org) and in the following three public places pursuant to City of Moreno Valley Resolution No. 2007-40:

City Hall, City of Moreno Valley  
14177 Frederick Street

Moreno Valley Library  
25480 Alessandro Boulevard

Moreno Valley Senior/Community Center  
25075 Fir Avenue

Jane Halstead, CMC,  
City Clerk

Date Posted:

**MINUTES  
CITY COUNCIL REGULAR MEETING OF THE CITY OF MORENO VALLEY  
September 22, 2015**

**CALL TO ORDER - 5:30 PM**

**SPECIAL PRESENTATIONS**

1. Proclamation Recognizing Fire Prevention Week - "Hear the Beep Where You Sleep" - October 4-10, 2015

**MINUTES  
JOINT MEETING OF THE  
CITY COUNCIL OF THE CITY OF MORENO VALLEY  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
CITY AS SUCCESSOR AGENCY FOR THE  
COMMUNITY REDEVELOPMENT AGENCY OF THE  
CITY OF MORENO VALLEY  
MORENO VALLEY HOUSING AUTHORITY  
BOARD OF LIBRARY TRUSTEES**

**REGULAR MEETING – 6:00 PM  
September 22, 2015**

**CALL TO ORDER**

Joint Meeting of the City Council, Community Services District, City as Successor Agency for the Community Redevelopment Agency, Housing Authority and the Board of Library Trustees – was called to order at 6:03 p.m. by Mayor Molina in the Council Chamber located at 14177 Frederick Street.

Mayor Jesse L. Molina announced that the City Council receives a separate stipend for CSD meetings.

**PLEDGE OF ALLEGIANCE**

The Pledge of Allegiance was led by Frank Wright.

**INVOCATION**

The Invocation was given by Pastor Charles Gibson, Breakthrough Church of God in Christ.

**ROLL CALL**

Council:	Jesse L. Molina	Mayor
	Jeffrey J. Giba	Council Member
	D. LaDonna Jempson	Council Member
	George E. Price	Council Member

Mayor Pro Tem Dr. Gutierrez participated by teleconference on items G.1 - G.7.

**INTRODUCTIONS**

Staff:	Michelle Dawson	City Manager
	Steve Quintanilla	Interim City Attorney
	Jane Halstead	City Clerk
	Richard Teichert	Chief Financial Officer
	Thomas M. DeSantis	Assistant City Manager

Minutes Acceptance: Minutes of Sep 22, 2015 6:00 PM (CONSENT CALENDAR-CITY COUNCIL)



Ahmad Ansari	Public Works Director/City Engineer
Joel Ontiveros	Police Chief
Mark Williams	Battalion Chief
Chris Paxton	Administrative Services Director
Betsy Adams	Parks & Community Services Director
Mike Lee	Economic Development Director
Allen Brock	Community Development Director

**PUBLIC COMMENTS ON MATTERS ON THE AGENDA WILL BE TAKEN UP AS THE ITEM IS CALLED FOR BUSINESS, BETWEEN STAFF'S REPORT AND CITY COUNCIL DELIBERATION (SPEAKER SLIPS MAY BE TURNED IN UNTIL THE ITEM IS CALLED FOR BUSINESS.)**

**PUBLIC COMMENTS ON ANY SUBJECT NOT ON THE AGENDA UNDER THE JURISDICTION OF THE CITY COUNCIL**

Mayor Molina announced that there will be 30 minutes of public comments not on the agenda. The remaining public comments will be heard prior to the City Council Reports and Closing Comments. In the event that the agenda item for such public comments has not been called by 9:00 p.m., it shall be called as the next item of business following the conclusion of any item being heard at 9:00 p.m.

Public Comments were received from the following:

Evan Morgan

1. World Logistic Center Lawsuits

Scott Heveran

1. Committees

Donovan Saadig

1. Edgemont

Edwardo Gomez

1. World Logistic Center

Curtis Gardner

1. Rendering and scaled model

Rafael Bruqueras

1. World Logistic Center

Ronald Swain

1. Land Development Division

Santiago Hernandez

1. World Logistic Center a reality; lawsuits

Susan Aris

- 1. City Employee's Reputation

Public comments were continued after 9:00 p.m.

Joann Stephan

- 1. Edgemont

Irma Florez

- 1. Ex- Mayor joins flurry of lawsuits

Frank Wright

- 1. Public opposition of World Logistic Center

Jose Chavez

- 1. Edgemont

Tom Jerele, Sr.

- 1. City Image

Louise Palomarez

- 1. In agreement with Tom Jerele, Sr.

Christopher Baca

- 1. First Amendment rights

Joe Livaich

- 1. Pace Program

**JOINT CONSENT CALENDARS (SECTIONS A-D)**

Mayor Molina opened the agenda items for the Consent Calendars for public comments; there being none, public comments were closed.

Motion to approve the Joint Consent Calendar; Items A.1 through D.2 with the exception of Items A.3, A.5 and A.6 which were removed for separate actions.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	D. LaDonna Jempson, Council Member
<b>SECONDER:</b>	George E. Price, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

**A. CONSENT CALENDAR-CITY COUNCIL**

Minutes Acceptance: Minutes of Sep 22, 2015 6:00 PM (CONSENT CALENDAR-CITY COUNCIL)

- A.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- A.2. City Council - Regular Meeting - Sep 8, 2015 6:00 PM

**Recommendation:** Approve as submitted.

- A.3. This item has been moved to F.

- A.4. LIST OF PERSONNEL CHANGES (Report of: Administrative Services)

**Recommendation:**

1. Ratify the list of personnel changes as described.

- A.5. This item has been moved to F.

- A.6. This item has been moved to F.

- A.7. MUNICIPAL SHELTER SPAY NEUTER GRANT AWARD (Report of: Administrative Services)

**Recommendation:**

1. Receive and accept a grant award in the amount of \$15,000 from the California Department of Food & Agriculture for the purpose of providing low to no cost spaying and neutering of dogs and cats owned by individuals residing in the City.

## **B. CONSENT CALENDAR-COMMUNITY SERVICES DISTRICT**

- B.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

- B.2. MINUTES - REGULAR MEETING OF SEPTEMBER 8, 2015 (See A.2)

**Recommendation:** Approve as submitted.

## **C. CONSENT CALENDAR - HOUSING AUTHORITY**

- C.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

C.2. MINUTES - REGULAR MEETING OF SEPTEMBER 8, 2015 (See A.2)

**Recommendation:** Approve as submitted.

#### D. CONSENT CALENDAR - BOARD OF LIBRARY TRUSTEES

D.1. ORDINANCES - READING BY TITLE ONLY - THE MOTION TO ADOPT AN ORDINANCE LISTED ON THE CONSENT CALENDAR INCLUDES WAIVER OF FULL READING OF THE ORDINANCE.

**Recommendation:** Waive reading of all Ordinances.

D.2. MINUTES - REGULAR MEETING OF SEPTEMBER 8, 2015 (See A.2)

**Recommendation:** Approve as submitted.

#### E. PUBLIC HEARINGS

Questions or comments from the public on a Public Hearing matter are limited to five minutes per individual and must pertain to the subject under consideration.

Those wishing to speak should complete and submit a GOLDENROD speaker slip to the Bailiff.

E.1. PUBLIC HEARING TO ADOPT SUBSTANTIAL AMENDMENT #1 TO THE 2015-16 ANNUAL ACTION PLAN (Report of: Financial & Management Services)

Mayor Molina opened the public testimony portion of the public hearing; there being none, public testimony was closed.

#### **Recommendations: That the City Council:**

1. Conduct a Public Hearing to allow public comment on the proposed Substantial Amendment #1 to the FY 2015-2016 Annual Action Plan.
2. Review and adopt the proposed Substantial Amendment #1 to the FY 2015-2016 Annual Action Plan.
3. Approve the necessary revenue and expense appropriations and authorize the Chief Financial Officer to process the adjustments.
4. Authorize the City Manager to reallocate grant funds between HUD-approved grant activities.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

## F. ITEMS REMOVED FROM CONSENT CALENDARS FOR DISCUSSION OR SEPARATE ACTION

- F.1. A.3 - APPROVAL OF CONSTRUCTION CONTRACT CHANGE ORDER FOR THE DUNLAVY COURT STORM DAMAGE REPAIRS (Report of: Public Works)

Mayor Molina opened the agenda item for public comments, which were received from Manuel Blanco, Roy Bleckert and Pete Bleckert.

### Recommendations:

1. Approve the appropriation of \$400,000 to fund Dunlavy Court Storm Damage Repairs from the General Fund (Account No. 1010-70-77-80004-720199).
2. Award a construction contract change order (CCCO) for the Dunlavy Court Storm Damage Repairs to Mamco, Inc. dba Alabbasi, 764 W. Ramona Expressway, Suite C, Perris, CA 92571, the lowest responsible bidder, for the East Sunnymead Boulevard Storm Drain Improvements project.
3. Authorize the Public Works Director/City Engineer to execute the CCCO with Mamco, Inc. dba Alabbasi.
4. Authorize the issuance of a Purchase Order Amendment to Mamco, Inc. dba Alabbasi for the amount of \$359,892 (\$299,910 bid amount plus 20% contingency) when the CCCO has been signed by all parties.
5. Authorize the Public Works Director/City Engineer to execute any subsequent related minor change orders to the CCCO with Mamco, Inc. dba Alabbasi up to, but not exceeding, the 20% contingency amount of \$59,982, subject to the approval of the City Attorney.

<b>RESULT:</b>	<b>CONTINUED [UNANIMOUS]</b>	<b>Next: 10/13/2015 6:00 PM</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member	
<b>SECONDER:</b>	George E. Price, Council Member	
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price	
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez	

F.2. A.5 - PA05-0054 (PM 33637) – APPROVE PARCEL MAP 33637 LOCATED ON THE SOUTH SIDE OF IRONWOOD AVENUE BETWEEN (Report of: Public Works)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendations:**

1. Approve Parcel Map 33637 for PA05-0054.
2. Authorize the City Clerk to sign the map and transmit said map to the County Recorder's Office for recordation.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	George E. Price, Council Member
<b>SECONDER:</b>	Jeffrey J. Giba, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

F.3. A.6 - RESOLUTION OF THE CITY OF MORENO VALLEY SERVING AS THE SUCCESSOR AGENCY FOR THE COMMUNITY REDEVELOPM (Report of: Financial & Management Services)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

At the direction of the City Council the ROP schedule will be brought before the Oversight Board prior to presentation to the City Council.

**Recommendations: That the City Council as Successor Agency:**

1. Adopt Resolution No. SA 2015-02. A Resolution of the City Council of the City of Moreno Valley, California, Serving as Successor Agency to the Community Redevelopment Agency of the City of Moreno Valley Approving the Recognized Obligation Payment Schedule and Administrative Budget for the Period of January 1, 2016 through June 30, 2016 (ROPS 15-16 B), and Authorizing the City Manager acting for the Successor Agency or her Designee to Make Modifications Thereto.

2. Authorize the City Manager acting for the Successor Agency or her Designee to make modifications to the Schedule.
3. Authorize the transmittal of the ROPS 15-16 B, for the period of January 1, 2016 through June 30, 2016, including Administrative Budget for the said period, ("Exhibit A") to the Oversight Board for review and approval.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	George E. Price, Council Member
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

Recessed

Reconvened

## G. REPORTS

### G.1. CITY COUNCIL REPORTS ON REGIONAL ACTIVITIES

(Informational Oral Presentation - not for Council action)

Mayor Pro Tem Dr. Gutierrez participated via teleconference.

Mayor Molina opened the agenda item for public comments, which were received from Tom Jerele, Sr.

March Joint Powers Commission (JPC)

Council Member Giba gave a report on the September 2nd Commission meeting.

The JPA's new office will be on the lower floor of the Western Municipal Water District building. The Commission meeting dates / times are changing with the move, which will likely occur in January.

Also heard an update on the JPA planning activities. There's a lot going on.

- They reported a total of 3,140 jobs created so far,
- Moreno Valley March Field Metrolink Station construction is coming along,
- Heacock Channel reconstruction is expected to go out to bid next Spring,
- US Vets will start grading in October for Phase I of their project,
- A 700,000 sq ft distribution facility is proposed along on the east side of I-215 between Cactus and Alessandro. It will be coming to the JPC for approval in Dec or Jan,

- Hillwood is planning aviation uses and a 20,000 sq ft hangar east of the joint use runway, and
- Lewis will be submitting a draft proposal for the golf course redevelopment in the next 2 - 3 weeks.

#### Riverside County Habitat Conservation Agency (RCHCA)

Council Member Price gave a brief update of items covered at last week's RCHCA Board meeting on September 17, 2015.

This was a fairly routine Board meeting, one agenda item of note for Council Members and public that may have interest in this Board:

The 2016 Board Meeting schedule was announced and the Board expects to have five regular meetings in the coming 2016 calendar year. The meetings are scheduled for the months of February, May, June, September and November.

#### Riverside County Transportation Commission (RCTC)

Mayor Molina reported that at the September 9th Board meeting, the Riverside County Transportation Commission approved staff's recommendations for the 2016 State Transportation Improvement Program (STIP) update. With a lack of funding capacity, the 2016 STIP update will not include any new project programming and existing projects will be delayed by approximately two years. This action could have delayed the State Route 60 Truck Climbing Lane project that is within the current STIP. However, I am pleased to report that, due to the project's safety features, and funding from the Caltrans State Highway Operations Protection Program, staff recommended for the schedule to remain unchanged, thereby ensuring timely delivery of this critical project.

#### Riverside Transit Agency (RTA)

Mayor Molina reported that the Moreno Valley and Perris Chapter of Transportation Now (TNOW) is having a Logo Contest. The contest is for High School students to help develop a new logo concept that reflects the principles of public transportation. There will be cash prizes of \$500, \$350, and \$250 for first, second, and third place respectively. Only one logo may be submitted per person and the deadline for submissions is October 31st.

Please go to the Riverside Transit Agency website for more details.

#### Western Riverside Council of Governments (WRCOG)

Council Member Giba gave the update on the WRCOG Executive Committee meeting on September 14, 2015.

#### **Advancing the Choice Expo set for October 29**

WRCOG's 16th annual Advancing the Choice Expo will be on Thursday, October



29, 2015. The Advancing the Choice Expo is one of the largest events in the Inland region aimed at strategies for people to live better, healthier lives with less impact on the environment. The event will be at the UC Riverside Center for Environmental Research & Technology from 9:00 a.m. - 1:00 p.m. The theme this year is “The Future of Transportation.”

### **Regional Streetlight Inventory Update**

WRCOG continues to pursue the development and administration of a Regional Streetlight Program. 58,000 streetlights have been inventoried. WRCOG will be working with consultant support to work with the CPUC to purchase the streetlights. The Program is anticipated to provide significant energy cost savings to member jurisdictions.

### **Active Transportation Plan**

With a grant from Caltrans, WRCOG is embarking on a two year effort to develop a regional Active Transportation Plan. The Plan will update the framework prepared approximately five years ago in 2010. The update will focus on articulating the positive health impacts of active transportation, on improving safety of active transportation networks, and on Safe Routes to Schools.

### **HERO Program**

The HERO Program continues to expand throughout the state. 14 more communities have been recently accepted into the California Program, which now includes 266 cities and counties.

There was considerable discussion at the meeting about other PACE (Property Assessed Clean Energy) program providers that are requesting that WRCOG jurisdictions allow them to conduct business in their communities. HERO is the recognized PACE program by WRCOG, and as a “JPA” the WRCOG Executive Committee recommends that member jurisdictions commit to HERO as the sole PACE Program for the WRCOG subregion. This idea of a sole program raised some strong comments by some member agencies based on concerns with creating a monopoly condition and lack of competition. Individual jurisdictions remain free to recognize other PACE providers, but in doing so are encouraged to examine and compare all factors between the Programs.

### **TUMF Program Update**

In light of SCAG’s efforts on the update to the Regional Transportation Plan, the Executive Committee voted to defer completing the WRCOG 2015 Nexus Study update until after SCAG adopts a new growth forecast in 2016. The Nexus Study was scheduled to occur prior to the end of this calendar year. WRCOG now expects the Nexus Study update to be ready in summer 2016.

Western Riverside County Regional Conservation Authority (RCA)

Council Member Jempson gave a brief update of items covered at last week’s RCA Board meeting on September 14, 2015.

The Authority, through the planning consultant firm of Dudek is working on Burrowing Owl Relocation Standards that will be submitted to the California Department of Fish and Wildlife and the United States Fish and Wildlife Service. Interesting as the City of Moreno Valley has burrowing owls. I have discussed this with our Planning Official and he will be following up to determine if this could have any bearing on City projects.

With regard to the Fiscal Year 2015 Preliminary 4th Quarter Financial Report, the Authority staff reported positive findings with an excess of revenues over expenditures of approximately \$3.6 million. Moreno Valley's contribution of non-residential MSHCP fees collected and paid are particularly strong in comparison to other jurisdictions at over \$600,000.

School District/City Joint Task Force

Mayor Pro Tem Dr. Gutierrez reported the next meeting would be held October 15.

Southern California Association of Governments (SCAG)

Council Member Giba reported SCAG had not met.

Mayor Molina announced that Aldi would be holding hiring events for 25 stores.

**G.2. FUNDING PROPOSAL TO REHABILITATE CERTAIN DISTRESSED STREETS IN THE EDGEMONT NEIGHBORHOOD (Report of: Public Works)**

Mayor Molina opened the agenda item for public comments, which were received from Donovan Saadiq, Louise Palomarez, Joann Stephen, Rafael Brugueras, and Christopher Baca.

**Recommendations: That the City Council:**

1. Designate all potential project savings from the Nason Street Improvement Project -- currently estimated at \$270,000 -- to the Citywide Annual Pavement Resurfacing Program.
2. Direct staff to return in November 2015 with recommendations to appropriate available funds to rehabilitate certain distressed streets in the Edgemont neighborhood.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	D. LaDonna Jempson, Council Member
<b>SECONDER:</b>	George E. Price, Council Member
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price

G.3. AMENDED AND RESTATED AFFORDABLE HOUSING AGREEMENT BY AND AMONG CITY OF MORENO VALLEY, MORENO VALLEY HOUSING AUTHORITY, AND HABITAT FOR HUMANITY, RIVERSIDE, INC. (Report of: Financial & Management Services)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendations: That the City Council and Housing Authority:**

1. Approve the Amended and Restated Affordable Housing Agreement by and among City of Moreno Valley, Moreno Valley Housing Authority and Habitat for Humanity, Riverside, Inc.
2. Authorize the City Manager and Executive Director of the Moreno Valley Housing Authority, or his or her designee, to prepare, approve and execute all project-related documents.
3. Authorize the City Manager to approve future amendments to the Affordable Housing Agreement (“AHA”) or undertake any other actions necessary, proper or convenient to the implementation of the AHA, as long as such revisions do not substantially increase the City’s stated obligations or materially change the uses or development permitted on the site.
4. Approve the Revenue and Expense Appropriations and authorize the Chief Financial Officer to process the necessary budget adjustments.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	George E. Price, Council Member
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price

G.4. CERTIFY RIVERSIDE HOUSING DEVELOPMENT CORPORATION AS A COMMUNITY HOUSING DEVELOPMENT ORGANIZATION (CHDO) (Report of: Financial & Management Services)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendations: That the City Council:**

1. Approve Resolution No. 2015-62. A Resolution of the City Council of

the City of Moreno Valley, California, Certifying Riverside Housing Development Corporation (RHDC) as a Community Housing Development Organization (CHDO) Eligible to Receive HOME Program Funds for 22889 and 22899 Allies Place.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member
<b>SECONDER:</b>	George E. Price, Council Member
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price

G.5. RESOLUTION NO. 2015-63 APPOINTING CITY TREASURER (Report of: City Attorney)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

Motion to continue item to December 2015.

**Recommendations: That the City Council:**

1. Take whatever action it deems appropriate.

<b>RESULT:</b>	<b>CONTINUED [UNANIMOUS]</b>
<b>MOVER:</b>	Jesse L. Molina, Mayor
<b>SECONDER:</b>	Jeffrey J. Giba, Council Member
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price

G.6. ENTER INTO AFFORDABLE HOUSING AGREEMENTS WITH RIVERSIDE HOUSING DEVELOPMENT CORPORATION FOR 22899 AND 22889 ALLIES PLACE (Report of: Financial & Management Services)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendations: That the City Council:**

1. Approve and formalize an Affordable Housing Agreement with Riverside Housing Development Corporation for the acquisition and rehabilitation of 22899 Allies Place for the purposes of creating affordable rental housing.
2. Approve and formalize an Affordable Housing Agreement with Riverside Housing Development Corporation for the acquisition and rehabilitation of 22889 Allies Place for the purposes of creating affordable rental housing.
3. Authorize the City Manager to execute said Agreements on behalf of the City in a form approved by the City Attorney.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member
<b>SECONDER:</b>	George E. Price, Council Member
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price

**G.7. UPDATE ON CROSSING GUARDS (Report of: City Manager)**

Mayor Molina opened the agenda item for public comments, which were received from Roy Bleckert, Jeff Clayton, Louise Palomarez, Joann Stephan, and Christopher Baca.

Substitute Motion to provide for sufficient advance notice and a smooth transition over the next ninety day period, I move that the City move forward with a phased in reduction to the current City funded crossing guard services. Effective October 31, 2015 phase 1 eliminates the crossing guard services for the 8 unwarranted locations, reduces the budget appropriation by \$40,000 and reduces 11 crossing guards and 3 alternate crossing guards from position control. Effective November 30, 2015 phase 2 eliminates the crossing guard services for 8 warranted locations at controlled intersections, reduces the budget appropriation by an additional \$100,000 and reduces an additional 11 crossing guards, 3 alternate crossing guards, and one part-time assistant supervisor from position control. Effective December 31, 2015 phase 3 eliminates the crossing guard services from the remaining 11 warranted locations at uncontrolled intersections, eliminates the remaining budget appropriation along with the reduction of the remaining 13 crossing guards, 3 alternate crossing guards, and one full-time supervisor from the position control. The cumulative savings from these will be approximately \$550,000 annually.

**Recommendations: That the City Council:**

1. Receive an update on discussions with Moreno Valley Unified School District regarding the crossing guard program and provide direction to staff.

<b>RESULT:</b>	<b>APPROVED [3 TO 2]</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member
<b>SECONDER:</b>	Dr. Yxstian A. Gutierrez, Mayor Pro Tem
<b>AYES:</b>	Jesse L. Molina, Dr. Yxstian A. Gutierrez, Jeffrey J. Giba
<b>NAYS:</b>	D. LaDonna Jempson, George E. Price

**G.8. EL NIÑO STORM PREPARATION STRATEGY PLAN AND EXPENDITURE AUTHORIZATION (Report of: Fire Department)**

Mayor Molina opened the agenda item for public comments, which were received from Roy Bleckert, Pete Bleckert, Tom Jerele, Sr., Robert Riddick, and Chris Baca.

Motion to approve staff recommendations 1 and 3.

**Recommendations: That the City Council:**

1. Approve the recommended El Niño Storm Preparation Strategy; and
2. Authorize the City Manager, or her designee, to appropriate and expend up to a maximum of \$1,500,000 for El Niño related preparation and response; and
3. Appropriate \$325,000 for immediate and upcoming labor, materials and equipment costs during the Preparedness/Mitigation Phase including:
  - a. Land Development Inspection Staff Cost - \$200,000
  - b. Materials - \$20,000
  - c. Equipment Rental - \$105,000

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	George E. Price, Council Member
<b>SECONDER:</b>	Jeffrey J. Giba, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

**G.9. CITY MANAGER'S REPORT**

(Informational Oral Presentation - not for Council action)

**G.10. CITY ATTORNEY'S REPORT**

(Informational Oral Presentation - not for Council action)

There have been six lawsuits filed against the city challenging the City Council's approval of the World Logistic project. Interim City Attorney Steve Quintanilla suggested that the lawsuits will be posted on the City's website.

The following entities have filed lawsuits:

- Friends of Northern San Jacinto Valley
- South Coast Air Quality Management District
- California Clean Energy Committee
- County of Riverside
- SoCal Environmental for Justice Alliance
- Riverside Commission Transportation Commission

Also three initiatives petitions are being circulated in the community. They propose that the City Council's approval of the various entitlements related to the World Logistic Center project be replaced by voter approval entitlements. These will be posted on the City's web site tomorrow. Two of the petitions are going to have summaries prepared by him. The impartial analysis will be included with the

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petitions as well as all the documents related to the petitions. These documents will also be posted on the City's web site.

Interim City Attorney stated that he wanted all these documents posted on the web site and they be made available to the public. If the public wants information, they can go to the City's website and get accurate information.

**H. LEGISLATIVE ACTIONS**

**H.1. ORDINANCES - 1ST READING AND INTRODUCTION**

**H.1.1. ORDINANCE EMERGENCY FLOODING – SINGLE SOURCE AND SOLE SOURCE (Report of: City Attorney)**

Mayor Molina opened the agenda item for public comments, which were received from Pete Bleckert.

**Recommendations: That the City Council:**

- 1. Adopt Ordinance No. 903. An Ordinance of the City Council of the City of Moreno Valley, California, which allows the City to purchase goods, materials, and services through single and/or sole sourcing in response to and in preparation of the impending threat of flooding which is anticipated to be caused by El Niño.

<b>RESULT:</b>	<b>FIRST READING OF ORDINANCE [UNANIMOUS]</b>	<b>Next:</b>
	<b>10/13/2015 6:00 PM</b>	
<b>MOVER:</b>	Jeffrey J. Giba, Council Member	
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member	
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price	
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez	

**H.1.2. INTRODUCE ORDINANCE NO. 904. AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, AMENDING SECTION 6.04.040 OF CHAPTER 6.04 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO PUBLIC NUISANCES. (Report of: Public Works)**

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendation: That the City Council:**

- 1. Adopt Ordinance No. 904. An Ordinance of the City Council of the City of Moreno Valley, California, amending section 6.04.040 of Chapter 6.04 of the Moreno Valley Municipal Code relating to Public Nuisances.

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<b>RESULT:</b>	<b>FIRST READING OF ORDINANCE [UNANIMOUS]</b>	<b>Next:</b>
	<b>10/13/2015 6:00 PM</b>	
<b>MOVER:</b>	Jeffrey J. Giba, Council Member	
<b>SECONDER:</b>	George E. Price, Council Member	
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price	
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez	

**H.2. ORDINANCES - 2ND READING AND ADOPTION - NONE**

**H.3. ORDINANCES - URGENCY ORDINANCES**

H.3.1. ADOPT URGENCY ORDINANCE NO. 905. AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA (Report of: Public Works)

Mayor Molina opened the agenda item for public comments; there being none, public comments were closed.

**Recommendation: That the City Council:**

1. Adopt Urgency Ordinance No. 905. An Ordinance of the City Council of the City of Moreno Valley, California, amending section 6.04.040 of Chapter 6.04 of the Moreno Valley Municipal Code relating to Public Nuisances.

<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	George E. Price, Council Member
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

H.3.2. URGENCY ORDINANCE EMERGENCY FLOODING – SINGLE SOURCE AND SOLE SOURCE (Report of: City Attorney)

Mayor Molina opened the agenda item for public comments, which were received from Pete Bleckert.

**Recommendations: That the City Council:**

1. Adopt Urgency Ordinance No. 906. An Urgency Ordinance of the City Council of the City of Moreno Valley, California, which allows the City to purchase goods, materials, and services through single and/or sole sourcing in response to and in preparation of the impending threat of flooding which is anticipated to be caused by El Niño.

Minutes Acceptance: Minutes of Sep 22, 2015 6:00 PM (CONSENT CALENDAR-CITY COUNCIL)



<b>RESULT:</b>	<b>APPROVED [UNANIMOUS]</b>
<b>MOVER:</b>	Jeffrey J. Giba, Council Member
<b>SECONDER:</b>	D. LaDonna Jempson, Council Member
<b>AYES:</b>	Jesse L. Molina, Jeffrey J. Giba, D. LaDonna Jempson, George E. Price
<b>ABSENT:</b>	Dr. Yxstian A. Gutierrez

#### H.4. RESOLUTIONS - NONE

#### **CLOSING COMMENTS AND/OR REPORTS OF THE CITY COUNCIL, COMMUNITY SERVICES DISTRICT, CITY AS SUCCESSOR AGENCY FOR THE COMMUNITY REDEVELOPMENT AGENCY OR HOUSING AUTHORITY**

Council Member Giba - no report given

#### Council Member Jempson

September 26, 2015 is the Bulky Waste event at Canyon Springs. Encouraged Edgemont residents with a truck to load up and transport to Canyon Springs. October 10<sup>th</sup> will be a clean-up day. Melissa Phillips will be leading the clean-up.

Thanked Julie Reyes and group with assisting with a dumpster, rakes and shovels during the clean-up.

There will be a Business Expo, Thursday from 5:00 - 7:30 p.m. at the Conference Center. Meet your businesses

Amazon fulfillment center Grand Opening will be held on September 24, 2015 at 10:30 a.m. - 11:30 a.m.

Encourages the public to sign up for *Let's Talk Moyal*. The topic right now is *mail box thefts*. Please take the survey and make comments. The information will be compiled and forwarded to Congressman Takano's office.

#### Council Member Price

Thanked Chief Ontiveros and Sergeant Riley for the Zone meeting. It was a very good turn-out. Police Department has 450 phone calls for service a day, if that continues it will be 10,000 more calls than the last year.

Advised Chris Baca to check dates he was sworn in, as he was not a Council Member when Julie Reyes was hired. Please check dates on band equipment and get the record straight, don't lie.

Please keep in your prayers those 7 hikers that were caught and killed in the flash flood at Zion National Park flooding. He had a relative that was part of the group.

#### Mayor Molina

Gave thanks to the people that work in the City yards. We don't give them enough credit. He also thanked staff. Stated he believes the city has a good staff and likes being positive instead of negative.

Mayor Molina would like to get things accomplished and stated he is here for staff and the citizens and asked for cooperation.

### **ADJOURNMENT**

There being no further business to conduct the Regular Meeting was adjourned at 12:38 p.m..

Submitted by:

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Jane Halstead, City Clerk, CMC  
 Secretary, Moreno Valley Community Services District  
 Secretary, City as Successor Agency for the Community Redevelopment Agency of the City of Moreno Valley  
 Secretary, Moreno Valley Housing Authority  
 Secretary, Board of Library Trustees

Approved by:

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Jesse L. Molina, Mayor  
 President, Moreno Valley Community Services District  
 Chairperson, City as Successor Agency for the Community Redevelopment Agency of the City of Moreno Valley  
 Chairperson, Moreno Valley Housing Authority  
 Chairperson, Board of Library Trustees



### Report to City Council

**TO:** Mayor and City Council

**FROM:** Jane Halstead, City Clerk

**AGENDA DATE:** October 13, 2015

**TITLE:** CITY COUNCIL REPORTS ON REIMBURSABLE ACTIVITIES

### RECOMMENDED ACTION

#### Recommendation:

1. Receive and file the Reports on Reimbursable Activities for the period of September 2 – October 6, 2015.

<i>Reports on Reimbursable Activities</i> September 2 – October 6, 2015			
Council Member	Date	Meeting	Cost
Jeffrey J. Giba	9/24/15	Riverside County Women's Leadership Conference	\$95.00
	9/30/15	League of California Cities (LCC)	\$1,731.88
	10/2/15	Annual Conference and Expo	
	10/2/15	League of California Cities (LCC) Riverside Division Annual Conference Breakfast	\$25.00
Dr. Yxstian A. Gutierrez	10/3/15	March Field Air Museum MASH Bash	\$45.00
	9/30/15	League of California Cities (LCC)	\$1685.65
	10/2/15	Annual Conference and Expo	
	10/2/15	League of California Cities (LCC) Riverside Division Annual Conference Breakfast	\$25.00
D. LaDonna Jempson	9/24/15	Riverside County Women's Leadership Conference	\$95.00

Jesse L. Molina	9/30/15	League of California Cities (LCC)	\$1,507.69
	10/2/15	Annual Conference and Expo	
	10/2/15	League of California Cities (LCC) Riverside Division Annual Conference Breakfast	\$25.00
	10/6/15	Moreno Valley Hispanic Chamber of Commerce Adelante	\$10.00
George E. Price	9/23/15	Moreno Valley Chamber of Commerce Wake-Up Moreno Valley	\$15.00
	9/30/15	League of California Cities (LCC)	\$1,667.88
	10/2/15	Annual Conference and Expo	
	10/2/15	League of California Cities (LCC) Riverside Division Annual Conference Breakfast	\$25.00

**NOTIFICATION**

Publication of Agenda.

**PREPARATION OF STAFF REPORT**

Prepared By:  
Cindy Miller  
Executive Assistant to the Mayor/City Council

Department Head Approval:  
Jane Halstead  
City Clerk

**CITY COUNCIL GOALS**

None

**ATTACHMENTS**

None

**APPROVALS**

Budget Officer Approval            ✓ Approved        
 City Attorney Approval              ✓ Approved        
 City Manager Approval               ✓ Approved



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Richard Teichert, Chief Financial Officer

**AGENDA DATE:** October 13, 2015

**TITLE:** PAYMENT REGISTER - AUGUST 2015

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### **RECOMMENDED ACTION**

#### **Recommendation:**

1. Receive and file the Payment Register.

### **SUMMARY**

The Payment Register is an important report providing transparency of financial transactions and payments for City activity for review by the City Council and the residents and businesses in Moreno Valley. The report is posted to the City's website as soon as it is available. The report is included in the City Council agenda as an additional means of distributing the report.

The payment register lists in alphabetical order all checks and wires in the amount of \$25,000 or greater, followed by a listing in alphabetical order of all checks and wires less than \$25,000. The payment register also includes the fiscal year-to-date (FYTD) amount paid to each vendor.

### **PREPARATION OF STAFF REPORT**

Prepared By:  
Dena Heald  
Financial Operations Division Manager

Department Head Approval:  
Richard Teichert  
Chief Financial Officer

### **CITY COUNCIL GOALS**

None

### **ATTACHMENTS**

1. August 2015 Payment Register

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/29/15 8:40 AM
City Attorney Approval	<u>✓ Approved</u>	9/29/15 8:44 AM
City Manager Approval	<u>✓ Approved</u>	10/05/15 1:41 PM



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS IN THE AMOUNT OF \$25,000 OR GREATER

Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
ACCESS ELECTRIC SUPPLY	225869	08/10/2015	26277	CRC GYM LIGHTING UPGRADE	\$46,695.92
Remit to: MORENO VALLEY, CA					FYTD: \$46,695.92
ALL AMERICAN ASPHALT, INC.	226097	08/31/2015	RETENTION-167107	RETENTION - CYCLE 1	\$162,343.11
Remit to: CORONA, CA					FYTD: \$162,693.11
ARCO AM PM	225917	08/10/2015	MVU 7010569-02	SOLAR INCENTIVE REBATE	\$49,516.25
Remit to: MORENO VALLEY, CA					FYTD: \$49,516.25
COUNTY OF RIVERSIDE SHERIFF	15556	08/03/2015	SH0000026456	CONTRACT LAW ENF. BILLING #12 (4/30-5/27/15)	\$2,484,712.43
	15689	08/24/2015	SH0000026666	CONTRACT LAW ENF. BILLING #13 (5/28-6/30/15)	\$3,398,252.89
Remit to: RIVERSIDE, CA					FYTD: \$8,563,258.27
COUNTY OF RIVERSIDE, AUDITOR- CONTROLLER	225839	08/03/2015	APR-15	TRANSMITTAL OF AB544 FROM PARKING CONTROL FEES	\$28,196.00
	225950	08/17/2015	JUN-15	TRANSMITTAL OF AB544 FROM PARKING CONTROL FEES	\$25,477.00
Remit to: RIVERSIDE, CA					FYTD: \$78,473.88
CSAC EXCESS INSURANCE AUTHORITY	15597	08/10/2015	16100097	EXCESS WORKERS' COMPENSATION PROGRAM PREMIUM/FEES 7/1/15-7/1/16	\$213,000.00
Remit to: FOLSOM, CA					FYTD: \$213,000.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



**City of Moreno Valley**  
**Payment Register**  
 For Period 8/1/2015 through 8/31/2015

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
DMS FACILITY SERVICES	15737	08/31/2015	RC-L104885	JANITORIAL SERVICES-PUBLIC SAFETY BLDG.-AUG15	\$27,712.18
		08/31/2015	L38450	SPECIAL CLEANINGS FOR JULY 2-9 EVENT RENTALS AT CRC	
		08/31/2015	RC-L104884	JANITORIAL SERVICES-MARCH FIELD PARK COMM. CTR.-AUG15	
		08/31/2015	RC-L104891	JANITORIAL SERVICES-TOWNGATE COMM. CTR.-AUG15	
		08/31/2015	RC-L104883	JANITORIAL SERVICES-LIBRARY-AUG15	
		08/31/2015	RC-L104880	JANITORIAL SERVICES-EOC-AUG15	
		08/31/2015	RC-L104879	JANITORIAL SERVICES-CRC-AUG15	
		08/31/2015	RC-L104888	JANITORIAL SERVICES-SENIOR CENTER-AUG15	
		08/31/2015	RC-L104892	JANITORIAL SERVICES-TRANSP. TRAILER-AUG15	
		08/31/2015	RC-L104877	JANITORIAL SERVICES-CITY HALL-AUG15	
		08/31/2015	RC-L104878	JANITORIAL SERVICES-CITY YARD-AUG15	
		08/31/2015	RC-L104876	JANITORIAL SERVICES-ANNEX #1-AUG15	
		08/31/2015	RC-L104893	JANITORIAL SERVICES-COTTONWOOD GOLF CTR.-AUG15	
		08/31/2015	L38451	SPECIAL CLEANING FOR JULY 4 EVENT AT TOWNGATE COMM. CTR.	
		08/31/2015	RC-L104700	JANITORIAL SERVICES-SUNNYMEAD MIDDLE/THINK-JUL15	
		08/31/2015	L38639	SPECIAL ADDTL. CLEANING FOR JULY 26 EVENT AT CRC	
		08/31/2015	L38636	SPECIAL CLEANING FOR JULY 12-31 EVENT RENTALS-TOWNGATE COMM. CTR	
		08/31/2015	L38635	SPECIAL CLEANINGS FOR JULY 26-30 EVENT RENTALS AT CRC	
		08/31/2015	L38634	SPECIAL CLEANING FOR JULY 4 EVENT AT COTTONWOOD GOLF CTR.	
		08/31/2015	L38611	SPECIAL CLEANINGS FOR JULY 12-25 EVENT RENTALS AT CRC	
		08/31/2015	L38615	CLEANING OF GLASS TABLE IN CHIEF'S CONFERENCE ROOM	
		08/31/2015	RC-L104875	JANITORIAL SERVICES-ANIMAL SHELTER-AUG15	

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)





**City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015**

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
DMS FACILITY SERVICES		08/31/2015	RC-L104889	JANITORIAL SERVICES-SUNNYMEAD MIDDLE/THINK-AUG15	
Remit to: MONROVIA, CA					<u>FYTD:</u> \$57,683.91
E. AVICO, INC	15690	08/24/2015	1064291R	CONTRACTOR - FS#48	\$56,038.78
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$177,153.80
EASTERN MUNICIPAL WATER DISTRICT	225840	08/03/2015	JUL-15 8/3/15	WATER CHARGES	\$53,800.84
	225915	08/10/2015	WS2015-216	SEWER/WATER FEES - CORP YARD	\$85,342.80
	225951	08/17/2015	JUL-15 8/17/15	WATER CHARGES	\$79,830.68
	226027	08/24/2015	AUG-15 8/24/15	WATER CHARGES	\$33,368.53
		08/24/2015	JUL-15 8/24/15	WATER CHARGES	
	226106	08/31/2015	AUG-15 8/31/15	WATER CHARGES	\$38,678.77
Remit to: PERRIS, CA					<u>FYTD:</u> \$440,523.89
EMPLOYMENT DEVELOPMENT DEPARTMENT	15588	08/07/2015	2016-00000057	CA TAX - STATE TAX WITHHOLDING*	\$34,668.26
	15675	08/21/2015	2016-00000072	CA TAX - STATE TAX WITHHOLDING	\$33,401.88
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$143,145.73

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS IN THE AMOUNT OF \$25,000 OR GREATER

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>		
ENCO UTILITY SERVICES MORENO VALLEY LLC	15601	08/10/2015	C15-02	TRANSFORMER T-1435 REPLACED DUE TO BLOWN FUSE-SKECHERS NORTHSIDE	\$43,053.48		
		08/10/2015	40-309B-02	WORK AUTHORIZATION 40-309B			
		08/10/2015	40-319-01	WORK AUTHORIZATION 40-319			
		08/10/2015	0402-MF-01669A	SOLAR METER INSTALLATION			
		08/10/2015	40-311B-05	WORK AUTHORIZATION 40-311B			
		08/10/2015	0402-MF-01667A	SOLAR METER INSTALLATION			
		08/10/2015	40-278B-07	WORK AUTHORIZATION 40-278B			
		08/10/2015	40-290B-09	UTILITY SERVICES - NASON ST WDNG			
		08/10/2015	40-314B-04	WORK AUTHORIZATION 40-314B			
		08/10/2015	40-314A-04	WORK AUTHORIZATION 40-314A			
		08/10/2015	0402-MF-01666A	SOLAR METER INSTALLATION			
		08/10/2015	40-315A-02	WORK AUTHORIZATION 40-315A			
		08/10/2015	40-315B-01	WORK AUTHORIZATION 40-315B			
		15635	08/17/2015	0405-1-198		DISTRIBUTION CHARGES 6/1-6/30/15	\$350,801.75
			08/17/2015	0405-MTS1-SP120		ELECTRIC METER FEES	
08/17/2015	40-310B-05		CONSULTANT INVOICE - 801 0027 70 HEACOCK ST/SAN MICHELE TO PVSD				
Remit to: ANAHEIM, CA					FYTD: \$704,818.04		
EXELON GENERATION COMPANY, LLC	15637	08/17/2015	MVEU-00017A	ENERGY PURCHASE	\$971,754.40		
Remit to: BALTIMORE, MD					FYTD: \$1,732,727.84		

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



**City of Moreno Valley**  
**Payment Register**  
 For Period 8/1/2015 through 8/31/2015

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
GRAFFITI TRACKER, INC.	15744	08/31/2015	2905	GRAFFITI TRACKING SERVICES (JULY 2015-JUNE 2016)	\$33,000.00
Remit to: OMAHA, NE					<u>FYTD:</u> \$33,000.00
GRIFFITH COMPANY	225884	08/10/2015	10	CONSTRUCTION - PERRIS WIDENING	\$234,216.30
	226031	08/24/2015	5-Cactus	CONTRACTOR - CACTUS WDNG	\$90,965.79
		08/24/2015	5-Cactus SP	STOP PAYMENT	
Remit to: BREA, CA					<u>FYTD:</u> \$1,031,320.36
HABITAT FOR HUMANITY RIVERSIDE	15642	08/17/2015	DRAW NO. 29	NSP3-8 SINGLE FAMILY HOMES-24265 MYERS AVE	\$197,938.54
		08/17/2015	04/APR 2015	MOBILE HOME REPAIR PROGRAM	
		08/17/2015	DRAW NO. 28	NSP3-8 SINGLE FAMILY HOMES-24265 MYERS AVE	
		08/17/2015	05/MAY-JUN 2015	MOBILE HOME REPAIR PROGRAM	
		08/17/2015	04/APR-JUN 2015	HELPING HANDS PROGRAM-CDBG	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$206,557.42
HILLCREST CONTRACTING, INC	15566	08/03/2015	PB 23426	CONTRACTOR - NASON/CACTUS TO FIR	\$648,252.92
	15697	08/24/2015	PB 23493	CONTRACTOR - NASON CACTUS/FIR	\$275,121.90
Remit to: CORONA, CA					<u>FYTD:</u> \$923,374.82
INTERNAL REVENUE SERVICE CENTER	15589	08/07/2015	2016-00000058	FED TAX - FEDERAL TAX WITHHOLDING*	\$134,445.97
	15677	08/21/2015	2016-00000074	FED TAX - FEDERAL TAX WITHHOLDING*	\$129,565.34
Remit to: OGDEN, UT					<u>FYTD:</u> \$534,206.16

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
KEYSTONE BUILDERS, INC	15699	08/24/2015	6	CONTRACTOR - CORP YARD	\$251,471.17
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$251,471.17
LANDCARE USA, LLC	15750	08/31/2015	7975982	LANDSCAPE MOWING-ZONE A PARKS-JUL 2015	\$29,468.23
		08/31/2015	7975984	LANDSCAPE MOWING-CFD #1-JUL 2015	
		08/31/2015	7975977	LANDSCAPE MAINT.-ZONE M-JUL 2015	
		08/31/2015	7975983	LANDSCAPE MAINT.-ZONE S-JUL 2015	
		08/31/2015	7975978	LANDSCAPE MAINT.-ZONES E-7, SD LMD ZN 01, 01A, & 08-JUL 2015	
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$77,402.74
LIBRARY SYSTEMS & SERVICES, LLC	225955	08/17/2015	15167	LIBRARY I.T. SERVICES-AUG15	\$244,001.82
		08/17/2015	15166	LIBRARY CONTRACTUAL SERVICES & MATERIALS-AUG15	
		08/17/2015	15069	LIBRARY I.T. SERVICES-JUL15	
		08/17/2015	15068	LIBRARY CONTRACTUAL SERVICES & MATERIALS-JUL15	
Remit to: GERMANTOWN, MD					<b>FYTD:</b> \$244,001.82
MAMCO, INC	225957	08/17/2015	1-ES	CONTRACTOR - E SUNNYMEAD SD	\$96,366.59
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$96,366.59

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



**City of Moreno Valley**  
**Payment Register**  
 For Period 8/1/2015 through 8/31/2015

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
MARIPOSA HORTICULTURAL ENTERPRISES, INC.	15567	08/03/2015	69215	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	\$52,577.39
		08/03/2015	69210	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69214	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69207	LANDSCAPE MAINT.-ZONE D-JUN 2015	
		08/03/2015	69176	LANDSCAPE MAINT. EXTRA WORK-SD LMD ZN 02-REPAIR IRRIGATION	
		08/03/2015	69208	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69175	LANDSCAPE MAINT. EXTRA WORK-SD LMD ZN 02-REPAIR IRRIGATION CTRL.	
		08/03/2015	68938	LANDSCAPE MAINT. EXTRA WORK-MAY 2015, ZONE D-PLACE CONCRETE	
		08/03/2015	69211	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69212	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69220	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69221	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69177	LANDSCAPE MAINT. EXTRA WORK-SD LMD ZN 02-REPAIR IRRIGATION	
		08/03/2015	69209	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69213	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69174	LANDSCAPE MAINT.-SD LMD ZN 02-JUN 2015	



**City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015**

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
MARIPOSA HORTICULTURAL ENTERPRISES, INC.		08/03/2015	69216	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69218	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69219	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69217	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-REPAIR IRRIGATION	
		08/03/2015	69222	LANDSCAPE MAINT. EXTRA WORK-JUN 2015, ZONE D-MULCH INSTALLATION	
Remit to: IRWINDALE, CA					<b>FYTD: \$91,455.98</b>
MERCHANTS LANDSCAPE SERVICES INC	15753	08/31/2015	46102	LANDSCAPE MAINT.-SD LMD ZN 03 & 03A-JUL 2015	\$28,255.86
		08/31/2015	46181	LANDSCAPE ADDTL. WORK-SD LMD ZN 03-MULCH INSTALLATION	
		08/31/2015	46101	LANDSCAPE MAINT.-ZONES E-8, SD LMD ZN 05, 06, & 07-JUL 2015	
		08/31/2015	46222	IRRIGATION REPAIRS-SD LMD ZN 03-JUL 2015	
Remit to: MONTEREY PARK, CA					<b>FYTD: \$61,864.95</b>
MORENO KNOX, LLC	226092	08/24/2015	PA09-0012	RELEASE OF GRADING & EROSION CONTROL SECURITY DEPOSIT (PM 36162)	\$178,628.00
Remit to: IRVINE, CA					<b>FYTD: \$178,628.00</b>
MORENO VALLEY UTILITY	225961	08/17/2015	AUG-15 8/1/15	ELECTRICITY	\$99,699.81
Remit to: HEMET, CA					<b>FYTD: \$200,140.66</b>

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



**City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015**

**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
NATIONWIDE RETIREMENT SOLUTIONS CP	15587	08/07/2015	2016-00000054	8010 - DEF COMP 457 - NATIONWIDE*	\$25,911.51
	15681	08/21/2015	2016-00000078	8010 - DEF COMP 457 - NATIONWIDE*	\$25,986.51
Remit to: COLUMBUS, OH					<u>FYTD:</u> \$112,972.05
NTH GENERATION COMPUTING, INC.	226039	08/24/2015	27093H	REPLACEMENT EMAIL SERVERS	\$37,069.93
Remit to: SAN DIEGO, CA					<u>FYTD:</u> \$56,259.93
PERMA	15610	08/10/2015	MV1344 SETTLEMNT	FULL/FINAL SETTLEMENT FOR CLAIM MV1344-M. DAVIS V. CITY CASE	\$49,950.00
	15707	08/24/2015	2015-16 GEN LIAB	DEPOSIT PREMIUM FOR 2015-16 GENERAL LIABILITY PROGRAM	\$491,885.00
		08/24/2015	2015-16 CYBER LB	INSURANCE PREMIUM FOR 2015-16 CYBER LIABILITY COVERAGE PROGRAM	
		08/24/2015	2015-16 CRIME CV	INSURANCE PREMIUM FOR 2015-16 CRIME COVERAGE PROGRAM	
	08/24/2015	2015-16 PROP PRG	INSURANCE PREMIUM FOR 2015-16 PROPERTY PROGRAM		
Remit to: PALM DESERT, CA					<u>FYTD:</u> \$541,835.00
PERS HEALTH INSURANCE	15621	08/10/2015	W150801	EMPLOYEE HEALTH INSURANCE	\$179,948.20
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$360,357.33
PERS RETIREMENT	15624	08/14/2015	P150731	PERS RETIREMENT DEPOSIT - CLASSIC	\$237,911.49
	15722	08/28/2015	P150814	PERS RETIREMENT DEPOSIT - CLASSIC	\$238,790.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$1,293,586.69

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City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS IN THE AMOUNT OF \$25,000 OR GREATER

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
RDO EQUIPMENT CO, INC	225899	08/10/2015	E02281	2015 VERMEER BC1500 CHIPPER PURCHASE	\$56,823.38
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$56,823.38
RIVERSIDE CONSTRUCTION COMPANY, INC	15572	08/03/2015	150607	CONSTRUCTION - SR-60/NASON OC	\$37,599.69
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$37,599.69
RIVERSIDE HOUSING DEVEL CORP	15656	08/17/2015	22877 ALLIES (4)	MULTI FAMILY AFFORDABLE HOUSING PROJ.-CONSTR. DRAW 5 (RETENTION)	\$54,918.74
		08/17/2015	22877 ALLIES (6)	MULTI FAMILY AFFORDABLE HOUSING PROJ-CONSTRUCTION DRAW 6	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$161,353.94
SCOTT FAZEKAS & ASSOCIATES, INC	225903	08/10/2015	18222	PLAN CHECK SERVICES FOR BLDG. & SAFETY DEPT.-MAY 2015	\$47,876.88
		08/10/2015	18274	PLAN CHECK SERVICES FOR BLDG. & SAFETY DEPT.-JUN 2015	
Remit to: IRVINE, CA					<u>FYTD:</u> \$47,876.88

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City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS IN THE AMOUNT OF \$25,000 OR GREATER

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
SOCO GROUP, INC	15762	08/31/2015	0190846-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	\$29,498.35
		08/31/2015	0189468-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0188492-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0186752-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0184669-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0193248-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0191952-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
		08/31/2015	0195822-IN	FUEL FOR CITY VEHICLES & EQUIPMENT	
	08/31/2015	0194599-IN	FUEL FOR CITY VEHICLES & EQUIPMENT		
Remit to: PERRIS, CA					FYTD: \$50,097.59

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
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CHECKS IN THE AMOUNT OF \$25,000 OR GREATER

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
SOUTHERN CALIFORNIA EDISON 1	225906	08/10/2015	7500584219	WDAT CHARGES-IRIS AVE. LOCATION	\$63,590.97
		08/10/2015	7500584222	WDAT CHARGES-NANDINA AVE. LOCATION	
		08/10/2015	7500584220	WDAT CHARGES-GRAHAM ST. LOCATION	
		08/10/2015	7500584221	WDAT CHARGES-GLOBE ST. LOCATION	
		08/10/2015	7500584224	WDAT CHARGES-SUBSTATION 115KV INTERCONNECTION	
		08/10/2015	7500584227	WDAT CHARGES-24417 NANDINA AVE. SUBSTATION	
	225968	08/10/2015	7500584223	WDAT CHARGES-FREDERICK AVE. LOCATION	\$115,857.03
		08/17/2015	721-3449/JUL-15	IFA CHARGES-SUBSTATION	
		08/17/2015	JUL-15 8/17/15	ELECTRICITY	
		08/17/2015	587-9520/JUL-15	ELECTRICITY-FERC CHARGES	
226046	08/17/2015	707-6081/JUL-15	ELECTRICITY	\$88,064.67	
08/24/2015	JUL-15 8/24/15	ELECTRICITY			
Remit to: ROSEMEAD, CA					FYTD: \$560,099.44
TENASKA ENERGY, INC	15765	08/31/2015	1342-JUL-15-01	RESOURCE ADEQUACY-MV UTILITY-JUL15	\$93,300.00
Remit to: OMAHA, NE					FYTD: \$124,120.00
TGP ENERGY MANAGEMENT, LLC	226048	08/24/2015	WREGIS6112015-XI	RENEWABLE ENERGY - RESOURCE ADEQUACY	\$218,644.84
		08/24/2015	WREGIS06112015-X	RENEWABLE ENERGY - RESOURCE ADEQUACY	
Remit to: NEW YORK, NY					FYTD: \$218,644.84

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**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
THE ADVANTAGE GROUP/ FLEX ADVANTAGE	15577	08/03/2015	201508	AUGUST 2015 RETIREE MEDICAL BENEFIT BILLING	\$41,857.31
	15766	08/31/2015	201509	SEPT. 2015 RETIREE MEDICAL BENEFIT BILLING	\$38,068.44
Remit to: TEMECULA, CA					<u>FYTD:</u> \$138,766.82
THE UNIVERSITY ENTERPRISES CORPORATION AT CSUSB	225976	08/17/2015	SP0006975	IE SMALL BUSINESS DEV. CTR FUNDING SUPPORT MATCH-3RD QTR FY14/15	\$37,188.00
		08/17/2015	SP0006840	IE SMALL BUSINESS DEV. CTR FUNDING SUPPORT MATCH-2ND QTR FY14/15	
		08/17/2015	SP0007062	IE SMALL BUSINESS DEV. CTR FUNDING SUPPORT MATCH-4TH QTR FY14/15	
Remit to: SAN BERNARDINO, CA					<u>FYTD:</u> \$49,688.00
THINK TOGETHER, INC	15716	08/24/2015	111-15/16-1	ASES PROGRAM MANAGEMENT SERVICES	\$492,539.36
Remit to: SANTA ANA, CA					<u>FYTD:</u> \$492,539.36
U.S. BANK/CALCARDS	15579	08/03/2015	07-27-15	JULY 2015 CALCARD ACTIVITY	\$195,389.45
Remit to: ST. LOUIS, MO					<u>FYTD:</u> \$628,234.94
VASQUEZ & COMPANY LLP	226014	08/17/2015	2150586-IN	AUDIT SERVICES-CITY FINANCIAL STMTS. FOR FY 14/15-FIRST BILLING	\$27,000.00
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$27,000.00
WASTE MANAGEMENT	225982	08/17/2015	081315	SOLID WASTE DELINQUENCIES LESS FRANCHISE FEES	\$29,728.94
Remit to: CORONA, CA					<u>FYTD:</u> \$29,728.94

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**CHECKS IN THE AMOUNT OF \$25,000 OR GREATER**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
WILLDAN ENGINEERING	15620	08/10/2015	002-15712	PLAN CHECK & INSPECTION SVCS FOR BLDG. & SAFETY DEPT.- JUN15	\$196,461.76
		08/10/2015	002-15522	PLAN CHECK & INSPECTION SVCS FOR BLDG. & SAFETY DEPT.- APR15	
		08/10/2015	002-15641	PLAN CHECK & INSPECTION SVCS FOR BLDG. & SAFETY DEPT.- MAY15	
Remit to: ANAHEIM, CA					<u>FYTD:</u> \$196,461.76
WRCOG WESTERN RIVERSIDE CO. OF GOVTS.	225985	08/17/2015	JUL-15 TUMF	TUMF FEES COLLECTED FOR 7/1-7/31/15	\$328,301.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$371,826.51
<b>TOTAL AMOUNTS OF \$25,000 OR GREATER</b>					<b>\$14,420,783.03</b>

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City of Moreno Valley  
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**CHECKS UNDER \$25,000**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ABILITY COUNTS, INC	15726	08/31/2015	ACI11840	LANDSCAPE MAINT-CDF#1-JUL15	\$2,065.00
Remit to: CORONA, CA					<u>FYTD:</u> \$4,130.00
ABRASIVE BLASTING SERVICE	226094	08/31/2015	6887	STRIPE REMOVAL SERVICES	\$15,761.25
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$15,761.25
ACCELA, INC.	15627	08/17/2015	PE023547	TRAVEL RELATED EXPENSES-DEVT. SVCS PROJ.	\$9,340.03
		08/17/2015	PE023660	TRAVEL RELATED EXPENSES-DEVT. SVCS PROJ.	
		08/17/2015	PS023546	PROFESSIONAL SVCS-DEVT. SVCS PROJ.	
		08/17/2015	PS023661	PROFESSIONAL SVCS-DEVT. SVCS PROJ.	
	15727	08/31/2015	PS023725	PROFESSIONAL SVCS-DEV'T. SVCS PROJ.	\$750.00
	15728	08/31/2015	PE023724	TRAVEL RELATED EXPENSES-DEV'T. SVCS PROJ.	\$1,345.00
Remit to: SAN RAMON, CA					<u>FYTD:</u> \$11,435.03
ADLERHORST INTERNATIONAL INC.	15729	08/31/2015	53295	MONTHLY K-9 TRAINING-AUG15	\$809.28
		08/31/2015	53198	SUPPLIES FOR K-9 DRE	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$1,543.50
ADMINSURE	226095	08/31/2015	8690	WORKERS' COMP CLAIMS ADMINISTRATION-JUL15	\$2,175.00
Remit to: DIAMOND BAR, CA					<u>FYTD:</u> \$2,175.00
ADVANCE REFRIGERATION & ICE SYSTEMS, INC	15682	08/24/2015	40086	REPAIR PARTS & LABOR-CRC FREEZER	\$732.32
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$4,496.41

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**CHECKS UNDER \$25,000**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ADVANCED ELECTRIC	226018	08/24/2015	11309	CRC GYM LIGHTING UPGRADE	\$24,747.00
		08/24/2015	11303	ELECTRICAL SERVICES-ANIMAL SHELTER	
		08/24/2015	11302	ELECTRICAL SERVICES-ANIMAL SHELTER	
		08/24/2015	11304	ELECTRICAL SERVICES-COTTONWOOD GOLF COURSE	
		08/24/2015	11300	ELECTRICAL SERVICES-ANIMAL SHELTER	
	226096	08/31/2015	11349	ELECTRICAL SERVICES-SUNNYMEAD PARK	\$3,241.08
		08/31/2015	11305	ELECTRICAL SERVICES-VISTA LOMAS PARK	
		08/31/2015	11306	ELECTRICAL SERVICES-MORRISON PARK	
		08/31/2015	11307	ELECTRICAL SERVICES-CELEBRATION PARK	
		08/31/2015	11348	ELECTRICAL SERVICES-SUNNYMEAD PARK	
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$59,880.08
AEI-CASC ENGINEERING	15730	08/31/2015	0034034	PLAN CHECK SVCS-WQMP	\$3,017.00
Remit to: COLTON, CA					<b>FYTD:</b> \$9,526.45
AIR EXCHANGE INC	225870	08/10/2015	36169	PLYMOVENT MAINT & REPAIRS-FS#2	\$1,351.90
	226157	08/31/2015	36543	PLYMOVENT MAINT & REPAIRS-FS#2,6,48,58,65,91&99	\$4,683.70
Remit to: FAIRFIELD, CA					<b>FYTD:</b> \$6,035.60
ALBERT A. WEBB ASSOCIATES	15683	08/24/2015	153745	CONSULTANT - EDGEMONT WATER SYSTEM	\$3,743.65
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$21,966.42

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ALTERNATIVES TO DOMESTIC VIOLENCE	15628	08/17/2015	JUN-2015	CDBG REIMBURSEMENT	\$652.60
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$2,027.95
ALWORTH, RALPH	225992	08/17/2015	R15-088686	AS REFUND-TRAP DEPOSIT	\$50.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$50.00
AMARO, PATRICIA	225854	08/03/2015	R15-088398	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$75.00
AMERICAN TOWERS	15590	08/10/2015	1983046	RADIO EQUIPMENT TOWER LEASE-AUG15	\$3,291.75
Remit to: CHARLOTTE, NC					<b>FYTD:</b> \$6,583.50
AMS.NET, INC	225871	08/10/2015	143157	EOC WIRELESS NETWORK INSTALLATION-SMARTNET CISCO CATALYST 2960	\$4,644.57
		08/10/2015	142677	NETWORK REDESIGN & INFRASTRUCTURE SUPPORT	
		08/10/2015	142875	EOC WIRELESS NETWORK INSTALLATION-MERAKI ENT LIC & SUPPORT-5YR	
	225872	08/10/2015	142859	MERAKI ENT CLOUD CONTROLLER LICENSE-5YR	\$1,410.69
	226098	08/31/2015	143470	EOC WIRELESS NETWORK INSTALLATION	\$15,868.38
		08/31/2015	143562	CRC WIRELESS NETWORK INSTALLATION	
		08/31/2015	143560	CRC WIRELESS NETWORK INSTALLATION	
		08/31/2015	143514	EOC WIRELESS NETWORK INSTALLATION	
Remit to: LIVERMORE, CA					<b>FYTD:</b> \$21,923.64

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
AMTECH ELEVATOR SERVICES	225873	08/10/2015	DVB65903115	WHEELCHAIR LIFT ROUTINE MAINT-CRC 1/1-6/30/15	\$827.80
		08/10/2015	DVB05046515	ELEVATOR ROUTINE MAINT-EOC-MAY15	
		08/10/2015	DVB05044515	ELEVATOR ROUTINE MAINT-CITY HALL-MAY15	
		08/10/2015	DVB05046615	ELEVATOR ROUTINE MAINT-EOC-JUN15	
		08/10/2015	DVB05044714	ELEVATOR ROUTINE MAINT-CITY HALL-JUL14	
		08/10/2015	DVB05044615	ELEVATOR ROUTINE MAINT-CITY HALL-JUN15	
Remit to: PASADENA, CA					<u>FYTD:</u> \$827.80
ANDLAND PROPERTIES, LLC	226058	08/24/2015	PA05-0108	REFUND OF T&M DEPOSIT BALANCE (PM33152-1 GATEWAY BUSINESS PARK)	\$345.89
Remit to: TORRANCE, CA					<u>FYTD:</u> \$345.89
ANJJ, LLC	225993	08/17/2015	BL#29781-YR2015	REFUND OF OVERPAYMENT FOR BL#29781	\$62.00
Remit to: ALHAMBRA, CA					<u>FYTD:</u> \$62.00
ARC OF RIVERSIDE COUNTY, THE	15629	08/17/2015	4/APR-JUN 2015	REIMB-MV RESOURCE CTR-CDBG	\$2,250.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$2,250.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ARROWHEAD WATER	15684	08/24/2015	05G0029115201	WATER PURIF. UNIT RENTAL-SENIOR CENTER	\$539.80
		08/24/2015	05G0029648037	WATER PURIF. UNIT RENTAL-FIRE ST. #91	
		08/24/2015	05G0028990919	WATER PURIF. UNITS RENTAL-CITY HALL	
		08/24/2015	05G0029115359	WATER PURIF. UNIT RENTAL-CRC	
		08/24/2015	05G0029115144	WATER PURIF. UNIT RENTAL-LIBRARY	
		08/24/2015	05G0029115110	WATER PURIF. UNITS RENTAL-CITY YARD & TRANSP. TRAILER	
		08/24/2015	05G0029647997	WATER PURIF. UNIT RENTAL-FIRE ST. #58	
		08/24/2015	05G0029647914	WATER PURIF. UNIT RENTAL-FIRE ST. #6	
		08/24/2015	05G0032389744	WATER PURIF. UNIT RENTAL-FIRE ST. #99	
		08/24/2015	05G0029647948	WATER PURIF. UNIT RENTAL-FIRE ST. #48	
		08/24/2015	05G0032414377	WATER PURIF. UNIT RENTAL-PUBLIC SAFETY BLDG.	
		08/24/2015	05G0029647971	WATER PURIF. UNIT RENTAL-FIRE ST. #2	
		08/24/2015	05G0029115177	WATER PURIF. UNITS RENTAL-ANIMAL SHELTER	
		08/24/2015	05G0029648052	WATER PURIF. UNIT RENTAL-FIRE ST. #65	
Remit to: LOUISVILLE, KY					<u>FYTD:</u> \$1,376.49
ASCENCIO , LETICIA	226134	08/31/2015	R15-088905,943	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: GARDENA, CA					<u>FYTD:</u> \$75.00
AT&T MOBILITY	226099	08/31/2015	872455379X080615	CELLULAR PHONE SVC-MCC	\$97.02
Remit to: CAROL STREAM, IL					<u>FYTD:</u> \$289.38
AVENA, AILEEN	225918	08/10/2015	1268933	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00

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BAILEY, RANCE	226091	08/24/2015	1276354	REFUND-CANCELLED REGIS-PEE WEE BASKETBALL COURSE	\$72.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$72.00
BARBOSA, VICTOR	225855	08/03/2015	1268323	REFUND MOVED	\$290.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$290.00
BARRAGAN , CLEOTILDE	226059	08/24/2015	R15-089016	AS REFUND-ADOPT RET, REFUND LICENSE FEE	\$15.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$15.00
BARTEL ASSOCIATES, LLC	226019	08/24/2015	15-431	ACTUARIAL CONSULTING SVCS-OPEB VALUATION-JUL15	\$2,955.00
Remit to: SAN MATEO, CA					<u>FYTD:</u> \$13,955.00
BENESYST	15591	08/10/2015	IN335776	ADMINISTRATION FEES-COBRA (JUN-2014)	\$255.20
Remit to: MILWAUKEE, WI					<u>FYTD:</u> \$255.20
BERUMEN, BERNADETTE	225994	08/17/2015	MV3130402013	REFUND-PARKING CITATION OVERPAYMENT	\$115.00
Remit to: CHINO HILLS, CA					<u>FYTD:</u> \$115.00
BHATIA, GURVIR	226135	08/31/2015	MVU 7013251-02	SOLAR INCENTIVE REBATE	\$3,535.10
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$3,535.10
BICKMORE RISK SERVICES & CONSULTING	15685	08/24/2015	BRS-0012179	WORKERS COMP ACTUARIAL REVIEW SERVICE	\$11,000.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$11,000.00
BILL'S SPECIAL KIDS	225995	08/17/2015	1272892	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00

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BMW MOTORCYCLES OF RIVERSIDE	15592	08/10/2015	6011054	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	\$2,080.31
		08/10/2015	6011080	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	
		08/10/2015	6011086	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	
		08/10/2015	6011093	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	
		08/10/2015	6010873	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	
	15731	08/31/2015	6011368	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	\$477.31
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$90,648.01

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BOX SPRINGS MUTUAL WATER COMPANY	225874	08/10/2015	721-1 7/27/15	WATER USAGE ZONE 01-TOWNGATE	\$135.34
	226020	08/24/2015	80-4 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	\$272.00
		08/24/2015	1087-1 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	1086-1 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	1085-1 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	1088-1 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	1084-1 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	204-9 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	45-4 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
		08/24/2015	189-13 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY	
	08/24/2015	195-5 7/27/15	WATER ASSESSMENT ON VACANT LOT OWNED BY THE HOUSING AUTHORITY		
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$785.42
BROADSTREET, CASSANDRA	225856	08/03/2015	R15-085205	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$75.00

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C F& D CORPORATION	226158	08/31/2015	18765	BOX SPRINGS TOWER SITE GROUND LEASE-SEPT 2015 THRU AUG 2016	\$19,788.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$19,788.00
CALGO VEBA CITY OF MORENO VALLEY	15593	08/10/2015	2016-00000039	4020 - EXEC VEBA*	\$15,609.45
	15686	08/24/2015	2016-00000059	4020 - EXEC VEBA*	\$1,950.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$29,493.61
CALIFORNIA DEPARTMENT OF SOCIAL SERVICES	225875	08/10/2015	334809653-15/16	COMMUNITY CARE LICENSING FEES-ARMADA SCHOOL CHILDCARE FAC.	\$473.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$473.00
CALIFORNIA DEPT OF EDUCATION	225943	08/17/2015	C-055027	FY13/14 CHILD'S PLACE GRANT APPORTIONMENT OVERPAYMENT	\$15,536.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$15,536.00
CALIFORNIA DEPT OF TRANSPORTATION	225944	08/17/2015	16000360	CALTRANS INVOICE - 801 0064 SR-60 REDLANDS	\$10,000.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$10,000.00
CALIFORNIA SHOPPING CART RETRIEVAL CORP.	15630	08/17/2015	157050	SHOPPING CART RETRIEVAL SVCS-JUN15	\$1,800.00
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$1,800.00
CALIFORNIA WATERSHED ENGINEERING CORP.	15594	08/10/2015	15668	PLAN CHECK SVCS-PWQMP	\$2,908.75
Remit to: FULLERTON, CA					<u>FYTD:</u> \$3,335.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
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For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
CARE ANIMAL HOSPITAL	226100	08/31/2015	186898	VET CARE SVCS-K-9 DRE	\$412.00
Remit to: TEMECULA, CA					<u>FYTD:</u> \$412.00
CARILLO, MARIA	225919	08/10/2015	1268831	CRC RENTAL REFUND DEPOSIT	\$750.00
Remit to: PERRIS, CA					<u>FYTD:</u> \$750.00
CARROLL, TIMOTHY	225945	08/17/2015	SUMMER 2015	TUITION REIMBURSEMENT	\$1,104.00
	225986	08/17/2015	4/14-4/17/15	TRAVEL PER DIEM & MILEAGE-NAB CONFERENCE 2015/LAS VEGAS, NV.	\$458.10
Remit to: LA HABRA, CA					<u>FYTD:</u> \$1,562.10
CHANDLER ASSET MANAGEMENT, INC	15595	08/10/2015	17985	INVESTMENT MANAGEMENT SVCS-JUL15	\$4,115.00
Remit to: SAN DIEGO, CA					<u>FYTD:</u> \$8,222.00
CHARLES ABBOTT ASSOCIATES, INC	15732	08/31/2015	54930	CONSULTING SVCS-NPDES/SWMP-JUL15	\$12,309.00
Remit to: MISSION VIEJO, CA					<u>FYTD:</u> \$29,265.00
CHUCK GALLEY	225835	08/03/2015	JUN-2015	INSTRUCTOR SERVICES-ELECTRIC GUITAR & BASS INSTRUCTION CLASS	\$150.00
Remit to: RIALTO, CA					<u>FYTD:</u> \$150.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
CINTAS CORPORATION	15631	08/17/2015	150508658	UNIFORM RENTAL SVC.-TREE MAINT. STAFF	\$468.26
		08/17/2015	150504993	UNIFORM RENTAL SVC.-ST. SWEEPING STAFF	
		08/17/2015	150504994	UNIFORM RENTAL SVC.-STORM DRAIN MAINT. STAFF	
		08/17/2015	150508657	UNIFORM RENTAL SVC.-EQUIPMENT MAINT. STAFF	
		08/17/2015	150508660	UNIFORM RENTAL SVC.-ST. SWEEPING STAFF	
		08/17/2015	150504989	UNIFORM RENTAL SVC.-GRAFFITI RMVL. STAFF	
		08/17/2015	150508662	UNIFORM RENTAL SVC.-STREET MAINT. STAFF	
		08/17/2015	150504991	UNIFORM RENTAL SVC.-TREE MAINT. STAFF	
		08/17/2015	150508656	UNIFORM RENTAL SVC.-GRAFFITI RMVL. STAFF	
		08/17/2015	150504996	UNIFORM RENTAL SVC.-CONCRETE MAINT. STAFF	
		08/17/2015	150504995	UNIFORM RENTAL SVC.-STREET MAINT. STAFF	
		08/17/2015	150504990	UNIFORM RENTAL SVC.-EQUIPMENT MAINT. STAFF	
		08/17/2015	150508663	UNIFORM RENTAL SVC.-CONCRETE MAINT. STAFF	
		08/17/2015	150508661	UNIFORM RENTAL SVC.-STORM DRAIN MAINT. STAFF	

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
CINTAS CORPORATION	15687	08/24/2015	150516121	UNIFORM RENTAL SVC.-TRAFFIC SIGNAL MAINT. STAFF	\$383.09
		08/24/2015	150516122	UNIFORM RENTAL SVC.-SIGNS & STRIPING STAFF	
		08/24/2015	150512400	UNIFORM RENTAL SVC.-TRAFFIC SIGNAL MAINT. STAFF	
		08/24/2015	150512411	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150512401	UNIFORM RENTAL SVC.-SIGNS & STRIPING STAFF	
		08/24/2015	150508665	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150527352	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150523584	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150516132	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150519867	UNIFORM RENTAL SVC.-TRAFFIC SIGNAL MAINT. STAFF	
		08/24/2015	150519868	UNIFORM RENTAL SVC.-SIGNS & STRIPING STAFF	
		08/24/2015	150504987	UNIFORM RENTAL SVC.-TRAFFIC SIGNAL MAINT. STAFF	
		08/24/2015	150519878	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150504998	UNIFORM RENTAL SVC.-FACILITIES STAFF	
		08/24/2015	150508654	UNIFORM RENTAL SVC.-TRAFFIC SIGNAL MAINT. STAFF	
		08/24/2015	150508655	UNIFORM RENTAL SVC.-SIGNS & STRIPING STAFF	
		08/24/2015	150504988	UNIFORM RENTAL SVC.-SIGNS & STRIPING STAFF	





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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
CINTAS CORPORATION	15733	08/31/2015	150519879	UNIFORM RENTAL SVC.-GOLF COURSE STAFF	\$432.43
		08/31/2015	150519872	UNIFORM RENTAL SVC.-CFD #1 STAFF	
		08/31/2015	150519866	UNIFORM RENTAL SVC.-PURCHASING DIV. STAFF	
		08/31/2015	150512398	UNIFORM RENTAL SVC.-PARKS MAINT. STAFF	
		08/31/2015	150512399	UNIFORM RENTAL SVC.-PURCHASING DIV. STAFF	
		08/31/2015	150504999	UNIFORM RENTAL SVC.-GOLF COURSE STAFF	
		08/31/2015	150504992	UNIFORM RENTAL SVC.-CFD #1 STAFF	
		08/31/2015	150516133	UNIFORM RENTAL SVC.-GOLF COURSE STAFF	
		08/31/2015	150512412	UNIFORM RENTAL SVC.-GOLF COURSE STAFF	
		08/31/2015	150519865	UNIFORM RENTAL SVC.-PARKS MAINT. STAFF	
		08/31/2015	150504985	UNIFORM RENTAL SVC.-PARKS MAINT. STAFF	
		08/31/2015	150516120	UNIFORM RENTAL SVC.-PURCHASING DIV. STAFF	
		08/31/2015	150516119	UNIFORM RENTAL SVC.-PARKS MAINT. STAFF	
		08/31/2015	150516126	UNIFORM RENTAL SVC.-CFD #1 STAFF	
		08/31/2015	150504986	UNIFORM RENTAL SVC.-PURCHASING DIV. STAFF	
		08/31/2015	150512405	UNIFORM RENTAL SVC.-CFD #1 STAFF	
		08/31/2015	150508666	UNIFORM RENTAL SVC.-GOLF COURSE STAFF	
		08/31/2015	150508659	UNIFORM RENTAL SVC.-CFD #1 STAFF	
		08/31/2015	150508652	UNIFORM RENTAL SVC.-PARKS MAINT. STAFF	
		08/31/2015	150508653	UNIFORM RENTAL SVC.-PURCHASING DIV. STAFF	

Remit to: ONTARIO, CA FYTD: \$3,212.55

CITY OF FOSTER CITY      225836      08/03/2015      9032      CALOPPS ANNUAL FEE - 2015      \$2,000.00

Remit to: FOSTER CITY, CA FYTD: \$2,000.00

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City of Moreno Valley  
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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
COLONIAL SUPPLEMENTAL INSURANCE	225850	08/03/2015	7133069-0801410	SUPPLEMENTAL INSURANCE	\$6,174.64
	226160	08/31/2015	7133069-0901481	SUPPLEMENTAL INSURANCE	\$6,174.64
Remit to: COLUMBIA, SC					<b>FYTD:</b> \$18,523.92
COMMUNITY ASSISTANCE PROGRAM - CAP	225946	08/17/2015	MAY 2015	CAP FOOD PROGRAM-CDBG	\$4,719.00
		08/17/2015	JUN 2015	CAP FOOD PROGRAM-CDBG	
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$11,438.00
COMMUNITY CONNECT	225947	08/17/2015	JUN 2015	211 CALL CENTER INFO & REFERRAL-CDBG	\$726.74
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$2,338.17
COMMUNITY HEALTH CHARITIES	225876	08/10/2015	2016-00000040	8725 - CH CHARITY	\$37.00
	226021	08/24/2015	2016-00000060	8725 - CH CHARITY	\$37.00
Remit to: BALTIMORE, MD					<b>FYTD:</b> \$148.00
COMPETITIVE STRIDE	15596	08/10/2015	3380	SPORTS AWARD SUPPLIES-SUMMER YOUTH BASKETBALL	\$1,624.32
		08/10/2015	3379	SPORTS AWARD SUPPLIES-TBALL	
	15688	08/24/2015	3376	TROPHY FOR JULY 4TH	\$30.24
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$2,190.24

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
COMPEX LEGAL SERVICES, INC.	226101	08/31/2015	21383187	LEGAL SERVICES-CLAIM#90-42/MV1506	\$135.01
	226102	08/31/2015	21374314	LEGAL SERVICES-CLAIM#90-42/MV1506	\$764.09
		08/31/2015	21378453	LEGAL SERVICES-CLAIM#90-42/MV1506	
		08/31/2015	21422026	LEGAL SERVICES-CLAIM#90-42/MV1506	
Remit to: TORRANCE, CA					<u>FYTD:</u> \$1,123.95
COMPRESSED AIR SPECIALTIES, INC	225948	08/17/2015	26012	COMPRESSED AIR MAINTENANCE	\$1,307.11
Remit to: ANAHEIM, CA					<u>FYTD:</u> \$1,307.11
CONTRERAS, JOSE	225949	08/17/2015	072315	SPORTS OFFICIATING SERVICES-SOFTBALL	\$147.00
		08/17/2015	061815	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	071215	SPORTS OFFICIATING SERVICES-SOFTBALL	
226022	08/24/2015	080915	SPORTS OFFICIATING SERVICES	\$63.00	
	08/24/2015	073015	SPORTS OFFICIATING SERVICES		
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$210.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
COSTCO	225837	08/03/2015	21955	MISC. SUPPLIES FOR EOC	\$165.30
		08/03/2015	21957	MISC. SUPPLIES FOR EOC	
	225877	08/10/2015	21960	SNACK SUPPLIES-SKATE PARK	\$7,193.60
		08/10/2015	21963	SPECIAL EVENTS SUPPLIES-SENIOR CTR	
		08/10/2015	21983	SNACK SUPPLIES FOR A CHILD'S PLACE	
		08/10/2015	21962	SNACK SUPPLIES FOR A CHILD'S PLACE	
		08/10/2015	22014	SNACK SUPPLIES-SKATE PARK	
		08/10/2015	22015	SNACK SUPPLIES-COTTONWOOD GOLF COURSE	
		08/10/2015	21961	SNACK SUPPLIES-CELEBRATION PARK	
	226103	08/31/2015	22071	MISC. SUPPLIES-CAREER DEV'T. SESSION	\$177.22
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$10,566.19
COUNSELING TEAM, THE	226104	08/31/2015	29347	EMPLOYEE SUPPORT SERVICES-JUL15	\$1,250.00
Remit to: SAN BERNARDINO, CA					<b>FYTD:</b> \$2,500.00
COUNTRY SQUIRE ESTATES	225838	08/03/2015	JULY 2015	UUT REFUND FOR JULY 2015	\$43.55
	226105	08/31/2015	AUG 2015	UUT REFUND AUGUST 2015	\$50.46
Remit to: ONTARIO, CA					<b>FYTD:</b> \$143.30
COUNTY OF RIVERSIDE	225878	08/10/2015	1840	CERTIFICATION OF REGISTERED VOTERS	\$35.00
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$4,675.42
COUNTY OF RIVERSIDE, AUDITOR- CONTROLLER	225879	08/10/2015	MAY-15	TRANSMITTAL OF AB544 FROM PARKING CONTROL FEES	\$24,800.88
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$78,473.88

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
CPRS DISTRICT XI	226023	08/24/2015	124499 15/16	RENEWAL MEMBERSHIP FOR MEL ALONZO	\$165.00
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$165.00
CREASON AND AARVIG, LLP	226024	08/24/2015	28988-JUN15	LEGAL SERVICES-CLAIM MV1510-J. DOMINGUEZ	\$525.82
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$1,378.66
CUTWATER INVESTOR SERVICES CORP	15734	08/31/2015	20237A	INVESTMENT MANAGEMENT SERVICES-JUL15	\$2,715.66
Remit to: DENVER, CO					<u>FYTD:</u> \$5,422.29
D&D SERVICES DBA D&D DISPOSAL, INC.	226025	08/24/2015	91030	DECEASED ANIMAL REMOVAL SVCS-JUL15	\$745.00
Remit to: VALENCIA, CA					<u>FYTD:</u> \$1,490.00
DADDIERCO, JUDITH	225920	08/10/2015	R15-088672	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: TRABUCO CANYON, CA					<u>FYTD:</u> \$75.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>	
DATA TICKET, INC.	15557	08/03/2015	61566TPC	THIRD PARTY COLLECTIONS-CODE-APR15	\$23,326.76	
		08/03/2015	61522	ADMIN CITATION PROCESSING-CODE (RED)-APR15		
		08/03/2015	62168TPC	THIRD PARTY COLLECTIONS-CODE-MAY15		
	15598	15598	08/03/2015	052015TKTST	TICKET STOCK-85 ROLLS	\$14,128.73
			08/03/2015	56181REV	ADMIN CITATION PROCESSING-CODE-AUG14	
			08/03/2015	57724REV	ADMIN CITATION PROCESSING-CODE-OCT14	
	15632	15632	08/03/2015	61637-TPC	THIRD PARTY COLLECTIONS-CODE-APR15	\$21,330.94
			08/03/2015	61637	PARKING CITATION PROCESSING-CODE-APR15	
			08/10/2015	63156	ADMIN CITATION PROCESSING-B&S-JUN15	
			08/10/2015	62168	PARKING CITATION PROCESSING-CODE-MAY15	
			08/10/2015	62884	BUSINESS INSPECTION PROCESSING-NPDES-JUN15	
			08/10/2015	62977TPC	THIRD PARTY COLLECTIONS-CODE-JUN15	
			08/17/2015	62977	PARKING CITATION PROCESSING-CODE-JUN15	
			08/17/2015	62664	ADMIN CITATION PROCESSING-CODE-MAY15	
			08/17/2015	60140TPC	THIRD PARTY COLLECTIONS-CODE-FEB15	
			08/17/2015	62328	ADMIN CITATION PROCESSING-CODE (RED)-MAY15	
	15735	15735	08/17/2015	61566	ADMIN CITATION PROCESSING-CODE-APR15	\$2,291.17
			08/17/2015	62872	ADMIN CITATION PROCESSING-CODE (RED)-JUN15	
08/17/2015			63169	THIRD PARTY COLLECTIONS-PARKS-JUN 2015		
08/17/2015			62264TPC	THIRD PARTY COLLECTIONS-CODE-MAY15		
15735	15735	08/31/2015	AnnualMS	ANNUAL MAINT/SUPPORT-PARKING CITATION SOFTWARE	\$2,291.17	
		08/31/2015	63155	ADMIN CITATION PROCESSING-A/S-JUN15		

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Remit to: NEWPORT BEACH, CA

FYTD: \$71,293.20



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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
DAVIS, CHARLE	225921	08/10/2015	R15-088623	AS REFUND-OVERPMT ON LICENSE RENEWAL	\$7.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$7.00
DEBRON GRAPHICS	15599	08/10/2015	JUL-2015	INSTRUCTOR SERVICES-CREATIVE WRITING CLASS	\$42.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$84.00
DELTA DENTAL OF CALIFORNIA	15558	08/03/2015	BE001252430	EMPLOYEE DENTAL INSURANCE-PPO	\$10,085.12
	15772	08/31/2015	BE001308072	EMPLOYEE DENTAL INSURANCE-PPO	\$10,566.31
Remit to: SAN FRANCISCO, CA					<u>FYTD:</u> \$30,793.85
DELTACARE USA	15773	08/31/2015	BE001309118	EMPLOYEE DENTAL INSURANCE-HMO	\$4,939.60
	225851	08/03/2015	BE001253414	EMPLOYEE DENTAL INSURANCE-HMO	\$4,925.48
Remit to: DALLAS, TX					<u>FYTD:</u> \$14,790.56
DENNIS GRUBB & ASSOCIATES, LLC	15633	08/17/2015	1344	PLAN REVIEW SERVICES 6/16-6/30/15	\$700.00
Remit to: MIRA LOMA, CA					<u>FYTD:</u> \$10,030.00
DESCOTEAUX, JULIA M.	225987	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM-ACCELA ENGAGE 2015 CONFERENCE	\$248.50
Remit to: MURRIETA, CA					<u>FYTD:</u> \$248.50
DEVIN, CHRISTINE	226136	08/31/2015	R15-087029	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00

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DIAMOND WIRELESS, LLC	225996	08/17/2015	BL#20262-YR2015	REFUND OF OVERPAYMENT FOR BL#20262	\$55.85
Remit to: SANDY, UT					<u>FYTD:</u> \$55.85
DICKSON, MARICEL	226060	08/24/2015	1273233	REFUND SCHEDULE CONFLICT	\$41.20
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$41.20
DLT SOLUTIONS	15736	08/31/2015	SI294987	AUTOCAD ANNUAL MAINTENANCE (7/18/15-7/17/16)	\$13,387.09
Remit to: HERNDON, VA					<u>FYTD:</u> \$13,387.09

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
DMS FACILITY SERVICES	15559	08/03/2015	L38441	SPECIAL CLEANINGS FOR JUNE 14-28 RENTALS AT TOWNGATE COMM. CTR.	\$3,479.00
		08/03/2015	L38170	UPHOLSTERY CLEANING OF 56 CHAIRS AT PUBLIC SAFETY BLDG.	
		08/03/2015	L38442	SPECIAL CLEANINGS FOR JUNE EVENT RENTALS AT COTTONWOOD GOLF CTR.	
		08/03/2015	L38379	SPECIAL CLEANINGS FOR JUNE 14-28 EVENT RENTALS AT CRC	
		08/03/2015	L38378	SPECIAL CLEANINGS FOR JUNE EVENT RENTALS AT SENIOR CENTER	
		08/03/2015	L38175	SPECIAL CLEANING AT COTTONWOOD GOLF CTR-EXT. WINDOWS/BANQUET RM.	
		08/03/2015	L38172	SPECIAL CLEANINGS FOR JUNE 4-11 EVENT RENTALS AT CRC	
		08/03/2015	L38171	SPECIAL CLEANINGS FOR JUNE 6-13 RENTALS AT TOWNGATE COMM. CTR.	

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DMS FACILITY SERVICES	15600	08/10/2015	L38173	UPHOLSTERY CLEANING OF CHAIR-CITY HALL/BEHIND FRONT COUNTER	\$20,034.80
		08/10/2015	RC-L104699	JANITORIAL SERVICES-SENIOR CENTER-JUL15	
		08/10/2015	RC-L104703	JANITORIAL SERVICES-TRANSP. TRAILER-JUL15	
		08/10/2015	RC-L104704	JANITORIAL SERVICES-COTTONWOOD GOLF CTR.-JUL15	
		08/10/2015	RC-L104692	JANITORIAL SERVICES-EMP. RESOURCE CTR.-JUL15	
		08/10/2015	RC-L104695	JANITORIAL SERVICES-MARCH FIELD PARK COMM. CTR.-JUL15	
		08/10/2015	RC-L104694	JANITORIAL SERVICES-LIBRARY-JUL15	
		08/10/2015	L38115	VENT CLEANING AT ANIMAL SHELTER	
		08/10/2015	RC-L103571	JANITORIAL SERVICES-RED MAPLE-MAR15	
		08/10/2015	RC-L104688	JANITORIAL SERVICES-CITY HALL-JUL15	
		08/10/2015	RC-L104687	JANITORIAL SERVICES-ANNEX 1-JUL15	
		08/10/2015	RC-L104686	JANITORIAL SERVICES-ANIMAL SHELTER-JUL15	
		08/10/2015	RC-L104186	JANITORIAL SERVICES-RED MAPLE-MAY15	
		08/10/2015	RC-L104690	JANITORIAL SERVICES-CRC-JUL15	
		08/10/2015	RC-L103018	JANITORIAL SERVICES-RED MAPLE-JAN15	
		08/10/2015	RC-L104689	JANITORIAL SERVICES-CITY YARD-JUL15	
		08/10/2015	RC-L103291	JANITORIAL SERVICES-RED MAPLE-FEB15	
		08/10/2015	RC-L104691	JANITORIAL SERVICES-EOC-JUL15	
		08/10/2015	L38397	CARPET & UPHOLSTERY CLEANING-FIRE ST. #99 & #58	
		08/10/2015	RC-L104702	JANITORIAL SERVICES-TOWNGATE COMM. CTR.-JUL15	
		08/10/2015	L38396	CARPET & UPHOLSTERY CLEANING-FIRE ST. #2 & #6	
		08/10/2015	L38395	CARPET & UPHOLSTERY CLEANING-FIRE ST. #65 & #91	
	15634	08/17/2015	RC-L104696	JANITORIAL SERVICES-PUBLIC SAFETY BLDG.-JUL15	\$5,989.93

Remit to: MONROVIA, CA

FYTD: \$57,683.91

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
DRAPER, BRETT	226026	08/24/2015	081615	SPORTS OFFICIATING SERVICES-SOFTBALL	\$42.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$42.00
E.R. BLOCK PLUMBING & HEATING, INC.	15560	08/03/2015	118396	BACKFLOW DEVICE TESTS-ZONE D & NPDES	\$3,324.00
		08/03/2015	118435	REPLACED BACKFLOW DEVICE-ZONE D	
	15691	08/24/2015	118814	BACKFLOW DEVICE TEST-FS#58	\$40.00
		08/24/2015	118813	BACKFLOW DEVICE TEST-FS#99	
	15738	08/31/2015	119032	BACKFLOW DEVICE TEST-FS#58	\$200.00
		08/31/2015	118955	BACKFLOW DEVICE TEST-FS#2	
		08/31/2015	119029	BACKFLOW DEVICE TEST-LIBRARY	
		08/31/2015	119030	BACKFLOW DEVICE TEST-CITY YARD	
		08/31/2015	119031	BACKFLOW DEVICE TEST-CRC	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$5,606.00
EASTERN MUNICIPAL WATER DISTRICT	225880	08/10/2015	JUL-15 8/10/15	WATER CHARGES	\$2,966.70
Remit to: PERRIS, CA					<u>FYTD:</u> \$440,523.89
EDERAINE, PATIENCE	225922	08/10/2015	1271050	COTTONWOOD RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
EDGE, JIM	225923	08/10/2015	R15-088604	AS REFUND-TRAP DEPOSIT	\$50.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$50.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
EDGELANE MOBILE HOME PARK	15692	08/24/2015	JULY 2015	UUT REFUND FOR JULY 2015	\$1.37
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$4.40
EDWARDS, LISA	226061	08/24/2015	R15-088913	AS REFUND-OVER PMT ON LICENSE RENEWAL	\$19.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$19.00
EMPIRE MOWER	225881	08/10/2015	166329	EQUIPMENT SUPPLIES FOR CITY PARKS	\$570.15
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$570.15
EMPLOYMENT DEVELOPMENT DEPARTMENT	15626	08/13/2015	2ND QTR 2015	UNEMPLOYMENT INSURANCE 4/1-6/30/15	\$5,910.26
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$143,145.73

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ENCO UTILITY SERVICES MORENO VALLEY LLC	15561	08/03/2015	40-238B-05	PROFESSIONAL SERVICES - CORP YARD	\$2,832.88
	15693	08/24/2015	40-238B-06	UTILITY SERVICES - CORP YARD	\$192.58

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ENCO UTILITY SERVICES MORENO VALLEY LLC	15739	08/31/2015	0402-MF-01708A	SOLAR METER INSTALLATION	\$19,908.00
		08/31/2015	0402-MF-01709A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01702A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01698A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01688A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01707A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01694A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01687A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01681A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01691A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01684A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01685A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01697A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01686A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01693A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01692A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01696A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01689A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01690A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01679A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01695A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01703A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01710A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01701A	SOLAR METER INSTALLATION	

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ENCO UTILITY SERVICES MORENO VALLEY LLC	15739	08/31/2015	0402-MF-01705A	SOLAR METER INSTALLATION	\$19,908.00
		08/31/2015	0402-MF-01699A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01704A	SOLAR METER INSTALLATION	
		08/31/2015	0402-MF-01700A	SOLAR METER INSTALLATION	
Remit to: ANAHEIM, CA					<b>FYTD: \$704,818.04</b>
ENNIS PAINT	15694	08/24/2015	292447	TRAFFIC PAINT & MATERIALS	\$13,673.24
Remit to: DALLAS, TX					<b>FYTD: \$13,673.24</b>
EVANS ENGRAVING & AWARDS	15636	08/17/2015	61215-2	NAMEPLATES & HOLDERS FOR ELC MEMBERS	\$126.36
		08/24/2015	72615-26	NAMEPLATES/BADGES FOR ADVISORY BOARD & ARTS COMMISIONERS	\$45.36
		08/31/2015	80615-1	NAMEPLATES FOR STAFF	\$84.24
		08/31/2015	72015-9	NAMEPLATES FOR ELC MEMBERS	
Remit to: BANNING, CA					<b>FYTD: \$255.96</b>
EXCEL LANDSCAPE, INC	15562	08/03/2015	84752	IRRIGATION REPAIRS-WQB/NPDES	\$78.86
Remit to: CORONA, CA					<b>FYTD: \$6,574.93</b>
FAIR HOUSING COUNCIL OF RIV CO, INC.	15638	08/17/2015	JUN 2015 (FH)	FAIR HOUSING DISCRIMINATION PROGRAM-CDBG	\$6,095.77
		08/17/2015	MAY 2015 (LT)	LANDLORD/TENANT MEDIATION PROGRAM-CDBG	
		08/17/2015	JUN 2015 (LT)	LANDLORD/TENANT MEDIATION PROGRAM-CDBG	
		08/17/2015	MAY 2015 (FH)	FAIR HOUSING DISCRIMINATION PROGRAM-CDBG	
Remit to: RIVERSIDE, CA					<b>FYTD: \$6,095.77</b>

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FALCON ENGINEERING SERVICES, INC.	15563	08/03/2015	2012-27	CONSULTING - SR-60/NASON OC	\$13,573.86
Remit to: CORONA, CA					<b>FYTD:</b> \$13,573.86
FAST SIGNS	225882	08/10/2015	70-35374	PLAQUE ENGRAVING FOR FIRE COMPLIANCE	\$107.88
		08/10/2015	70-35314	SIGNS FOR CRC (YOC SIGN)	
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$4,442.73
FIRST AMERICAN CORE LOGIC, INC.	15639	08/17/2015	81530898	REAL QUEST WEB SVCS-JUN15 (IMAGING)	\$640.00
		08/17/2015	81531003	REAL QUEST WEB SVCS-JUN15 (ACCESS)	
Remit to: DALLAS, TX					<b>FYTD:</b> \$640.00
FIRST AMERICAN DATA TREE, LLC	226107	08/31/2015	20027760615	ONLINE SOFTWARE SUBSCRIPTION-JUN15	\$148.00
		08/31/2015	20027760715	ONLINE SOFTWARE SUBSCRIPTION-JUL15	
Remit to: PASADENA, CA					<b>FYTD:</b> \$148.00
FIRST INDUSTRIAL REALTY TRUST	15602	08/10/2015	2562486	PROPERTY LEASE RENT-MVU-AUG15	\$515.00
	15741	08/31/2015	2569750	PROPERTY LEASE RENT-MVU-SEPT15	\$540.75
		08/31/2015	2568281	PROPERTY LEASE RENT-AUG 2015 LATE FEE	
Remit to: PASADENA, CA					<b>FYTD:</b> \$1,570.75
FIRST INDUSTRIAL REALTY TRUST, INC.	226062	08/24/2015	PA07-0165	REFUND OF T&M DEPOSIT BALANCE (NANDINA)	\$996.11
Remit to: EL SEGUNDO, CA					<b>FYTD:</b> \$996.11

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
FITNESS 19	226028	08/24/2015	2016-00000061	8730 - GYM MEMBERSHIP*	\$94.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$188.00
FRANCE PUBLICATIONS, INC.	15564	08/03/2015	SB69206	ADVERTISING-SHOPPING CENTER BUSINESS	\$3,250.00
Remit to: ATLANTA, GA					<u>FYTD:</u> \$3,250.00
FRANCHISE TAX BOARD	225883	08/10/2015	2016-00000041	1015 - GARNISHMENT - CREDITOR %*	\$556.79
	226029	08/24/2015	2016-00000062	1015 - GARNISHMENT - CREDITOR %*	\$536.94
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$2,170.33
FRANKS, HILTON	226063	08/24/2015	1275042	REFUND FOR CANCELLED SHELTER	\$66.60
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$66.60
FULLMER CONSTRUCTION	226137	08/31/2015	MINKA/HARBOR	REFUND-PLANNING DEPOSIT BALANCES	\$3,331.80
Remit to: ONTARIO, CA					<u>FYTD:</u> \$3,331.80
GAGE, LESIA	15742	08/31/2015	SUMMER 2015	TUITION REIMBURSEMENT	\$541.42
	226093	08/24/2015	8/30-8/31/15	TRAVEL PER DIEM & MILEAGE-GFOA CAPITAL ASSET TRAINING	\$73.93
Remit to: WHITTIER, CA					<u>FYTD:</u> \$615.35
GALLARDO, DULCE	225924	08/10/2015	R15-084836	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
GALLEGOS, JOYCE	226064	08/24/2015	R15-088534	AS REFUND-OVERPMT ON LICENSE RENEWAL	\$19.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$19.00

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GALLS INC., INLAND UNIFORM	15603	08/10/2015	BC0172520	UNIFORMS FOR SET UNIT	\$1,466.87
		08/10/2015	BC0170792	UNIFORMS FOR POP UNIT	
		08/10/2015	BC0170791	UNIFORMS FOR POP UNIT	
	15743	08/31/2015	BC0178542	UNIFORMS FOR SET UNIT	\$331.99
		08/31/2015	BC0178665	UNIFORMS FOR SET UNIT	
		08/31/2015	BC0167048	UNIFORMS FOR POP UNIT	
Remit to: PASADENA, CA					<u>FYTD:</u> \$1,798.86
GARCIA, MIGUEL	225925	08/10/2015	MVU 7013870-02	SOLAR INCENTIVE REBATE	\$9,611.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$9,611.00
GAUTHIER, JELLI	225997	08/17/2015	R15-088446	AS REFUND-RABIES DEPOSIT	\$20.00
Remit to: PERRIS, CA					<u>FYTD:</u> \$20.00
GENESIS SPORTS	15565	08/03/2015	MAY-2015 (5/29)	INSTRUCTOR SERVICES-GENESIS HOOPS BASKETBALL TRAINING	\$921.60
		08/03/2015	JUL-2015	INSTRUCTOR SERVICES-GENESIS HOOPS BASKETBALL TRAINING	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$921.60
GIBBS, GIDEN, LOCHER,TURNER, SENET & WITTBRODT LLP	15696	08/24/2015	229179	LEGAL SERVICES-BOND SAFEGUARD	\$218.50
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$218.50
GIL, SANDRA JO	225998	08/17/2015	MV2141222019	REFUND-DISMISSED CITATION	\$57.50
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$57.50

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GIRON, VICENTE B.	15640	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$305.32
Remit to: RANCHO CUCAMONGA, CA					<b>FYTD:</b> \$305.32
GOLDBERG-RUDNICK, JENNIFER	226065	08/24/2015	R15-087441	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$75.00
GONZALEZ, RICARDO	225852	08/03/2015	8/10-8/12/15	TRAVEL PER DIEM & MILEAGE-CRESTON DM CERT. ENGINEER TRAINING	\$240.07
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$240.07
GOZDECKI, DAN	15641	08/17/2015	AUG-2015 ADULT	INSTRUCTOR SERVICES-KUNG FU CLASS	\$270.00
		08/17/2015	AUG-2015 YOUTH	INSTRUCTOR SERVICES-KUNG FU CLASS	
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$621.00
GRAVES & KING, LLP	226030	08/24/2015	1506-0009459-11	LEGAL SERVICES-CLAIM MV1329-S. BOE/G. CONNOR	\$655.55
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$2,426.71
GREENWIRE, INC dba. HALO CORPORATE UNIVERSITIES	15745	08/31/2015	2241	HALO ONLINE TRAINING-20 USER LICENSES	\$3,000.00
Remit to: ROSEVILLE, CA					<b>FYTD:</b> \$3,000.00
GUTIERREZ, ARTHUR R.	225841	08/03/2015	072215 / 072515	SPORTS OFFICIATING SERVICES-SUMMER YOUTH BASKETBALL	\$150.00
	225885	08/10/2015	071115	SPORTS OFFICIATING SERVICES-SUMMER YOUTH BASKETBALL	\$105.00
		08/10/2015	071815	SPORTS OFFICIATING SERVICES-SUMMER YOUTH BASKETBALL	
Remit to: YUCCA VALLEY, CA					<b>FYTD:</b> \$330.00

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GUZMAN, ALFONSO	225926	08/10/2015	1270312	REFUND FOR CANCELLED GUITAR CLASS	\$47.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$47.00
HARDIN, CLARISA	226066	08/24/2015	R15-089141	AS REFUND-OVERPMT ON LICENSE RENEWAL	\$53.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$53.00
HARDY & HARPER, INC.	15643	08/17/2015	42180	SPEED HUMPS PROGRAM	\$10,800.00
Remit to: SANTA ANA, CA					<u>FYTD:</u> \$10,800.00
HDL/HINDERLITER DE LLAMAS & ASSOCIATES	225886	08/10/2015	0021616-IN	FY14/15 CAFR SERVICES	\$595.00
	226108	08/31/2015	0024313-IN	SALES TAX AUDIT SVCS	\$2,612.67
Remit to: DIAMOND BAR, CA					<u>FYTD:</u> \$3,207.67
HEREDIA, SANDRA	225999	08/17/2015	REFUND	PARKING CIT OVERPYMT-MV2130411020 & MV2130725023	\$417.50
Remit to: SAN JOSE, CA					<u>FYTD:</u> \$417.50
HERNANDEZ, JOSEFINA	225927	08/10/2015	1271047	COTTONWOOD RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
HF LOGISTICS-SKX T1, LLC	225928	08/10/2015	PA09-0113	REFUND-BALANCE OF DEPOSIT (CLOSED ACCT)	\$525.87
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$525.87
HLP, INC.	15746	08/31/2015	10979	WEB LICENSE MONTHLY FEES	\$17,670.05
		08/31/2015	10933	CHAMELEON SOFTWARE ANNUAL MAINT-FY15/16	
Remit to: LITTLETON, CO					<u>FYTD:</u> \$17,707.15

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HONDA YAMAHA OF REDLANDS	15747	08/31/2015	57535	MAINT & REPAIRS-TRAFFIC MOTORCYCLE	\$1,855.24
Remit to: REDLANDS, CA					<b>FYTD: \$5,263.29</b>
HORN, EDWARD	225857	08/03/2015	R15-088240	AS REFUND-TRAP DEPOSIT	\$50.00
Remit to: MORENO VALLEY, CA					<b>FYTD: \$50.00</b>
HUEGEL, BETH	226000	08/17/2015	R15-087596	AS REFUND-RABIES & S/N DEPOSITS	\$95.00
Remit to: PALM DESERT, CA					<b>FYTD: \$95.00</b>
HUMANSCALE	226109	08/31/2015	2023930	ERGONOMIC ASSESSMENT PROGRAM	\$14,508.00
		08/31/2015	2000081	ERGONOMIC ASSESSMENT PROGRAM	
Remit to: CHICAGO, IL					<b>FYTD: \$14,508.00</b>
HUNSAKER & ASSOCIATES IRVINE, INC	225952	08/17/2015	15060238	CONSULTANT - CACTUS WDNG	\$11,098.00
Remit to: RIVERSIDE, CA					<b>FYTD: \$33,442.06</b>
HUSBAND, CHRISTINA	226138	08/31/2015	1277309 1277310	COTTONWOOD RENTAL REFUND DEPOSIT/CREDIT ON ACCT	\$250.00
		08/31/2015	CONTRACT#28737	ADDL. REFUND-8/22/15 COTTONWOOD G/C EVENT	
Remit to: MORENO VALLEY, CA					<b>FYTD: \$250.00</b>
ICMA RETIREMENT CORP	15583	08/07/2015	2016-00000049	8030 - DEF COMP 457 - ICMA	\$7,923.84
		08/21/2015	2016-00000073	8030 - DEF COMP 457 - ICMA	
Remit to: BALTIMORE, MD					<b>FYTD: \$32,695.36</b>

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IES COMMERCIAL, INC	15748	08/31/2015	118391	ACCESS CONTROL SERVICE-PSB	\$855.00
Remit to: TEMPE, AZ					<u>FYTD:</u> \$855.00
IL SORRENTO MOBILE PARK	225842	08/03/2015	MAY-JUNE 2015	UUT REFUND MAY-JUNE 2015	\$95.84
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$160.81
IMANEOJEMU, QUEEN	225858	08/03/2015	15156193	APPEAL GRANTED BY POLICE	\$32.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$32.00
INLAND OVERHEAD DOOR COMPANY	226032	08/24/2015	39135	ROLL UP DOOR PREVENTIVE MAINT-FS#91	\$1,169.00
		08/24/2015	39132	AUTO GATE PREVENTIVE MAINT-FS#48	
		08/24/2015	39131	ROLL UP DOOR PREVENTIVE MAINT-FS#2	
		08/24/2015	39134	ROLL UP DOOR PREVENTIVE MAINT-FS#65	
		08/24/2015	39133	ROLL UP DOOR PREVENTIVE MAINT-FS#58	
		08/24/2015	39136	ROLL UP DOOR PREVENTIVE MAINT-FS#99	
	226110	08/31/2015	38760-1	AUTO GATE REPAIRS-PSB GATE #6	\$3,539.25
		08/31/2015	39007	AUTO GATE REMOTE CONTROLS (2)-FS#65	
		08/31/2015	39289	AUTO GATE REPAIRS-FS#58	
		08/31/2015	39160	AUTO GATE REPAIRS-FS#99	
		08/31/2015	38760	AUTO GATE REPAIRS-PSB GATE #5 & #7	
		08/31/2015	39181a	AUTO GATE REPAIR SVCS-FS#58	
		08/31/2015	39266	INSTALLED NEW 24' MILLER SAFETY EDGE-FS#48	
Remit to: COLTON, CA					<u>FYTD:</u> \$6,350.75

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
IRON MOUNTAIN, INC	15644	08/17/2015	LRB0747	OFF-SITE STORAGE OF CITY RECORDS-JUL15	\$1,843.17
	15749	08/31/2015	LSZ6242	OFF-SITE STORAGE OF CITY RECORDS-AUG15	\$1,762.41
Remit to: PASADENA, CA					<u>FYTD:</u> \$3,605.58
ISLAM, SHAFIQ	225929	08/10/2015	1271024	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
JACK HENRY & ASSOCIATES	225887	08/10/2015	2022591	PROFIT STARS CHARGES-JUN15	\$330.95
Remit to: MONETT, MO					<u>FYTD:</u> \$644.00
JACOBS MEDIA SERVICES	15604	08/10/2015	06062015	PHOTOGRAPHY SERVICES	\$1,566.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$1,566.00
JOHN CAIRNEY AND RENEE CAIRNEY	226033	08/24/2015	CLAIM NO. MV1531	FULL AND FINAL SETTLEMENT	\$2,125.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$2,125.00
JOHNSON MEZZCAP	15698	08/24/2015	1083	LITE OWLS & E-SERIES EQUIPMENT LEASE-SEPT15	\$2,243.51
Remit to: DALLAS, TX					<u>FYTD:</u> \$6,730.53
JOHNSON, DARIN	226140	08/31/2015	R15-084980	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
JOHNSON, MICHAEL	226067	08/24/2015	1275201	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
JOHNSON, TRACY	225953	08/17/2015	JUL-2015	INSTRUCTOR SERVICES- SHITO-RYU KARATE CLASSES	\$284.60
	226111	08/31/2015	AUG-2015	INSTRUCTOR SERVICES- SHITO-RYU KARATE CLASSES	\$352.60
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$874.60
JOHNSON, WINDA	226068	08/24/2015	1264555	REFUND CLASS CANCELLED	\$112.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$112.00
JONES, AMBER	226069	08/24/2015	R15-088979	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
JONES, ESTER	225930	08/10/2015	1271045	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
JORDAN, APRIL	226070	08/24/2015	1274425	REFUND CANCELLED RENTAL	\$83.20
Remit to: PERRIS, CA					<u>FYTD:</u> \$83.20
KENNEDY, ROBERT	226001	08/17/2015	R15-088106	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: RANCHO CUCAMONGA, CA					<u>FYTD:</u> \$75.00
KOA CORPORATION	225843	08/03/2015	JB44046x8	CONSULTANT - RECHE VISTA	\$269.12
Remit to: MONTEREY PARK, CA					<u>FYTD:</u> \$269.12
KOSMONT COMPANIES	225888	08/10/2015	0011/JUN-15	ECONOMIC DEV'T. CONSULTING SVCS	\$12,654.85
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$38,699.11

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
KRUEGER, KIMBERLEE	225988	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$323.15
Remit to: TEMECULA, CA					<u>FYTD:</u> \$595.69
KTU+A	15605	08/10/2015	27087	CONSULTANT-BICYCLE MASTER PLAN	\$517.75
Remit to: SAN DIEGO, CA					<u>FYTD:</u> \$517.75
LAKE ELSINORE & SAN JACINTO WATERSHEDS	226112	08/31/2015	8712	FY15/16 TMDL TASK FORCE STAKEHOLDER CONTRIBUTION	\$17,750.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$17,750.00
LANDCARE USA, LLC	15578	08/03/2015	7958402 REVISED	LANDSCAPE MAINT.-ZONES E-7, SD LMD ZN 01, 01A, & 08-JUN 2015	\$8,210.11
	15616	08/10/2015	7967874	TRIMMING OF TREES AND PALMS ALONG VETERANS MEMORIAL DRIVE BY CRC	\$13,868.71
		08/10/2015	7967869	IRRIGATION REPAIRS-SD LMD ZN 04-JUN 2015	
		08/10/2015	7967499	INSTALL MEDIUM GRIND MULCH TO BARE PLANTER AREAS-SD LMD ZN 04	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$77,402.74
LANEY, YVETTE	225931	08/10/2015	1270369	REFUND FOR CANCELLED GUITAR AND PIANO FOR KIDS CLASSES	\$92.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$92.00
LARA, JOSEPH R.	226133	08/31/2015	9/8-9/11/15	TRAVEL PER DIEM & MILEAGE-TOWER & SMALL CELL SUMMIT	\$1,191.50
		08/31/2015	9/14-9/19/15	TRAVEL PER DIEM & MILEAGE-DESIGNING TELECOM DISTR. SYSTEMS TRNG.	
Remit to: PERRIS, CA					<u>FYTD:</u> \$1,191.50

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
LATITUDE GEOGRAPHICS	225844	08/03/2015	201500898	HOSTING ARCGIS SERVER	\$12,540.00
Remit to: VICTORIA, BC					<u>FYTD:</u> \$12,540.00
LAWN TECH EQUIPMENT	15700	08/24/2015	533084	MAINT & REPAIRS-TREE TRIMMING EQUIPMENT	\$35.52
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$208.32
LEADING EDGE LEARNING CENTER	225889	08/10/2015	JUL-2015	INSTRUCTOR SERVICES-GED TEST & READING RASCALS CLASSES	\$406.40
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$406.40
LEAGUE OF CALIFORNIA CITIES-RIV CNTY DIV 1	225954	08/17/2015	7-27-15 GEN MTNG	GENERAL MEETING ATTENDANCE-4 ATTENDEES	\$60.00
Remit to: RANCHO MIRAGE, CA					<u>FYTD:</u> \$60.00
LEE, CLIFTON	226002	08/17/2015	R15-088918,917	AS REFUND-OVERPMT ON 2 LIC RENEWALS	\$14.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$14.00
LEE, JERI	15645	08/17/2015	JUL-2015	INSTRUCTOR SERVICES-ZUMBA KIDS CLASS	\$72.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$72.00
LEIVAS, INC. DBA. LEIVAS LIGHTING	15606	08/10/2015	236935	LANDSCAPE LIGHTING MAINT-JUL15	\$150.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$150.00
LEON, ROBERTO	226003	08/17/2015	MV2140424018	REFUND-PARKING CITATION OVERPAYMENT	\$14.00
Remit to: SAN BERNARDINO, CA					<u>FYTD:</u> \$14.00

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Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
LEXISNEXIS PRACTICE MGMT.	15646	08/17/2015	1506078728	LEGAL RESEARCH TOOLS-JUN15	\$2,360.00
		08/17/2015	1505078854	LEGAL RESEARCH TOOLS-MAY15	
	15701	08/24/2015	1507078584	LEGAL RESEARCH TOOLS-JUL15	\$1,180.00
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$3,540.00
LIEBERT, CASSIDY, WHITMORE	225956	08/17/2015	1402132	LEGAL SERVICES-MO140-00001	\$7,575.30
		08/17/2015	1402134	LEGAL SERVICES-MO140-00015	
		08/17/2015	1406192	LEGAL SERVICES-MO140-00001	
	226113	08/31/2015	9/10/15 WORKSHOP	TRAINING FEES FOR 6 ATTENDEES	\$210.00
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$8,745.30
LIENHARD, DORI A.	225989	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$323.15
Remit to: RANCHO MIRAGE, CA					<b>FYTD:</b> \$323.15
LIN, MICHELLE	225932	08/10/2015	R15-088439	AS REFUND-ADOPT,CHIP,VACS	\$67.00
Remit to: ORANGE, CA					<b>FYTD:</b> \$67.00
LOVAS, CORI	226071	08/24/2015	R15-089129	AS REFUND-RABIES DEP ON 2 DOGS	\$40.00
Remit to: SUN CITY, CA					<b>FYTD:</b> \$40.00
LOZANO SMITH, LLP	225890	08/10/2015	36151	LEGAL SERVICES-DEV'T. AGREEMENT	\$13,548.00
		08/10/2015	36150	GENERAL LEGAL MATTERS	
	226034	08/24/2015	37397	LEGAL SERVICES-RE: WLC (BILL CURLEY)	\$11,087.38
Remit to: FRESNO, CA					<b>FYTD:</b> \$24,635.38

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
LYONS SECURITY SERVICE, INC	15647	08/17/2015	21865	SECURITY GUARD SVCS-4TH OF JULY EVENT	\$4,041.48
	15751	08/31/2015	22104	SECURITY GUARD SVCS-LIBRARY-JUL15	\$4,206.25
		08/31/2015	22103	SECURITY GUARD SVCS-TOWNGATE-JUL15	
		08/31/2015	22102	SECURITY GUARD SVCS-COTTONWD G/C SPECIAL EVENTS-JUL15	
		08/31/2015	22132	SECURITY GUARD SVCS-MVU-JUL15	
		08/31/2015	22101	SECURITY GUARD SVCS-CITY HALL-JUL15	
Remit to: ANAHEIM, CA					<u>FYTD:</u> \$21,907.50
MAGANA, FAVIOLA	225891	08/10/2015	123	JULY 4TH 2015 PARADE & FUNFEST SIGNAGE SERVICES	\$540.00
Remit to: RIALTO, CA					<u>FYTD:</u> \$540.00
MARCH JOINT POWERS AUTHORITY	225958	08/17/2015	35903	CONSULTANT INVOICE - 804 0001 70 77	\$1,852.50
	226035	08/24/2015	36031	CONSULTANT INVOICE HEACOCK CHANNEL 804 0001 70 77	\$6,608.18
		08/24/2015	36030	CONSUTLANT INVOICE HEACOCK CHANNEL 804 0001 70 77	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$8,464.43

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
MARIPOSA HORTICULTURAL ENTERPRISES, INC.	15752	08/31/2015	69593	LANDSCAPE MAINT.-AQUEDUCT BIKEWAY-DELPHINIUM/PERHAM TO JFK-JUL15	\$19,707.43
		08/31/2015	69595	LANDSCAPE MAINT.-NORTH AQUEDUCT-JUL15	
		08/31/2015	69599	LANDSCAPE MAINT.-SCE & OLD LAKE DRIVE-JUL15	
		08/31/2015	69604	LANDSCAPE MAINT.-ELECTRIC SUBSTATION-JUL15	
		08/31/2015	69603	LANDSCAPE MAINT.-CRC-JUL15	
		08/31/2015	69602	LANDSCAPE MAINT.-CITY YARD-JUL15	
		08/31/2015	69592	LANDSCAPE MAINT.-AQUEDUCT BIKEWAY/BAY AVE. TO GRAHAM-JUL15	
		08/31/2015	69601	LANDSCAPE MAINT.-ASES ADMIN. BLDG.-JUL15	
		08/31/2015	69596	LANDSCAPE MAINT.-PAN AM SECTION AQUEDUCT-JUL15	
		08/31/2015	69597	LANDSCAPE MAINT.-SOUTH AQUEDUCT A-JUL15	
		08/31/2015	69591	LANDSCAPE MAINT.-TOWNGATE AQUEDUCT BIKEWAY-JUL15	
		08/31/2015	69607	LANDSCAPE MAINT.-SENIOR CENTER-JUL15	
		08/31/2015	69598	LANDSCAPE MAINT.-SOUTH AQUEDUCT B-JUL15	
		08/31/2015	69582	LANDSCAPE MAINT.-SD LMD ZN 02-JUL 2015	
		08/31/2015	69605	LANDSCAPE MAINT.-LIBRARY-JUL15	
		08/31/2015	69600	LANDSCAPE MAINT.-ANIMAL SHELTER-JUL15	
		08/31/2015	69608	LANDSCAPE MAINT.-UTILITY FIELD OFFICE-JUL15	
		08/31/2015	69594	LANDSCAPE MAINT.-AQUEDUCT BIKEWAY/VANDENBERG TO FAY-JUL15	
		08/31/2015	69590	LANDSCAPE MAINT.-TOWNGATE COMM. CTR-JUL15	

Remit to: IRWINDALE, CA

FYTD: \$91,455.98

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
MARKOWITZ, BREANNA	226141	08/31/2015	R15-089361,362	AS REFUND-OVERPMT ON 2 LIC RENEWALS	\$24.00
Remit to: MORENO VALLEY , CA					<u>FYTD:</u> \$24.00
MARTINEZ, ULISES	226072	08/24/2015	R15-089274	AS REFUND-OVERPMT ON LICENSE RENEWAL	\$19.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$19.00
MAXWELL, THOMAS	226142	08/31/2015	C11635	REFUND-ADMIN CITATION OVERPAYMENT	\$149.00
Remit to: BUENA PARK, CA					<u>FYTD:</u> \$149.00
MCCOWEN, KAREN	225933	08/10/2015	R15-088370	AS REFUND-RABIES DEPOSIT	\$20.00
Remit to: TEMECULA, CA					<u>FYTD:</u> \$20.00
MCKENNAN, KATHY	226004	08/17/2015	R15-088815	AS REFUND-TRAP DEPOSIT	\$50.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$50.00
MEEKS, DANIEL	15648	08/17/2015	070215	SPORTS OFFICIATING SERVICES-SOFTBALL	\$168.00
		08/17/2015	070915	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	071615	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	080215	SPORTS OFFICIATING SERVICES-SOFTBALL	
	15702	08/24/2015	071215	SPORTS OFFICIATING SERVICES-SOFTBALL	\$168.00
		08/24/2015	081315	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/24/2015	080615	SPORTS OFFICIATING SERVICES-SOFTBALL	
Remit to: PERRIS, CA					<u>FYTD:</u> \$483.00
MELENDREZ, JOSE T	226005	08/17/2015	MV4150612011	REFUND-PARKING CITATION OVERPAYMENT	\$115.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$115.00

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MEYERS, NAVE, RIBACK, SILVER & WILSON	225959	08/17/2015	2015050671	LEGAL SERVICES-MAY 2015 FEES FOR ROPS 13-14A MATTER	\$10,238.13
		08/17/2015	2015030480	LEGAL SERVICES-MAR. 2015 RETAINER & COSTS	
		08/17/2015	2015040108	LEGAL SERVICES-APR. 2015 RETAINER & COSTS	
		08/17/2015	2015030481	LEGAL SERVICES-MAR. 2015 FEES FOR ROPS 13-14A MATTER	
Remit to: OAKLAND, CA					<b>FYTD:</b> \$10,238.13
MEYERS, ROBERT	15649	08/17/2015	2	PHOTOGRAPHY FOR JULY 4, 2015 EVENT	\$234.00
		08/17/2015	JUL-2015	INSTRUCTOR SERVICES-PHOTOGRAPHY CLASS	
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$234.00
MICHAEL BAKER INTERNATIONAL, INC	226016	08/17/2015	141625	CONSULTING - NASON CACTUS/FIR	\$2,465.23
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$2,465.23
MICHAEL, WYOMIA	225860	08/03/2015	1268251	REFUND MOVED	\$85.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$85.00
MISSION PACIFIC LAND COMPANY	226073	08/24/2015	TR22180-2&2180-3	REFUND OF T&M DEPOSIT BALANCE (LEGACY PARK)	\$7,726.00
Remit to: NEWPORT BEACH, CA					<b>FYTD:</b> \$7,726.00
MONTGOMERY PLUMBING INC	226036	08/24/2015	072215	PLUMBING REPAIR-CITY HALL/REPLACED SLOAN AUTO FLUSH UNIT	\$9,102.50
		08/24/2015	072115	PLUMBING REPAIR-ANIMAL SHELTER/CLEARED DRAIN WITH POWER SNAKE	
		08/24/2015	071115	12" SEWER DRAIN REPAIR AT COTTONWOOD GOLF CENTER	
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$10,242.50

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MONTGOMERY, BRIDGETTE	226056	08/24/2015	8/30-9/2/15	TRAVEL PER DIEM & MILEAGE-CALIFORNIA HR CONFERENCE	\$233.51
Remit to: YUCAIPA, CA					<u>FYTD:</u> \$329.54
MORA, MALISA	226074	08/24/2015	1274654	REFUND DUE TO NO CLASS THIS MONTH	\$20.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$20.00
MORENO VALLEY AUTO MALL COLLISION CENTER, LLC	226143	08/31/2015	BL#09764-YR2015	REFUND OF OVERPAYMENT FOR BL#09764	\$74.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$74.00
MORENO VALLEY BLACK CHAMBER OF COMMERCE	225960	08/17/2015	1500-03	TICKETS FOR MADAM C.J. WALKER AWARDS GALA-6/25/15	\$150.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$150.00
MORENO VALLEY CHAMBER OF COMMERCE	226017	08/17/2015	4737	WAKE-UP MEETING ATTENDANCE-7/22/15	\$210.00
		08/17/2015	4725	WAKE-UP MEETING ATTENDANCE-6/24/15	
	226114	08/31/2015	4834	STATE OF THE CITY ADDRESS-ATTENDANCE FOR TWO	\$70.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$280.00
MORENO VALLEY CITY EMPLOYEES ASSOC.	15584	08/07/2015	2016-00000051	8710 - MVCEA EMPLOYEE DUES	\$1,238.00
	15678	08/21/2015	2016-00000075	8710 - MVCEA EMPLOYEE DUES	\$1,226.50
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$4,946.00

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MORENO VALLEY MANAGEMENT ASSOCIATION	15607	08/10/2015	2016-00000042	8705 - MVMA EMPLOYEE DUES	\$660.00
	15703	08/24/2015	2016-00000063	8705 - MVMA EMPLOYEE DUES	\$680.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$2,660.00
MORENO VALLEY UNIFIED SCHOOL DISTRICT	225892	08/10/2015	160057	FACILITY USE CHARGES FOR JULY 4TH ACTIVITIES-VVHS & MT. VIEW MS	\$1,480.00
	225893	08/10/2015	151988	BUS SERVICE FOR VALLEY KIDS CAMP & "A CHILD'S PLACE" FIELD TRIPS	\$7,110.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$8,590.00
MORENO VALLEY UTILITY	226037	08/24/2015	7013411-01/JUL15	ELECTRICITY-UTILITY FIELD OFFICE	\$181.41
Remit to: HEMET, CA					<u>FYTD:</u> \$200,140.66
MURRAY, ARTHUR	226006	08/17/2015	MV1150416067	REFUND-DISMISSED CITATION	\$57.50
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$57.50
MUSIC CHANGING LIVES	15754	08/31/2015	JUL-2015	INSTRUCTOR SERVICES-COMIC BOOK CREATION/DRAWING FOR KIDS CLASSES	\$282.00
		08/31/2015	AUG-2015	INSTRUCTOR SERVICES-COMIC BOOK CREATION/DRAWING FOR KIDS CLASSES	
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$282.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
MUSICSTAR	225894	08/10/2015	JUN-2015	INSTRUCTOR SERVICES-GUITAR/LEGO ENG. CAMP/PIANO FOR KIDS CLASSES	\$1,957.80
	226038	08/24/2015	JUL-2015	INSTRUCTOR SERVICES-ROBOTICS CAMP & VIDEO GAME DESIGN CLASSES	\$2,610.00
	226115	08/31/2015	AUG-2015	INSTRUCTOR SERVICES-GUITAR & PIANO FOR KIDS CLASSES	\$324.00
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$4,891.80
NAJUMI, HASHEMA	225935	08/10/2015	1271027	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$200.00
NAMEKATA, DOUGLAS	226116	08/31/2015	AUG-2015	INSTRUCTOR SERVICES- SHITO-RYU KARATE CLASSES	\$352.60
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$629.20
NAMEKATA, JAMES	226117	08/31/2015	AUG-2015	INSTRUCTOR SERVICES- SHITO-RYU KARATE CLASSES	\$352.60
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$629.20
NATIONAL ALLIANCE OF FREE WOMEN, INC.	226156	08/31/2015	20	WOMEN OF VALUE CONFERENCE SPONSORSHIP-CRC 8/29/15	\$500.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$500.00
NATIONWIDE RETIREMENT SOLUTIONS CP	15585	08/07/2015	2016-00000052	8020 - DEF COMP PST - NATIONWIDE	\$2,745.35
	15680	08/21/2015	2016-00000077	8020 - DEF COMP PST - NATIONWIDE	\$2,265.80
Remit to: COLUMBUS, OH					<b>FYTD:</b> \$112,972.05
NATURE'S IMAGE, INC.	225895	08/10/2015	15-02-390	DETENTION BASIN MAINTENANCE SERVICES	\$7,962.66
Remit to: LAKE FOREST, CA					<b>FYTD:</b> \$7,962.66

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NAVA , DARLENE	225936	08/10/2015	R15-085309	AS REFUND-RABIES DEPOSIT	\$20.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$20.00
NEGRETE , LORENA	226075	08/24/2015	R15-089216	AS REFUND	\$18.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$18.00
NEW HORIZON MOBILE HOME PARK	15704	08/24/2015	JULY 2015	UUT REFUND FOR A JULY 2015	\$4.75
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$14.46
NOLLAR, JANICE	225990	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$323.15
Remit to: REDLANDS, CA					<u>FYTD:</u> \$677.57
NUNOZ, SAUNDRA	226144	08/31/2015	1277317	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
OGWO, EDDIE	226076	08/24/2015	1273975	CRC RENTAL REFUND DEPOSIT MINUS BALANCE DUE	\$130.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$130.00
OLSON, EUGENE	225937	08/10/2015	R15-088201	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: FOUNTAIN VALLEY, CA					<u>FYTD:</u> \$75.00
ONEAL, JANET	225861	08/03/2015	R15-088415/414	AS REFUND-OVERPMT ON 2 LICENSE RENEWALS	\$38.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$38.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
OPERATION SAFEHOUSE, INC.	15651	08/17/2015	JUN 2015	CDBG REIMBURSEMENT FOR SHELTER PROGRAM	\$2,823.52
		08/17/2015	MAY 2015	CDBG REIMBURSEMENT FOR SHELTER PROGRAM	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$3,089.87
OPTIMA MARKETING USA dba. XSAT GLOBAL	225845	08/03/2015	9963	12-MONTH SERVICE FOR IRIDIUM SATELLITE PHONES	\$2,700.00
Remit to: HALLANDALE BEACH, FL					<u>FYTD:</u> \$2,700.00
ORRICK, HERRINGTON & SUTCLIFFE, LLP	226118	08/31/2015	1541753	LEGAL SERVICES RE: CFD NO. 7 MOU	\$8,865.00
Remit to: SAN FRANCISCO, CA					<u>FYTD:</u> \$8,865.00
ORROCK, POPKA, FORTINO & BRISLIN	15705	08/24/2015	90-041M STMT 17	LEGAL DEFENSE COSTS-M. DAVIS V. CITY CASE	\$2,604.00
		08/24/2015	90-042M STMT 4	LEGAL DEFENSE COSTS-L. SPARKS V. CITY CASE	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$2,604.00
OSTERMAN, RONALD	226145	08/31/2015	R15-088174	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: GLENDALE, AZ					<u>FYTD:</u> \$75.00
OVERLAND PACIFIC & CUTLER, INC.	15568	08/03/2015	1506131	ROW CONSULTANT - VARIOUS PROJECTS	\$2,835.00
Remit to: LONG BEACH, CA					<u>FYTD:</u> \$2,835.00

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PACIFIC ALARM SERVICE, INC	15608	08/10/2015	R 113079	BURGLAR ALARM SYSTEM RENT/SVC/MONITORING-MVU SUBSTATION-JUL15	\$488.00
		08/10/2015	R 113309	BURGLAR ALARM SYSTEM RENT/SVC/MONITORING-MVU SUBSTATION-AUG15	
Remit to: BEAUMONT, CA					<u>FYTD:</u> \$488.00
PACIFIC TELEMAGEMENT SERVICES	15609	08/10/2015	753079	PAY PHONE SERVICES-JUL15	\$626.40
		08/10/2015	761010	PAY PHONE SERVICES-AUG15	
	15755	08/31/2015	768824	PAY PHONE SERVICES-SEP15	\$344.52
Remit to: SAN RAMON, CA					<u>FYTD:</u> \$970.92
PARKS, MELINDA	226077	08/24/2015	R15-087075	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: LA QUINTA, CA					<u>FYTD:</u> \$75.00
PERCEPTIVE ENTERPRISES, INC.	15706	08/24/2015	MVL-19	DBE SERVICES	\$1,207.50
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$1,207.50
PERKINS, SAUNDRA	226007	08/17/2015	1272905	COTTONWOOD RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
PERS LONG TERM CARE PROGRAM	225896	08/10/2015	2016-00000043	4720 - PERS LONG TERM CARE	\$460.33
		08/24/2015	2016-00000064	4720 - PERS LONG TERM CARE	\$460.33
Remit to: PASADENA, CA					<u>FYTD:</u> \$1,841.32

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Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
PERS RETIREMENT	15622	08/14/2015	P150717a	PERS RETIREMENT - CLASSIC FINAL	\$1,715.92
	15623	08/14/2015	P150717b	PERS RETIREMENT - PEPRA FINAL	\$11,462.71
	15625	08/14/2015	P150731P	PERS RETIREMENT DEPOSIT - PEPRA	\$12,521.65
	15723	08/28/2015	P150814P	PERS RETIREMENT DEPOSIT - PEPRA	\$12,567.89
	15724	08/28/2015	P150731a	PERS RETIREMENT - CLASSIC FINAL	\$2,503.55
	15725	08/28/2015	P150731b	PERS RETIREMENT - PEPRA FINAL	\$10,678.02
Remit to: SACRAMENTO, CA					<b>FYTD:</b> \$1,293,586.69
PETALS THE CLOWN & FRIENDS	226119	08/31/2015	202	ENTERTAINMENT FOR TIME4TOTS OPEN HOUSE	\$170.00
Remit to: RIVERSIDE, CA					<b>FYTD:</b> \$170.00
PIONEER CREDIT RECOVERY, INC	225897	08/10/2015	2016-00000044	1015 - GARNISHMENT - CREDITOR %	\$243.04
	226041	08/24/2015	2016-00000065	1015 - GARNISHMENT - CREDITOR %	\$226.38
Remit to: ARCADE, NY					<b>FYTD:</b> \$936.41
PIP PRINTING	15708	08/24/2015	56074	PRINTING OF INVITATIONS/ENVELOPES FOR STATE OF THE CITY ADDRESS	\$556.20
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$1,655.21
PIPER, MATTHEW	225898	08/10/2015	SPRING 2015	TUITION REIMBURSEMENT	\$355.00
Remit to: MURRIETA, CA					<b>FYTD:</b> \$355.00
PITASSI ARCHITECTS, INC	15569	08/03/2015	13740	CONSULTANT - CORP YARD	\$6,037.30
Remit to: RANCHO CUCAMONGA, CA					<b>FYTD:</b> \$6,037.30

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
POSITIVE YOUNG PEOPLE, INC.	15652	08/17/2015	APRIL 2015	CDBG REIMBURSEMENT	\$256.69
		08/17/2015	MAY 2015	CDBG REIMBURSEMENT	
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$256.69
POWER PLUS	15570	08/03/2015	268935P0515-0715	FS48 RENTAL EQUIPMENT FOR POWER FEES	\$540.00
Remit to: ANAHEIM, CA					<u>FYTD:</u> \$540.00
PROFESSIONAL PRESS REPAIR	226120	08/31/2015	71235	PAPER CUTTER MACHINE REPAIRS FOR GRAPHICS DIV.	\$2,078.60
Remit to: HESPERIA, CA					<u>FYTD:</u> \$2,078.60
PROLOGIS	225938	08/10/2015	P11-115	REFUND BALANCE OF DEPOSIT ACCT. FOR MASTER PLOT PLAN PEER REVIEW	\$2,584.40
Remit to: CERRITOS, CA					<u>FYTD:</u> \$2,584.40
PRUITT, CHERYL	15653	08/17/2015	JUL-2015	INSTRUCTOR SERVICES-COMPUTERS FOR BEGINNERS CLASS	\$297.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$297.00
PSOMAS	225962	08/17/2015	109440	CONSULTANT - E SUNNYMD SD	\$5,790.00
	226042	08/24/2015	109437	CONSULTANT - CORP YARD	\$3,437.50
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$12,210.00
PW ENHANCEMENT CENTER	15654	08/17/2015	7 - MAY 2015	CDBG REIMBURSEMENT-COMMUNITY EMERGENCY OUTREACH PROGRAM	\$3,477.90
		08/17/2015	8 - JUNE 2015	CDBG REIMBURSEMENT-COMMUNITY EMERGENCY OUTREACH PROGRAM	
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$5,045.43

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Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
QUALITY CODE PUBLISHING, LLC	15756	08/31/2015	2015-302	SUPPLEMENT SERVICE TO THE MV MUNICIPAL CODE	\$1,696.88
Remit to: SEATTLE, WA					<b>FYTD:</b> \$1,696.88
R J NOBLE COMPANY	226146	08/31/2015	BL#09228-YR2015	REFUND OF OVERPAYMENT FOR BL#09228	\$71.00
Remit to: ORANGE, CA					<b>FYTD:</b> \$71.00
RAMIREZ, JOSE J	225991	08/17/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$303.49
Remit to: RANCHO CUCAMONGA, CA					<b>FYTD:</b> \$303.49
RAMIREZ, JULIANNA	226147	08/31/2015	1277325 1277326	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$200.00
RAMOS, ROBERTO	15571	08/03/2015	JUL-2015	INSTRUCTOR SERVICES-KINDER KARATE & TAE KWON DO CLASSES	\$612.50
	15757	08/31/2015	AUG-2015	INSTRUCTOR SERVICES-KINDER KARATE & TAE KWON DO CLASSES	\$514.50
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$1,127.00
RANCHO BELAGO DANCE COMPANY	226015	08/17/2015	JUL-2015	INSTRUCTOR SERVICES-DANCE CLASSES	\$226.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$226.00
REGALADO, BLANCA E	15709	08/24/2015	AUG-2015	INSTRUCTOR SERVICES-FOLKLORIC DANCE ADULT & YOUTH CLASSES	\$228.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$777.00

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REPUBLIC MASTER CHEFS TEXTILE RENTAL SERVICE	15611	08/10/2015	11626983	LINENS RENTAL FOR CRC BALL ROOM	\$119.84
		08/10/2015	11617397	LINENS RENTAL FOR CRC BALL ROOM	
		08/10/2015	11611925	LINENS RENTAL FOR CRC BALL ROOM	
		08/10/2015	S474293	LINENS FOR SPECIAL EVENTS AT CRC	
		08/10/2015	S473013	LINENS FOR SPECIAL EVENTS AT CRC	
		08/10/2015	11621877	LINENS RENTAL FOR CRC BALL ROOM	
	15710	08/24/2015	11632054	LINENS RENTAL FOR CRC BALL ROOM	\$95.54
		08/24/2015	11642685	LINENS RENTAL FOR CRC BALL ROOM	
		08/24/2015	S479335	LINENS FOR SPECIAL EVENTS AT CRC	
		08/24/2015	11637610	LINENS RENTAL FOR CRC BALL ROOM	
	15758	08/31/2015	11647768	LINENS RENTAL FOR CRC BALL ROOM	\$22.00
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$259.38
REYES, JULIE	226043	08/24/2015	SUMMER 2015	TUITION REIMBURSEMENT	\$1,579.20
Remit to: RANCHO CUCAMONGA, CA					<b>FYTD:</b> \$1,579.20
REYNOSO, LUPE	225939	08/10/2015	1271030	TOWNGATE RENTAL REFUND DEPOSIT MINUS BALANCE OWED	\$175.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$175.00
RIGHTWAY SITE SERVICES, INC.	226121	08/31/2015	85242	PORTABLE RESTROOM/SVC-MARCH MIDDLE SCHOOL	\$591.70
		08/31/2015	85241	PORTABLE RESTROOMS/SVC-EQUESTRIAN CENTER	
		08/31/2015	85240	PORTABLE RESTROOM/SVC-COTTONWOOD GOLF COURSE	
Remit to: LAKE ELSINORE, CA					<b>FYTD:</b> \$1,775.10

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RISING STARS BUSINESS ACADEMY	15655	08/17/2015	103	CDBG REIMBURSEMENT-VOCATIONAL TRAINING PROGRAM	\$1,397.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$1,397.00
RIVERSIDE AREA RAPE CRISIS CENTER	225900	08/10/2015	JUNE 2015	CDBG REIMBURSEMENT-CHILD ABUSE PREVENTION PROGRAM	\$540.08
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$3,292.52
RIVERSIDE COUNTY INFORMATION TECHNOLOGY (RCIT)	225901	08/10/2015	JULY1215MZ02	GIS DATA DISTRIBUTION-FY 2015-2016	\$2,800.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$2,871.48
RIVERSIDE COUNTY SHERIFF CIVIL DIVISION-WEST	226044	08/24/2015	2016-00000066	1015 - GARNISHMENT - CREDITOR %	\$528.79
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$528.79
RIVERSIDE RUBBER STAMP & ENGRAVING	15759	08/31/2015	15-83043	SELF-INKING STAMP FOR CITY CLERK'S OFFICE	\$18.04
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$18.04
RMA GROUP	225902	08/10/2015	49203	CONSULTANT - CORPORATE YARD	\$1,075.00
	226045	08/24/2015	49204	CONSULTANT - CORP YARD	\$2,912.50
Remit to: RANCHO CUCAMONGA, CA					<u>FYTD:</u> \$13,696.50
ROBERTS, JERI	225867	08/06/2015	PA14-0032	REFUND FULL AMOUNT OF APPEAL FEES	\$375.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$375.00

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RODRIGUEZ, JANINE	226078	08/24/2015	1275207	COTTONWOOD RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$200.00
ROJAS, MEDARDO	226079	08/24/2015	PERMIT B1501423	REFUND 80% OF ELECTRICAL & PLUMBING FEES DUE TO PROJECT CHANGED	\$251.20
Remit to: ODESSA, TX					<u>FYTD:</u> \$251.20
ROMAN TINT, INC	225963	08/17/2015	1768	VERTICAL BLINDS, ROLLER SHADES & TINT GYM WINDOWS-FIRE ST. #48	\$2,320.00
Remit to: RIALTO, CA					<u>FYTD:</u> \$2,320.00
ROSALES, DEBBIE	15760	08/31/2015	SUMMER 2015	TUITION REIMBURSEMENT	\$2,000.00
Remit to: PERRIS, CA					<u>FYTD:</u> \$2,000.00
ROSALES-VILLIA, GLORIA	226008	08/17/2015	1272004	REFUND FOR PICNIC SHELTER	\$92.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$92.00
SALVATION ARMY	225964	08/17/2015	15-001	CDBG REIMBURSEMENT-FOOD PANTRY PROGRAM	\$5,547.03
		08/17/2015	2 (2015)	CDBG REIMBURSEMENT-FOOD PANTRY PROGRAM	
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$5,547.03
SAN BERNARDINO & RIVERSIDE CO FIRE EQUIP	15612	08/10/2015	78576	TESTING OF ANSUL SYSTEM AT CRC	\$234.24
		08/10/2015	78577	TESTING OF ANSUL SYSTEM AT SENIOR CENTER	
Remit to: SAN BERNARDINO, CA					<u>FYTD:</u> \$234.24

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SAPP, BRIAN	226148	08/31/2015	R15-087498	AS REFUND-RABIES DEPOSIT	\$20.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$20.00
SCHIEFELBEIN, LORI C.	226122	08/31/2015	JUL 2015	CONSULTANT SERVICES-ROTATIONAL TOW SERVICE PROGRAM	\$632.50
Remit to: BULLHEAD CITY, AZ					<u>FYTD:</u> \$1,526.25
SCHMITZ, KIMBERLY	226057	08/24/2015	8/30-9/2/15	TRAVEL PER DIEM-CALIFORNIA HR CONFERENCE	\$177.50
Remit to: GRAND TERRACE, CA					<u>FYTD:</u> \$177.50
SEAGER, MATTHEW	226149	08/31/2015	R15-087108	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
SECTRAN SECURITY, INC	225904	08/10/2015	15070720	ARMORED TRANSPORT SERVICES-JUL. 2015	\$483.75
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$483.75
SECURITY LOCK & KEY	15657	08/17/2015	27288	LOCK REPAIRS-TOWNGATE PARK	\$804.12
		08/17/2015	27289	LOCK REPAIRS-PARTS & LABOR FOR RED MAPLE EXT. DOOR & STORAGE RM.	
		08/17/2015	27290	LOCK REPAIRS-WESTBLUFF PARK	
Remit to: YUCAIPA, CA					<u>FYTD:</u> \$1,623.27
SHIVELY, BLANCA	225862	08/03/2015	R15-084893	AS REFUND-RABIES & S/N DEPOSITS	\$95.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$95.00
SHUBIN, KATHLEEN	15573	08/03/2015	11	SPECIAL PROJECT WORK-2008 CITY COUNCIL MEETINGS PDF DOWNLOADS	\$118.50
Remit to: TEMECULA, CA					<u>FYTD:</u> \$118.50

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Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
SIGLER WHOLESALE DISTRIBUTORS	225965	08/17/2015	INV-RVS15006837	7.5 TONS COOLING CONDENSING UNIT-COTTONWOOD GOLF CTR. HVAC PROJ.	\$3,221.65
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$16,846.97
SIGNS BY TOMORROW	226123	08/31/2015	16054	PUBLIC HEARING SIGN UPDATE & SITE POSTING SVCS RE: WLC PROJECT	\$2,470.02
		08/31/2015	16064	REMOVAL OF PUBLIC HEARING SIGNS RE: WLC PROJECT	
		08/31/2015	16191	PUBLIC HEARING SIGN UPDATE, REFURBISH & SITE POSTING-WLC PROJECT	
Remit to: MURRIETA, CA					<b>FYTD:</b> \$3,594.66
SIMPLOT PARTNERS	225966	08/17/2015	205028530	FERTILIZER FOR CFD #1 PARKS	\$4,295.80
		08/17/2015	205028529	FERTILIZER FOR CITY PARKS	
Remit to: LOS ANGELES, CA					<b>FYTD:</b> \$4,295.80
SIRE TECHNOLOGIES/HYLAND SOFTWARE	15658	08/17/2015	277746	SIRE SOFTWARE MAINTENANCE 8/1/15-7/31/16	\$17,393.56
Remit to: WESTLAKE, OH					<b>FYTD:</b> \$17,393.56
SKECHERS	225940	08/10/2015	MVU 701366901	SOLAR INCENTIVE REBATE	\$13,066.04
Remit to: MANHATTAN BEACH, CA					<b>FYTD:</b> \$13,066.04
SKONBERG, RIX	15574	08/03/2015	SPRING 2015	TUITION REIMBURSEMENT	\$510.00
Remit to: LA VERNE, CA					<b>FYTD:</b> \$510.00

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
SKY PUBLISHING	15659	08/17/2015	15_BMV_012	MEMORIAL DAY ADVERTISEMENT	\$850.00
	15761	08/31/2015	15_4_107	1/2 PAGE MAGAZINE AD-RECYCLING PROGRAM	\$850.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$4,907.00
SKY TRAILS MOBILE VILLAGE	15711	08/24/2015	JULY 2015	UUT REFUND FOR JULY 2015	\$41.02
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$126.05
SMART ENERGY SOLAR, INC.	226009	08/17/2015	RECEIPT 407792	REFUND OF OVERPAYMENT OF PERMIT FEES PAID 7/30/15	\$30.00
	226080	08/24/2015	PERMIT B1501366	REFUND PAYMENT INCORRECTLY APPLIED TO WRONG CONTRACTOR'S PERMIT	\$201.20
Remit to: CORONA, CA					<u>FYTD:</u> \$30.00
SMITHSON ELECTRIC, INC.	225967	08/17/2015	57452	6' CIRCLE TRAFFIC LOOPS FOR CITY YARD GATE & EUCALYPTUS/MEMORIAL	\$3,300.00
Remit to: ORANGE, CA					<u>FYTD:</u> \$3,300.00
SOLAR SERVICE CENTER	226150	08/31/2015	FP15-1005	REFUND-FIRE PLAN CK FEES (CANCELLED APPLICATION)	\$150.00
Remit to: CORONA, CA					<u>FYTD:</u> \$150.00
SOLAR SERVICE CENTER, INC.	226081	08/24/2015	PERMIT B1500904	REFUND 80% PERMIT FEE LESS ISSUANCE FEE-PROJ. CANCELLED	\$133.76
	226082	08/24/2015	PERMIT B1500905	REFUND 80% PERMIT FEE LESS ISSUANCE FEE-PROJ. CANCELLED	\$146.32
	226083	08/24/2015	PERMIT B1500718	REFUND 80% PERMIT FEE LESS ISSUANCE FEE-PROJ. CANCELLED	\$133.76
	226084	08/24/2015	PERMIT B1500719	REFUND 80% PERMIT FEE LESS ISSUANCE FEE-PROJ. CANCELLED	\$146.32
Remit to: PERRIS, CA					<u>FYTD:</u> \$133.76

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SORIANO, ERNESTO	226151	08/31/2015	C10793	REFUND-DISMISSED ADMIN CITATION	\$100.00
Remit to: MORENO VALLEY, CA					<b>FYTD: \$100.00</b>
SOSA, HUGO	15575	08/03/2015	JUL-2015	INSTRUCTOR SERVICES-TRADITIONAL KARATEDO CLASS	\$420.00
	15763	08/31/2015	AUG-2015	INSTRUCTOR SERVICES-TRADITIONAL KARATEDO CLASS	\$300.00
Remit to: RANCHO CUCAMONGA, CA					<b>FYTD: \$720.00</b>
SOUTH COAST AIR QUALITY MGMT DISTRICT	226124	08/31/2015	2861776	EMISSIONS FEES-FIRE STATION #99	\$691.87
		08/31/2015	2860001	ANNUAL OPERATING FEES-FIRE STATION #65 GENERATOR/RULE 461 LFDS	
		08/31/2015	2861107	EMISSIONS FEES-FIRE STATION #65	
		08/31/2015	2860737	ANNUAL OPERATING FEES-FIRE STATION #99 DIESEL GENERATOR	
Remit to: DIAMOND BAR, CA					<b>FYTD: \$691.87</b>
SOUTHERN CALIFORNIA EDISON 1	225846	08/03/2015	JUL-15 8/3/15	ELECTRICITY	\$3,979.40
	225905	08/10/2015	JUL-15 8/10/15	ELECTRICITY	\$8,411.54
		08/10/2015	JUN-15 8/10/15	ELECTRICITY	
	225969	08/17/2015	7500585835	RELIABILITY SERVICE-DLAP_SCE_SEES_HV	\$2,661.36
	226125	08/31/2015	AUG-15 8/31/15	ELECTRICITY	\$1,512.07
Remit to: ROSEMEAD, CA					<b>FYTD: \$560,099.44</b>
SOUTHERN CALIFORNIA GAS CO.	225847	08/03/2015	5	ADDTL. PAYMENT DUE PER LINE EXTENSION CONTRACT-PRJ# 158537-FS 99	\$11,937.39
	225970	08/17/2015	JUL-2015	GAS CHARGES	\$3,916.53
Remit to: MONTEREY PARK, CA					<b>FYTD: \$19,311.95</b>

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Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
SOUTHERN PET SUPPLIES	15660	08/17/2015	9494	PET SUPPLIES-ASSORTED SAFETY CAT COLLARS	\$491.50
		08/17/2015	9493	PET SUPPLIES-ASSORTED COLLARS AND LEADS	
Remit to: SAN DIEGO, CA					<b>FYTD:</b> \$921.30
SPARKLETTS	15576	08/03/2015	10050036 070215	BOTTLED WATER/SVC.-EOC/ERF	\$4.50
		08/24/2015	7364596 080215	BOTTLED WATER/SVC.-CREEKSIDE ELEMENTARY "A CHILD'S PLACE"	\$39.96
		08/24/2015	7363683 070215	BOTTLED WATER/SVC.-ARMADA ELEMENTARY "A CHILD'S PLACE"	
	08/24/2015	7363683 080215	BOTTLED WATER/SVC.-ARMADA ELEMENTARY "A CHILD'S PLACE"		
	15764	08/31/2015	7387294 080715	BOTTLED WATER/SVC.-COTTONWOOD GOLF COURSE STAFF	\$10.00
		08/31/2015	7387294 070715	BOTTLED WATER/SVC.-COTTONWOOD GOLF COURSE STAFF	
Remit to: DALLAS, TX					<b>FYTD:</b> \$265.83
SPRINT	15661	08/17/2015	417544340-104	CELLULAR PHONE SERVICE FOR PD GTF	\$32.60
Remit to: CAROL STREAM, IL					<b>FYTD:</b> \$79.84
STANDARD & POOR'S RATINGS SERVICES	15713	08/24/2015	10373707	SERVICES RENDERED RE: 2015 LEASE REVENUE BONDS	\$20,900.00
Remit to: CHICAGO, IL					<b>FYTD:</b> \$20,900.00
STANDARD INSURANCE CO	225853	08/03/2015	150801	SUPPLEMENTAL INSURANCE	\$1,320.26
	226126	08/31/2015	150901	SUPPLEMENTAL INSURANCE	\$1,320.26
Remit to: PORTLAND, OR					<b>FYTD:</b> \$29,309.25

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
STANLEY CONVERGENT SECURITY SOLUTIONS, INC	15613	08/10/2015	12523353	EQUIPMENT SERVICE CALL-REPAIR OF DAMAGED SPLICED WIRE-CITY YARD	\$175.00
	15662	08/17/2015	12588849	ALARM SYSTEM MONITORING SERVICES-LIBRARY	\$1,746.92
		08/17/2015	12595419	ALARM SYSTEM MONITORING SERVICES-CITY HALL	
		08/17/2015	12572475	ALARM SYSTEM MONITORING SERVICES-EOC/AUG15	
		08/17/2015	12581339	ALARM SYSTEM MONITORING SERVICES-ANNEX 1 FIRE ALARM	
		08/17/2015	12423429	ALARM SYSTEM MONITORING SERVICES-FIRE ST. #58	
		08/17/2015	12585026	ALARM SYSTEM MONITORING SERVICES-COTTONWOOD GOLF CTR.	
	08/17/2015	12400192	ALARM SYSTEM MONITORING SERVICES-MARCH ASES BLDG. 823		
15714	08/24/2015	12592252	ALARM SYSTEM MONITORING SERVICES-FIRE ST. #99/AUG15	\$116.00	
	08/24/2015	12509070	ALARM SYSTEM MONITORING SERVICES-FIRE ST. #99/JUL15		
Remit to: PALATINE, IL					<u>FYTD:</u> \$7,356.18
STASSIN, KRISTINE	225941	08/10/2015	R15-085785	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
STATE BOARD OF EQUALIZATION 1	15721	08/20/2015	073115	SALES & USE TAX REPORT FOR JULY 1-31, 2015	\$3,261.00
	226047	08/24/2015	2016-00000067	1015 - GARNISHMENT - CREDITOR %	\$425.95
Remit to: SACRAMENTO, CA					<u>FYTD:</u> \$6,728.95
STATE DISBURSEMENT UNIT	15586	08/07/2015	2016-00000053	1005 - GARNISHMENT - CHILD SUPPORT*	\$3,329.19
	15679	08/21/2015	2016-00000076	1005 - GARNISHMENT - CHILD SUPPORT*	\$3,132.00
Remit to: WEST SACRAMENTO, CA					<u>FYTD:</u> \$12,592.04

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
STATE OF CALIF. DEPT OF TRANSPORTATION	225907	08/10/2015	15008286	MATERIALS FURNISHED FOR PROJECT PER CO-OP AGREEMENT	\$6,552.89
Remit to: SACRAMENTO, CA					<b>FYTD: \$6,552.89</b>
STATE OF CALIFORNIA DEPT. OF CONSUMER AF	225971	08/17/2015	CERT68819 15/16	PROF. ENGINEER LICENSE RENEWAL-ERIC LEWIS	\$115.00
Remit to: SACRAMENTO, CA					<b>FYTD: \$115.00</b>
STATE OF CALIFORNIA DEPT. OF JUSTICE	225848	08/03/2015	107026	LIVE SCAN FINGERPRINTING APPS FOR PD-JUN15	\$2,007.00
	225908	08/10/2015	101630 (BL)	FINGERPRINTING SERVICES-BUSINESS LICENSE RELATED	\$1,120.00
		08/10/2015	101630 (PCS)	FINGERPRINTING SERVICES-PARKS CONTRACT CLASS RELATED	
		08/10/2015	101630 (HR)	FINGERPRINTING SERVICES-HR/EMPLOYMENT/VOLUNTEERS RELATED	
	225972	08/17/2015	107202 (HR)	FINGERPRINTING SERVICES-HR/EMPLOYMENT/VOLUNTEERS RELATED	\$367.00
		08/17/2015	107202 (BL)	FINGERPRINTING SERVICES-BUSINESS LICENSE RELATED	
	225973	08/17/2015	101630 (OEM)	FINGERPRINTING SERVICES-OEM RELATED	\$94.00
Remit to: SACRAMENTO, CA					<b>FYTD: \$5,288.00</b>
STOUT, CHRISTOPHER	226010	08/17/2015	7008026-11	SOLAR INCENTIVE REBATE	\$12,920.25
Remit to: MORENO VALLEY, CA					<b>FYTD: \$12,920.25</b>

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STRADLING, YOCCA, CARLSON & RAUTH	15663	08/17/2015	298375-0000	LEGAL SERVICES RE: SUCCESSOR AGENCY	\$1,550.00
		08/17/2015	299121-0031	LEGAL SERVICES RE: SUCCESSOR AGENCY	
		08/17/2015	298399-0031	LEGAL SERVICES RE: SUCCESSOR AGENCY	
		08/17/2015	298398-0032	LEGAL SERVICES RE: NSP AGREEMENTS	
		08/17/2015	299131-0000	LEGAL SERVICES RE: SUCCESSOR AGENCY	
Remit to: NEWPORT BEACH, CA					<u>FYTD:</u> \$6,049.97
SULLIVAN SOLAR POWER	226085	08/24/2015	1273964	CRC RENTAL REFUND DEPOSIT	\$100.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$100.00
SUNNYMEAD ACE HARDWARE	226127	08/31/2015	62231	MISC. SUPPLIES FOR FIRE ST. #65	\$178.93
		08/31/2015	62524	MISC. SUPPLIES FOR PD	
		08/31/2015	62615	MISC. SUPPLIES FOR PD	
		08/31/2015	62650	MISC. SUPPLIES FOR FIRE ST. #48	
		08/31/2015	62663	MISC. SUPPLIES FOR PD	
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$178.93
SUNNYMEAD VETERINARY CLINIC	225974	08/17/2015	301115	VETERINARY SERVICES FOR MV ANIMAL SHELTER	\$150.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$9,700.00
T-34 HERITAGE FOUNDATION, INC	225975	08/17/2015	1002	FLYOVER FOR JULY 4, 2015 EVENT	\$400.00
Remit to: ALISO VIEJO, CA					<u>FYTD:</u> \$400.00
TAYLOR'S APPLIANCE	225909	08/10/2015	J97508	WASHING MACHINE LEAK REPAIR/PARTS-FIRE ST. #65	\$177.69
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$177.69

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<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
TENORIO, ENRIQUE	226086	08/24/2015	PERMIT B1500964	REFUND 80% PERMIT FEE LESS ISSUANCE FEE-PROJ. CANCELLED	\$134.76
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$134.76
TERRY, JENNIFER A.	225916	08/10/2015	8/23-8/26/15	TRAVEL PER DIEM & MILEAGE-ACCELA ENGAGE 2015 CONFERENCE	\$323.15
Remit to: HEMET, CA					<u>FYTD:</u> \$323.15
THE ADVANTAGE GROUP/ FLEX ADVANTAGE	15614	08/10/2015	2016-00000045	4511 - FSA - MED CARE REIMB 2015*	\$4,293.25
	15715	08/24/2015	88195	FLEX & COBRA ADMIN FEES-JUL15	\$5,581.00
		08/24/2015	2016-00000068	4511 - FSA - MED CARE REIMB 2015*	
Remit to: TEMECULA, CA					<u>FYTD:</u> \$138,766.82
THE DUMBELL MAN FITNESS EQUIPMENT	226128	08/31/2015	32098	FITNESS EQUIPMENT REPAIR	\$295.69
Remit to: TORRANCE, CA					<u>FYTD:</u> \$295.69
THEODORA ORINGHER, PC	225977	08/17/2015	92103	LEGAL SERVICES	\$3,825.00
Remit to: LOS ANGELES, CA					<u>FYTD:</u> \$3,825.00
THERMAL COMBUSTION INNOVATORS	225849	08/03/2015	143701	BIOHAZARDOUS MEDICAL WASTE PICKUP FROM ANIMAL SHELTER-JUN15	\$88.13
Remit to: COLTON, CA					<u>FYTD:</u> \$88.13
THERMAL-COOL INC.	225978	08/17/2015	WO-7250	AC UNIT TROUBLESHOOT & REPAIR-CRC	\$1,058.09
		08/17/2015	WO-7332	HVAC VAV CONTROLLER, TSTAT & SENSOR-CITY HALL COUNCIL CHAMBER	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$47,764.97

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THOMAS, ANTHONY	225863	08/03/2015	1266300	REFUND FROM RAIN OUT CREDIT	\$300.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$300.00
THOMPSON COBURN LLP	15615	08/10/2015	3107066	LEGAL SERVICES FOR MVU RE: RELIABILITY STANDARD COMPLIANCE-MAY15	\$1,962.25
		08/10/2015	3112339	LEGAL SERVICES FOR MVU RE: NERC COMPLIANCE-JUN15	
		08/10/2015	3107781	LEGAL SERVICES FOR MVU RE: NERC COMPLIANCE-MAY15	
		08/10/2015	3112672	LEGAL SERVICES FOR MVU RE: RELIABILITY STANDARD COMPLIANCE-JUN15	
Remit to: WASHINGTON, DC					<u>FYTD:</u> \$1,962.25
TR DESIGN GROUP, INC.	15767	08/31/2015	2273	CONSULTANT - FS#48	\$3,854.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$3,854.00
TRANE U.S. INC.	225910	08/10/2015	35145307	CITY HALL COUNCIL CHAMBER HVAC WORK	\$795.76
Remit to: CITY OF INDUSTRY, CA					<u>FYTD:</u> \$795.76
TRAUDT, LISA	226011	08/17/2015	R15-084785	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MENIFEE, CA					<u>FYTD:</u> \$75.00
TRICHE, TARA	15664	08/17/2015	AUG-2015	INSTRUCTOR SERVICES-DANCE CLASSES	\$1,582.80
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$3,778.20
TTG ENGINEERS	225911	08/10/2015	100396	CONSULTANT INVOICE - 802 0002 70 77	\$18,111.20
Remit to: PASADENA, CA					<u>FYTD:</u> \$18,111.20

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TUKES, JOSHUA	15617	08/10/2015	JUL-2015	INSTRUCTOR SERVICES-WATERCOLOR TECHNIQUE CLASS	\$168.00
Remit to: MORENO VALLEY, CA					<b>FYTD: \$168.00</b>
TURF STAR, INC.	225979	08/17/2015	2288126-00	COTTONWOOD GOLF COURSE EQUIPMENT REPAIR PARTS/LABOR	\$1,813.72
Remit to: SAN FRANCISCO, CA					<b>FYTD: \$1,813.72</b>
TW TELECOM HOLDINGS, INC	15665	08/17/2015	07646946a	INTERNET & DATA SERVICES	\$3,953.08
		08/17/2015	07646946	TELECOM SVCS.-LOCAL/LONG DISTANCE CALLS	
Remit to: DENVER, CO					<b>FYTD: \$7,866.81</b>
TWINING LABORATORIES OF SO. CALIFORNIA	225912	08/10/2015	57661	CONSULTANT INVOICE - 801 0027 70 77	\$4,305.00
		08/10/2015	57170	CONSULTANT INVOICE - 801 0027 70 77	
	226049	08/24/2015	58058	CONSULTANT - PERRIS WIDENING	\$6,563.50
Remit to: LONG BEACH, CA					<b>FYTD: \$11,440.00</b>
U.S. HEALTHWORKS MEDICAL GROUP	15580	08/03/2015	2720220-CA	PRE-EMPLOYMENT PHYSICAL EXAM/EMPLOYEE DOT EXAM	\$1,606.72
		08/03/2015	2723900-CA	PRE-EMPLOYMENT PHYSICAL EXAM	
		08/03/2015	2731163-CA	PRE-EMPLOYMENT PHYSICAL EXAMS	
		08/03/2015	122135276 6/30	HEALTH INSURANCE CLAIM-EMPLOYEE INJURY TREATMENT	
		08/03/2015	122135276 6/29	HEALTH INSURANCE CLAIM-EMPLOYEE INJURY TREATMENT	
		08/03/2015	2713905-CA	PRE-EMPLOYMENT PHYSICAL EXAMS/EMPLOYEE DOT EXAM	
Remit to: VALENCIA, CA					<b>FYTD: \$1,606.72</b>

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ULTRASERV AUTOMATED SERVICES, LLC	226050	08/24/2015	3590:026232	COFFEE SVC. SUPPLIES-ANNEX #1	\$2,645.10
		08/24/2015	3590:025946	COFFEE SVC. SUPPLIES-CITY HALL/BREAKROOM LOCATION	
		08/24/2015	3590:024687	COFFEE SVC. SUPPLIES-CITY HALL/PUBLIC WORKS LOCATION	
		08/24/2015	3590:026230	COFFEE SVC. SUPPLIES-CITY HALL/BREAKROOM LOCATION	
		08/24/2015	3590:025942	COFFEE SVC. SUPPLIES-CITY YARD	
		08/24/2015	3590:026234	COFFEE SVC. SUPPLIES-CITY HALL/PUBLIC WORKS LOCATION	
		08/24/2015	3590:024685	COFFEE SVC. SUPPLIES-ANNEX #1	
		08/24/2015	3590:026236	COFFEE SVC. SUPPLIES-CITY HALL/CITY CLERK LOCATION	
		08/24/2015	3590:025713	COFFEE SVC. SUPPLIES-CITY YARD	
		08/24/2015	3590:025426	COFFEE SVC. SUPPLIES-CITY HALL/PUBLIC WORKS LOCATION	
		08/24/2015	3590:025106	COFFEE SVC. SUPPLIES-CITY HALL/BREAKROOM LOCATION	
		08/24/2015	3590:025108	COFFEE SVC. SUPPLIES-CITY YARD	
		08/24/2015	3590:025110	COFFEE SVC. SUPPLIES-CITY HALL/PUBLIC WORKS LOCATION	
		08/24/2015	3590:026238	COFFEE SVC. SUPPLIES-CITY YARD	
		08/24/2015	3590:025428	COFFEE SVC. SUPPLIES-CITY HALL/BREAKROOM LOCATION	
		08/24/2015	3590:025711	COFFEE SVC. SUPPLIES-CITY HALL/PUBLIC WORKS LOCATION	
		08/24/2015	3590:025430	COFFEE SVC. SUPPLIES-ANNEX #1	

Remit to: COSTA MESA, CA

FYTD: \$11,081.77

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>	
UNDERGROUND SERVICE ALERT	15618	08/10/2015	620150456 (b)	DIGALERT TICKETS SUBSCRIPTION SERVICE-JUN15	\$381.00	
		08/10/2015	620150456 (a)	DIGALERT TICKETS SUBSCRIPTION SERVICE-JUN15		
		08/10/2015	620150456 (c)	DIGALERT TICKETS SUBSCRIPTION SERVICE-JUN15		
		08/10/2015	620150456 (d)	DIGALERT TICKETS SUBSCRIPTION SERVICE-JUN15		
Remit to: CORONA, CA					<u>FYTD:</u> \$670.50	
UNITED POWER GENERATION, INC.	225980	08/17/2015	4075	TROUBLESHOOT/REPAIR OF CITY HALL GENERATOR-ANNUNCIATOR FAILURE	\$385.00	
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$4,420.00	
UNITED ROTARY BRUSH CORP	15666	08/17/2015	285550	STREET SWEEPER BROOM KITS/RECONDITIONING & REPAIR PART	\$2,671.41	
		08/17/2015	285644	STREET SWEEPER BROOM KITS/RECONDITIONING		
		08/17/2015	285733	STREET SWEEPER BROOM KITS/RECONDITIONING & REPAIR PART		
		08/17/2015	285838	STREET SWEEPER BROOM KITS/RECONDITIONING		
Remit to: KANSAS CITY, MO					<u>FYTD:</u> \$4,661.49	
UNITED SITE SERVICES OF CA, INC.	15667	08/17/2015	114-3109439	FENCE RENTAL AT ANIMAL SHELTER	\$106.65	
		15668	08/17/2015	114-2887614	SITE SERVICES - FS#48	\$2,661.20
		15717	08/24/2015	114-3135861	SITE SERVICES - FS#48	\$1,774.13
Remit to: EL MONTE, CA					<u>FYTD:</u> \$6,316.11	
UNITED STATES TREASURY - 4	225913	08/10/2015	2016-00000046	1001 - GARNISHMENT - IRS TAX LEVY	\$376.59	
		226051	08/24/2015	2016-00000069	1001 - GARNISHMENT - IRS TAX LEVY	\$396.44
Remit to: FRESNO, CA					<u>FYTD:</u> \$1,424.62	

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)





City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
UNITED STATES VETERANS INITIATIVE	225981	08/17/2015	2 - FINAL INV.	CDBG REIMBURSEMENT-MEALS FOR HEROES PROGRAM	\$1,032.03
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$1,032.03
UNITED WAY OF INLAND VALLEYS	15619	08/10/2015	2016-00000047	8720 - UNITED WAY	\$22.50
	15718	08/24/2015	2016-00000070	8720 - UNITED WAY	\$22.50
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$90.00
UNITED WAY OF THE INLAND VALLEYS	225942	08/10/2015	1268379	CRC RENTAL REFUND DEPOSIT	\$100.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$100.00
URBAN CROSSROADS, INC.	225914	08/10/2015	25860	TUMF NETWORK UPDATE SERVICES - JAN 2015	\$4,735.00
		08/10/2015	25798	TUMF NETWORK UPDATE SERVICES - DEC 2014	
Remit to: IRVINE, CA					<u>FYTD:</u> \$4,735.00
URRUTIA, DIALENA	226159	08/31/2015	AUG-2015	INSTRUCTOR SERVICES-INTERNATIONAL LATIN DANCE CLASS	\$75.00
Remit to: RIVERSIDE, CA					<u>FYTD:</u> \$75.00
USA MOBILITY/ARCH WIRELESS	15719	08/24/2015	Y6218870G	PAGER SERVICE FOR ON-CALL TRAFFIC SIG. MAINT. STAFF	\$4.68
Remit to: SPRINGFIELD, VA					<u>FYTD:</u> \$4.68
VALDEZ, BERTA	226087	08/24/2015	R15-087681	AS REFUND-RABIES DEPOSIT	\$20.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$20.00
VALENZUELA, CAROLINA	226088	08/24/2015	R15-088563	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
VERIZON	226129	08/31/2015	EQN6913105-15209	BACKBONE COMMUNICATION CHARGES	\$588.55
Remit to: TRENTON, NJ					<b>FYTD:</b> \$1,179.13
VERIZON CALIFORNIA	226052	08/24/2015	951 AC7-3573	EMERGENCY SERVICE LISTING	\$1,941.58
	226130	08/31/2015	1258220327JUL-15	FIOS SERVICES FOR FIRE STATION 99	\$120.20
	226131	08/31/2015	951 UH2-7052-AUG	PHONE CHARGES - ERC	\$645.32
Remit to: DALLAS, TX					<b>FYTD:</b> \$3,343.69
VILLA, JUAN	225868	08/06/2015	PA14-0032	REFUND BALANCE OF APPEAL FEES	\$300.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$300.00
VISION SERVICE PLAN	15581	08/03/2015	150801	EMPLOYEE VISION INSURANCE	\$3,935.78
	15768	08/31/2015	150901	EMPLOYEE VISION INSURANCE	\$3,993.05
Remit to: SAN FRANCISCO, CA					<b>FYTD:</b> \$11,882.65
VOYA INSURANCE AND ANNUITY COMPANY	226053	08/24/2015	2016-00000071	8792 - VOYA (FORMERLY ING) - EMPLOYEE *	\$325.00
Remit to: DES MOINES, IA					<b>FYTD:</b> \$650.00
VOYAGER FLEET SYSTEM, INC.	15669	08/17/2015	869211615530	CNG FUEL PURCHASES	\$3,059.30
	15670	08/17/2015	869336602530	FUEL CARD PURCHASES	\$1,367.17
Remit to: HOUSTON, TX					<b>FYTD:</b> \$8,857.08
WARREN, KATHY	226152	08/31/2015	R15-088822	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<b>FYTD:</b> \$75.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

Vendor Name	Check/EFT Number	Payment Date	Inv Number	Invoice Description	Payment Amount
WASTE MANAGEMENT, INC.	225983	08/17/2015	4517247-2371-8	ROLLOFF BIN DELIVERY/PICKUP-CRC LOCATION FOR YOC PROJECT	\$488.79
Remit to: LOS ANGELES, CA					FYTD: \$488.79
WEN, QIKUN	226153	08/31/2015	C11484/C11694	REFUND-DISMISSED ADMIN CITATIONS	\$300.00
Remit to: TEMPLE CITY, CA					FYTD: \$300.00
WEST PAYMENT CENTER	226132	08/31/2015	832303916	AUTO TRACK SERVICES FOR PD INVESTIGATIONS-JUL15	\$753.98
Remit to: CAROL STREAM, IL					FYTD: \$1,507.96
WEST, HELEN	226089	08/24/2015	R15-088850	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: CABAZON, CA					FYTD: \$75.00
WESTERN MUNICIPAL WATER DISTRICT	226054	08/24/2015	23821-018258/JL5	WATER CHARGES-MFPCC BLDG. 938	\$2,905.11
		08/24/2015	23866-018292/JL5	WATER CHARGES-SKATE PARK	
		08/24/2015	24753-018620/JL5	WATER CHARGES-MARB BALLFIELDS	
		08/24/2015	23821-018257/JL5	WATER CHARGES-MFPCC LANDSCAPE	
Remit to: ARTESIA, CA					FYTD: \$6,859.03
WHITE, GENIE	226090	08/24/2015	1275204	TOWNGATE RENTAL REFUND DEPOSIT	\$200.00
Remit to: MORENO VALLEY, CA					FYTD: \$200.00
WILLDAN FINANCIAL SERVICES	15671	08/17/2015	010-27849	GRANT PROGRAM SUPPORT SERVICES FEB 2015-JUN 2015	\$11,980.00
		08/17/2015	010-28259	2015 DIF STUDY SERVICES-JUN 2015	
Remit to: TEMECULA, CA					FYTD: \$23,880.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

CHECKS UNDER \$25,000

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
WILLIAMS, HENRY	226154	08/31/2015	C13548	REFUND-DISMISSED ADMIN CITATION	\$100.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$100.00
WILLIAMS, JASON T	226155	08/31/2015	C11496	REFUND-ADMIN CITATION OVERPAYMENT	\$1,600.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$1,600.00
WILLIAMS, PATRICIA	225864	08/03/2015	15181285	APPEAL GRANTED BY POLICE REFUND	\$32.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$32.00
WILLIS, ROBERT H	225984	08/17/2015	080215	SPORTS OFFICIATING SERVICES-SOFTBALL	\$315.00
		08/17/2015	072615	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	073015	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	072315	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	070915	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	070215	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/17/2015	071615	SPORTS OFFICIATING SERVICES-SOFTBALL	
	226055	08/24/2015	080615	SPORTS OFFICIATING SERVICES-SOFTBALL	\$210.00
		08/24/2015	081615	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/24/2015	081315	SPORTS OFFICIATING SERVICES-SOFTBALL	
		08/24/2015	080915	SPORTS OFFICIATING SERVICES-SOFTBALL	
Remit to: PERRIS, CA					<u>FYTD:</u> \$651.00
WINSTON, LOUIS	225865	08/03/2015	1265810	REFUND CANCELLED PICNIC SHELTER	\$64.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$64.00

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



City of Moreno Valley  
Payment Register  
For Period 8/1/2015 through 8/31/2015

**CHECKS UNDER \$25,000**

<u>Vendor Name</u>	<u>Check/EFT Number</u>	<u>Payment Date</u>	<u>Inv Number</u>	<u>Invoice Description</u>	<u>Payment Amount</u>
ZAMEER, AHMAD	226012	08/17/2015	1272901	TOWNGATE RENTAL REFUND DEPOSIT MINUS BALANCE DUE	\$104.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$104.00
ZAVALA, JOSEPHIN	225866	08/03/2015	1266620	REFUND CANCELLED PICNIC SHELTER	\$37.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$37.00
ZEE MEDICAL INC	15582	08/03/2015	0140729766	ITEMS FOR FIRST AID KIT REPLENISHMENTS FOR ANIMAL SERVICES	\$344.62
Remit to: INDIANAPOLIS, IN					<u>FYTD:</u> \$976.02
ZOEBER, JENNIFER	226013	08/17/2015	R15-088488	AS REFUND-SPAY/NEUTER DEPOSIT	\$75.00
Remit to: MORENO VALLEY, CA					<u>FYTD:</u> \$75.00
<b>TOTAL CHECKS UNDER \$25,000</b>					<b>\$1,197,886.41</b>
<b>GRAND TOTAL</b>					<b>\$15,618,669.44</b>

Attachment: August 2015 Payment Register (1691 : PAYMENT REGISTER - AUGUST 2015)



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** AUTHORIZATION TO SUBMIT SUSTAINABLE TRANSPORTATION PLANNING GRANT APPLICATION TO CALTRANS AND RESOLUTION NO. 2015-64 AUTHORIZING THE CITY MANAGER TO EXECUTE AGREEMENTS WITH CALTRANS FOR TRANSPORTATION PLANNING GRANTS

---

### **RECOMMENDED ACTION**

#### **Recommendations:**

1. Authorize staff to submit an application for a Sustainable Transportation Planning Grant.
2. Adopt Resolution No. 2015-64. A Resolution of the City Council of the City of Moreno Valley, California, Authorizing the City Manager to Execute Agreements with Caltrans for the Moreno Valley Dracaea Avenue Corridor Master Plan.

### **SUMMARY**

This report recommends authorization to submit an application for a Sustainable Transportation Planning Grant and approval of Resolution 2015-XX authorizing the City Manager to execute agreements with Caltrans for Transportation Planning Grants. The planning grant would be used to prepare a study to evaluate Dracaea Avenue as a Master Planned Neighborhood Greenway Corridor.

### **DISCUSSION**

Transportation Planning Grants offered by Caltrans are intended to promote a balanced, comprehensive multi-modal transportation system. Goals of the grants are the following:

1. Improve Mobility and Accessibility: Expanding the system and enhancing modal choices and connectivity to meet the State's future transportation demands.
2. Preserve the Transportation System: Maintaining, managing, and efficiently utilizing California's existing transportation system.
3. Support the Economy: Maintaining, managing, and enhancing the movement of goods and people to spur the economic development and growth, job creation, and trade.
4. Enhance Public Safety and Security: Ensuring the safety and security of people, goods, services, and information in all modes of transportation.
5. Reflect Community Values: Finding transportation solutions that balance and integrate community values with transportation safety and performance, and encourage public involvement in transportation decisions.
6. Enhance the Environment: Planning and providing transportation services while protecting our environment, wildlife, and historical and cultural assets.

Dracaea Avenue is a residential collector roadway, approximately five miles in length, extending from Arbor Park Lane to Nason Street. Dracaea Avenue provides direct connection to four parks, eight schools, two major shopping centers, churches, multi-use trails, transit stops, and several residential communities. Dracaea Avenue is the longest residential collector roadway in the City. Within the corridor, certain segments carry more than 5,500 vehicles per day, which is higher than any other residential collector within the City. The majority of the corridor has a 35 mph posted speed limit and residences take direct access to the roadway.

Resulting from higher vehicle volumes and speeds, coupled with the direct fronting residential access, the City receives approximately five to ten requests annually for traffic calming measures on Dracaea Avenue including speed humps, all-way stops, and increased traffic enforcement. Spot speed surveys confirmed that on many segments along the corridor, motorists routinely exceed the posted speed by more than 10 mph. Additionally, segments within the corridor experience higher collision rates as compared to similar roadways within the City.

It is the intent of staff to submit a grant application to have a consultant evaluate Dracaea Avenue as a Master Planned Neighborhood Greenway Corridor. Neighborhood Greenways are intended to operate as low-volume, low-speed routes that provide safe, quiet routes for motorists, pedestrians, and bicycles.

The purpose of the Corridor Master Plan would be to provide policies and guidelines for improvements along the corridor to enhance bicycle and pedestrian safety, to reduce cut through traffic, and reduce neighborhood speeding.

The community and other interested parties would be engaged to assess current challenges and needs, evaluate best practices that address those needs, and develop design concepts for the community to consider. The plan could also serve as a framework for implementation of traffic calming on other City Residential Collector roadways..

As part of the grant application, a local resolution is required that states the title of the person authorized to execute agreements with Caltrans if the City is awarded grant funding.

### **ALTERNATIVES**

1. Authorize staff to submit a Transportation Planning Grant and approve Resolution 2015-64 which authorizes the City Manager to execute agreements with the California Department of Transportation for Transportation Planning Grants, if the City of Moreno Valley secures grant funding. *Staff recommends this action.*
2. Do not authorize staff to submit a Transportation Planning Grant and do not approve Resolution 2015-64 which would not authorize the City Manager to execute agreements with the California Department of Transportation for Transportation Planning Grants. *If such authority is not granted, the City would not submit an application for a Transportation Planning Grant.*

### **FISCAL IMPACT**

All applications for the Transportation Planning Grant require a minimum of 11.47 percent match from the agency submitting the application. Staff anticipates submitting an application requesting approximately \$175,000 in grant funds with \$20,073 in matching funds. The source of the matching funds would be from Measure A, Gas Tax, or other transportation related funding. If the grant application is selected by Caltrans for funding, then City staff will bring to Council a request to accept the grant and appropriate funds for reimbursement by Caltrans. Successful grant applications are anticipated to be announced in April 2016. There is no impact to the General Fund with this action.

### **NOTIFICATION**

N/A

### **PREPARATION OF STAFF REPORT**

Prepared By:  
Eric Lewis, P.E., T.E.

Department Head Approval:  
Ahmad R. Ansari, P.E.



City Traffic Engineer

Public Works Director/City Engineer

**CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Public Safety.** Provide a safe and secure environment for people and property in the community, control the number and severity of fire and hazardous material incidents, and provide protection for citizens who live, work and visit the City of Moreno Valley.

**Public Facilities and Capital Projects.** Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

**ATTACHMENTS**

1. Resolution 2015-64\_City Council

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/23/15 5:16 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 12:03 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 1:47 PM

RESOLUTION NO. 2015-64

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, AUTHORIZING THE CITY MANAGER TO EXECUTE AGREEMENTS WITH CALTRANS FOR THE MORENO VALLEY DRACAEA AVENUE CORRIDOR MASTER PLAN

WHEREAS, the City of Moreno Valley is eligible to receive Federal and/or State funding for certain transportation planning related plans, through the California Department of Transportation; and

WHEREAS, a Fund Transfer Agreement is needed to be executed with the California Department of Transportation before such funds can be claimed through the Transportation Planning Grant Programs; and

WHEREAS, the City of Moreno Valley wishes to delegate authorization to execute these agreements and any amendments thereto;

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS: It does hereby authorize the City Manager to execute agreements and any amendments thereto with the California Department of Transportation for Transportation Planning Grants, if awarded to the City.

APPROVED AND ADOPTED this 13th day of October 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

1  
Resolution No. 2015-64  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-64\_City Council [Revision 1] (1669 : AUTHORIZATION TO SUBMIT SUSTAINABLE TRANSPORTATION PLANNING

**RESOLUTION JURAT**

STATE OF CALIFORNIA            )  
COUNTY OF RIVERSIDE        ) ss.  
CITY OF MORENO VALLEY        )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 2015-64 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13th day of October 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)

2  
Resolution No. 2015-64  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-64\_City Council [Revision 1] (1669 : AUTHORIZATION TO SUBMIT SUSTAINABLE TRANSPORTATION PLANNING



## Report to City Council

---

**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** FUNDING APPROPRIATION AND AUTHORIZATION TO AWARD AGREEMENT FOR PROFESSIONAL CONSULTANT SERVICES FOR THE HUBBARD STREET STORM DRAIN PROJECT PROJECT NO. 804 0010 70 77

---

### **RECOMMENDED ACTION**

#### **Recommendations:**

1. Approve the appropriation of \$200,000 from the unencumbered General Fund fund balance to the Hubbard Street Storm Drain design: GL Account No. 1010-70-77-80004-720199, Project No. 804 0010-1010-99.
2. Authorize the City Manager to award and execute a Professional Consultant Services Agreement for the Hubbard Street Storm Drain design, if it is within the project budget, subject to approval by the City Attorney.
3. Authorize the issuance of a Purchase Order in an amount not to exceed \$175,000.00 when the Agreement has been signed by all parties.
4. Authorize the Public Works Director/City Engineer to execute any subsequent amendments to the Agreement for Professional Consultant Services, not to exceed the Purchase Order amount, subject to the approval of the City Attorney.

### **SUMMARY**

This report recommends appropriation of funds for planning and design efforts of the Hubbard Street Storm Drain to fast track the project. The source of funds is the General Fund, to be reimbursed by the Riverside County Flood Control and Water Conservation District. Furthermore, this report recommends authorizing the City Manager to award and execute an agreement with a competitively selected consultant for the Hubbard Street Storm Drain design.

## **DISCUSSION**

On July 13, 2010, the City Council awarded a construction contract for work to the Indian Basin and Ironwood Avenue street and storm drain improvements. This contract included work on the Sunnymead Master Drain Plan Line H-1A Stage 2 from Indian Street to Hubbard Street. The Notice of Completion was filed with the County on October 27, 2011. Since then, City Staff has coordinated with the Riverside County Flood Control and Water Conservation District (District) to receive funds for the design and construction of the Hubbard Street Storm Drain (aka Sunnymead Master Drain Plan Line H-1A Stage 3). The Hubbard Street Storm Drain is the next logical phase of the Master Plan to continue improvements upstream. The project is currently shown in the City's FY 15/16 Adopted Capital Improvement Plan on Page D-13 as an unfunded project.

The District has identified funds for the project, but the funds will not be available until FY 16/17. In order to expedite the construction of the much needed storm drain improvements in light of the recent rains and subsequent flooding, City Staff proposes to move forward with design of the Hubbard Street storm drain improvements. By appropriating City funds at this time with the District reimbursement forthcoming, in essence "fronting" the money, the City can complete design and obtain construction bids approximately nine to twelve months earlier. The construction contract for the lowest responsible bidder will be presented to City Council at an earlier date than would occur if the City waited for the FY 16/17 District allocation of funds. City Staff is currently negotiating a Co-Operative Agreement with the District for reimbursement of the work during the design and construction phase. The Co-Operative Agreement will be brought to City Council for approval at a later date.

The Hubbard Street Storm Drain project will include improvements such as storm drain installation, catch basin installation, and miscellaneous street improvements such as curb and gutter, AC berm, driveway reconstruction, and grading to channel storm runoff in the streets to catch basin inlets.

On September 3, 2015, a Notice Inviting Proposals for Professional Consultant Services to perform design for the Hubbard Street Storm Drain project was posted on the City's website and a notice was sent to 250 vendors via the City's PlanetBids account. City Staff is currently in the process of reviewing the proposals in order to select the most qualified storm drain design consultant based upon understanding of the work and ability to provide the required services on time and within budget. Consistent with the expedited nature of this project, Staff recommends that Council authorize the City Manager to award and execute a Professional Consultant Services Agreement with a competitively selected consultant, if it is within the project budget of \$175,000.00, and subject to approval by the City Attorney.

## **ALTERNATIVES**

1. Approve and authorize the recommended actions as presented in this staff report. *This alternative will provide for the timely completion of the Hubbard Street Storm Drain design such that the project can go to bid and be constructed once the District funds are made available for FY16/17.*
2. Do not approve and authorize the recommended actions as presented in this staff report. *This alternative will delay completion of the Hubbard Street Storm Drain design thus delaying the start of construction of needed improvements.*

**FISCAL IMPACT**

**The design phase of this project is fully funded by General Fund monies.** As previously mentioned, reimbursement from the District will be received based upon a Co-Operative Agreement currently under negotiation.

**Appropriations/Budget Adjustments**

Fund	Account Number	Type	FY 15/16 Budget	Proposed Adjustment	FY 15/16 Amended Budget
General Fund	GL: 1010-70-77-80004-720199	EXP	\$0	\$200,000	\$200,000
	Project No. 804 0010-1010-99	EXP	\$0	\$200,000	\$200,000

**AVAILABLE BUDGET – FISCAL YEAR 2015/2016:**

General Fund

(Account 1010-70-77-80004-720199) (Project No. 804 0010-1010-99).....\$200,000

Total ..... \$200,000

**ESTIMATED PROJECT DESIGN COSTS:**

Consultant Design Cost and City Project Administration..... \$200,000

**ANTICIPATED PROJECT SCHEDULE:**

Complete Design.....May 2016

District allocates funds for Construction ..... July 2016

Complete Construction..... December 2016

**PREPARATION OF STAFF REPORT**

Prepared By:  
Michael Lloyd, P.E.  
Senior Engineer

Department Head Approval:  
Ahmad R. Ansari, P.E.  
Public Works Director/City Engineer

Concurred By:  
Prem Kumar, P.E.  
Deputy Public Works Director/Assistant City Engineer

**CITY COUNCIL GOALS**

**Public Safety.** Provide a safe and secure environment for people and property in the community, control the number and severity of fire and hazardous material incidents, and provide protection for citizens who live, work and visit the City of Moreno Valley.

**Public Facilities and Capital Projects.** Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

**Positive Environment.** Create a positive environment for the development of Moreno Valley's future.


**ATTACHMENTS**

- 1. Location Map

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/29/15 7:45 AM
City Attorney Approval	<u>✓ Approved</u>	9/29/15 8:23 AM
City Manager Approval	<u>✓ Approved</u>	10/05/15 1:21 PM



	<b>HUBBARD STREET STORM DRAIN</b>	
	LOCATION MAP Public Works Department Capital Projects Division	<b>HUBBARD STREET STORM DRAIN</b> <b>FROM IRONWOOD AVENUE TO HILTON DRIVE</b>
	ATTACHMENT 1	PROJECT No. 804 0010

Attachment: Location Map (1668 : FUNDING APPROPRIATION AND AUTHORIZATION TO AWARD AGREEMENT FOR PROFESSIONAL





## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Chris Paxton, Administrative Services Director

**AGENDA DATE:** October 13, 2015

**TITLE:** LIST OF PERSONNEL CHANGES

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### **RECOMMENDED ACTION**

#### **Recommendation:**

1. Ratify the list of personnel changes as described.

### **DISCUSSION**

The attached list of personnel changes scheduled since the last City Council meeting are presented for City Council ratification.

### **FISCAL IMPACT**

All position changes are consistent with appropriations previously approved by the City Council.

### **PREPARATION OF STAFF REPORT**

Prepared By:  
Chris Paxton  
Administrative Services Director

Department Head Approval:  
Chris Paxton  
Administrative Services Director

### **CITY COUNCIL GOALS**

None

### **ATTACHMENTS**

1. List of Personnel Changes

### **APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/06/15 1:35 PM
City Attorney Approval	<u>✓ Approved</u>	10/06/15 5:00 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 1:44 PM

## City of Moreno Valley Personnel Changes

### New Hires

Pablo Arroyo, Maintenance Worker I, Public Works Department

### Promotions

Nicholas Henderson

From: Building & Safety Inspector, Community Development Department

To: Building & Safety Supervisor, Community Development Department

### Transfers

Lesia Gage

From: Senior Accountant, Financial & Management Services Department/Financial Operations

To: Senior Accountant, Financial & Management Services Department/Electric Utility

Angel Orellana

From: Park Ranger, Parks & Community Services Department

To: Maintenance Worker II, Public Works Department

### Separations

None



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES FOR REGULATORY PARTICIPATION IN SCE'S 2015 GENERAL RATE CASE

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### **RECOMMENDED ACTION**

#### **Recommendation:**

1. Approve a Third Amendment to Agreement for Legal Services for Regulatory Participation in SCE's 2015 General Rate Case.

### **SUMMARY**

This report recommends approval of a Third Amendment to a Legal Services Agreement with Braun Blasing McLaughlin & Smith PC ("BBMS"). BBMS provides legal guidance on utility regulations and on participating in SCE's 2015 General Rate Case ("GRC"). Services provided by BBMS have been funded by participating cities of the Coalition for Affordable Street Lights ("CASL"). The City of Moreno Valley spearheaded the formation of CASL in 2011 and serves as the lead agency on the Agreement with BBMS. This Third Amendment modifies the scope of services and compensation to complete Phase 1 (Revenue Requirement) and to further participate in Phase 2 (Rate Design) of the 2015 GRC.

### **DISCUSSION**

#### **Background**

Every three years SCE submits an application to the California Public Utilities Commission ("CPUC") to make adjustments to its utility rates and tariffs. The CPUC identifies this process as a General Rate Case ("GRC"). There are two phases of the GRC. Phase 1 is to establish SCE's Revenue Requirement. The Revenue Requirement defines the annual amount of revenue SCE will be permitted to generate

during that three year GRC cycle. Phase 2 establishes the Rate Design. The Rate Design sets the tariff that will be charged for each rate paying class to meet the approved Revenue Requirement. Specifically, this is the process SCE goes through to adjust the tariff for its street lights. The tariff is the charge the City pays for the operation and maintenance of the street lights.

Over the years, the CPUC has approved SCE's request to increase the street light tariff which caused expenditures for Moreno Valley's street lighting programs to increase and exceed revenues. In FY 2006/07, fund balances in the street lighting programs were used to balance the street light budgets and continue operation of the programs. Fund balances were eventually depleted and in FY 2010/11, the General Fund began subsidizing the programs.

### SCE's 2012 GRC Phase 2

To assist in controlling escalating street light costs, the City applied for and the CPUC granted it "party status" in SCE's 2012 GRC. Party status authorizes the City to request documentation from SCE which SCE used to develop its request for adjustments to the rates and tariffs. SCE's application for Phase 2 (Rate Design) requested a 4.8% increase in the street light tariff (excluding energy costs) for each of the three years (2012-2014) covered by the GRC.

Moreno Valley entered into an Agreement with BBMS to provide legal guidance on utility regulations and on participating in the GRC process. The Agreement with BBMS also included economic rate analysis, which was provided by MRW & Associates. To assist in funding the services provided by BBMS, Moreno Valley spearheaded the formation of CASL and obtained cost sharing commitments from six cities (Huntington Beach, Murrieta, Rancho Cucamonga, Redondo Beach, Torrance, and Upland). CASL became actively involved in the rate design discussions and the final settlement agreement for SCE's 2012 GRC.

In April 2013, the CPUC approved the settlement agreement for Phase 2 of the 2012 GRC. Included as part of the settlement agreement, SCE agreed to redesign the street light tariff to be based on actual costs. As a result, the street light tariff (excluding energy costs) remained fixed at the June 2012 rate until the 2015 GRC cycle.

### SCE's 2015 GRC

In November 2013, SCE filed its application for Phase 1 (Revenue Requirement) of the 2015 GRC. Preliminary analysis indicated, if approved, the street light tariff (excluding energy costs) for SCE owned street lights (LS-1) could increase by 17% in 2015 and cause even further increases of 70% in the 2018 GRC cycle. For Moreno Valley, the expenditures for the street lighting program could increase by \$209,000 in 2015 and by an additional \$629,000 in 2018. The preliminary analysis was based on: 1) limited information available from SCE to accurately assess the impact of the changes requested in the application; 2) costs for SCE's plan to increase the number of steel pole replacements throughout its service territory; and, 3) costs for SCE's proposal to

increase the number of luminaires replaced annually.

In March 2014, the City entered into a second Agreement with BBMS to provide legal services and economic rate analysis for Phase 1 of SCE's 2015 GRC. The cost of the second Agreement is shared with four other cities that have entered into a cost sharing agreement with the City of Moreno Valley. The Agreement with BBMS has been amended twice as commitments have been received from the cities. The table below identifies those cities participating in the cost sharing and their level of commitment to-date.

<b>City</b>	<b>Cost Sharing</b>
Huntington Beach	\$15,000
Moreno Valley	\$24,500
Murrieta	\$18,000
Rancho Cucamonga	\$18,000
Torrance	\$24,500
<b>Total</b>	<b>\$100,000</b>

While most of the authorized funds have been used to participate in Phase 1 of the 2015 GRC, unanticipated resources were needed to address SCE's settlement agreement for Assembly Bill 719 (2013) (street light tariff to convert SCE owned street lights to light emitting diode technology) and to address the Western Riverside Council of Governments' request for assistance in response to SCE's change in policy to end its street light sales program.

On June 20, 2014, SCE filed its Phase 2 (Rate Design) application for the 2015 GRC. CASL filed for party status for Phase 2 to reserve the opportunity to participate in the process, if necessary. In order to finalize settlement discussions for Phase 1, SCE has deferred certain settlement points related to Phase 1 to Phase 2 settlement discussions. Participating in Phase 2 requires an amendment to the Agreement with BBMS (Attachment 1), which will allow for the continued legal guidance and economic rate analysis services. The amended Scope of Services (Exhibit A to the amendment) includes finalization of Phase 1 activities currently under consideration by the CPUC and Phase 2 settlement discussions. This amended Scope of Services is estimated to cost an additional \$25,000. The proposed scope and cost estimate assumes negotiations are not protracted and the settlements are not contested.

## **ALTERNATIVES**

- 1. Approve the Third Amendment to the Agreement for Legal Services with BBMS** which will allow continued utility regulatory legal and economic rate analysis services for Phase 1 (Revenue Requirement) and Phase 2 (Rate Design) of SCE's 2015 GRC. *This alternative will allow Moreno Valley to closely monitor discussions related to the street light tariff.*
- 2. Do not approve the Third Amendment to the Agreement for Legal Services with BBMS.** *This alternative will limit Moreno Valley's participation in SCE's*

2015 GRC for street lights and could have negative financial implications for the City's street light programs.

**FISCAL IMPACT**

The estimated cost for the amended Scope of Services is \$25,000. The cities of Torrance, Rancho Cucamonga, and Huntington Beach have agreed to equally share in the additional cost with Moreno Valley for a cost of \$6,250 each for the Amendment with BBMS. Funds have been budgeted in the FY 2015/16 operating budgets for both the Zone C (Fund 5110-70-79-25703-620230) and LMD 2014-01 (Fund 5012-70-79-25703-620230) street lighting programs.

**NOTIFICATION**

N/A

**PREPARATION OF STAFF REPORT**

Prepared By:  
Candace E. Cassel  
Special Districts Division Manager

Department Head Approval:  
Ahmad R. Ansari, P.E.  
Public Works Director/City Engineer

**CITY COUNCIL GOALS**

**Advocacy.** Develop cooperative intergovernmental relationships and be a forceful advocate of City policies, objectives, and goals to appropriate external governments, agencies and corporations.

**Positive Environment.** Create a positive environment for the development of Moreno Valley's future.

**Community Image, Neighborhood Pride and Cleanliness.** Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

**ATTACHMENTS**

1. Third Amendment to Agreement
2. Second Amendment to Agreement
3. First Amendment to Agreement
4. Legal Services Agreement

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/29/15 7:40 AM
City Attorney Approval	<u>✓ Approved</u>	9/29/15 8:11 AM
City Manager Approval	<u>✓ Approved</u>	10/05/15 10:05 AM





**THIRD AMENDMENT TO AGREEMENT  
FOR LEGAL SERVICES  
PROJECT: SCE'S 2015 GENERAL RATE CASE**

This Third Amendment to the Agreement is made and entered into by and between the City of Moreno Valley, a municipal corporation, the Successor Agency to the Community Redevelopment Agency of the City of Moreno Valley and/or the Moreno Valley Community Services District, California, a municipal corporation, (hereafter referred to collectively as "City") and the law firm of Braun Blasing McLaughlin & Smith PC ("Attorney"), and becomes effective upon the date signed by the City Attorney.

**RECITALS**

WHEREAS, the City and Attorney entered into an Agreement entitled "AGREEMENT FOR LEGAL SERVICES," hereinafter referred to as "Agreement," dated March 19, 2014 and subsequently amended on July 15, 2014 and September 24, 2014; and

WHEREAS, Attorney is serving in the capacity as an intervening party to address street lighting matters in Southern California Edison Company's ("SCE") 2015 General Rate Case ("GRC") at the California Public Utilities Commission ("CPUC"); and

WHEREAS, the City entered into Letter Agreements with other interested cities within SCE's service territory (collectively referred to as the Coalition for Affordable Street Lights ("CASL")) to participate and share in the cost of services as provided by Attorney in the performance of regulatory and legal services to address SCE's GRC; and

WHEREAS, Letter Agreements between City and individual participating cities to date will collectively reimburse City up to \$100,000 of the cost of services provided by Attorney to address SCE's 2015 GRC; and

WHEREAS, it is necessary to amend the Scope of Services to complete services related to Phase 1 and to add additional services related to Phase 2 of SCE's 2015 GRC as more fully

described in Exhibit "A", attached hereto; and

WHEREAS, City is soliciting additional reimbursement funding from cities participating in CASL to share in the cost for the amendment to the Scope of Services.

#### SECTION 1. AMENDMENT TO ORIGINAL AGREEMENT

1.1 Attachment 1 of the Agreement is amended to include services related to completion of Phase 1 and Phase 2 of SCE's 2015 GRC, as more fully described in Exhibit "A".

1.2 Section 3 of the Agreement is amended to increase the "Not-to-Exceed" compensation amount from \$100,000 to \$125,000.

#### SECTION 2.

2.1 Except as otherwise specifically provided in this Third Amendment, the terms and conditions of the Agreement shall remain in full force and effect.

**SIGNATURE PAGES TO FOLLOW**

IN WITNESS HEREOF, the parties have executed this Third Amendment on the day and date signed by the City Attorney.

Dated: 9/15/2015

Braun Blaising McLaughlin & Smith PC

By: [Signature]  
Scott Blaising, Partner

Dated: \_\_\_\_\_

CITY OF MORENO VALLEY  
A Municipal Corporation

By: \_\_\_\_\_  
City Manager

INTERNAL USE ONLY

APPROVED AS TO FORM:

[Signature]  
City Attorney

09/08/15  
Date

RECOMMENDED FOR APPROVAL:

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Date

Attachment: Third Amendment to Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

*Coalition for Affordable Street Lights (CASL)*

**EXHIBIT A – TO THE THIRD AMENDMENT FOR LEGAL SERVICES**

AMENDED SCOPE OF SERVICES

**- Regulatory Participation – SCE General Rate Case (Test Year 2015) -**

September 2015

The following is a general description of *additional* activities associated with intervening as a party and addressing street light matters in Southern California Edison Company's (SCE) general rate case (GRC) at the California Public Utilities Commission (CPUC). SCE's GRC has two phases – Phase 1, which generally relates to SCE's requested authorization of revenue to conduct various capital and maintenance activities, and Phase 2, which generally relates to the allocation of responsibility for this revenue among customer classes and the establishment or modification of SCE's rates and rate design methodologies. Under the leadership of the city of Moreno Valley, the Coalition for Affordable Street Lights (CASL) has been participating in SCE's 2015 GRC. Additional work is necessary to finalize activities related to Phase 1 and Phase 2, as further described below.

Description of Additional Regulatory Activity (As Directed by CASL's Participants)

- Prepare for and participate in settlement discussions with SCE
  - If a settlement is not reached, prepare for and participate in evidentiary hearings (trial) at the CPUC
  - If a settlement is not reached, prepare and file post-hearing legal briefs on street light matters
- Monitor regulatory activity and file appropriate pleadings (comments on proposed decisions, etc.), and possibly prepare for and participate in *ex parte* meetings with CPUC commissioners and staff

Regulatory Team

CASL Participants' Staff. Staff from CASL's participating cities, with executive leadership from the cities of Moreno Valley and Torrance, will be directly involved in providing guidance on regulatory matters, including settlement discussions with SCE. Staff will also provide technical assistance.

Braun Blaising McLaughlin & Smith (BBMS). BBMS provides regulatory and legal services to public agencies on matters before the CPUC. Scott Blaising will serve as BBMS's lead partner on this matter. Scott's billable rate is \$370 per hour.

MRW & Associates (MRW). MRW provides technical and economic support on regulatory matters before the CPUC. Laura Norin will be CASL's principal rate witness and technical support person. Laura's billable rate is \$245 per hour.

Estimate of Additional Costs

- Based on past experience, it is estimated that an additional amount of \$25,000 is necessary to finalize GRC activities.

**SECOND AMENDMENT TO AGREEMENT  
FOR LEGAL SERVICES  
PROJECT: SCE'S 2015 GENERAL RATE CASE**

This Second Amendment to the Agreement is made and entered into by and between the City of Moreno Valley, a municipal corporation, the Successor Agency to the Community Redevelopment Agency of the City of Moreno Valley and/or the Moreno Valley Community Services District, California, a municipal corporation, (hereafter referred to collectively as "City") and the law firm of Braun Blaising McLaughlin & Smith PC ("Attorney"), and becomes effective upon the date signed by the City Attorney.

**RECITALS**

WHEREAS, the City and Attorney entered into an Agreement entitled "AGREEMENT FOR LEGAL SERVICES," hereinafter referred to as "Agreement," dated March 19, 2014; and

WHEREAS, Attorney is serving in the capacity as an intervening party to address street lighting matters in Southern California Edison Company's ("SCE") 2015 General Rate Case ("GRC") at the California Public Utilities Commission ("CPUC"); and

WHEREAS, the City entered into Letter Agreements with other interested cities within SCE's service territory (collectively referred to as the Coalition for Affordable Street Lights), ("CASL") to participate and share in the cost of services as provided by Attorney in the performance of regulatory and legal services to address SCE's GRC; and

WHEREAS, Letter Agreements between City and individual participating cities to date will collectively reimburse City up to \$60,000 of the cost of services provided by Attorney to address Phase 1 of SCE's 2015 GRC; and

WHEREAS, City is in the process of obtaining additional reimbursement funding from cities participating in CASL to share in the remaining balance of the original proposal costs to complete work described as Phase 1 of SCE's 2015 GRC; and,

WHEREAS, it is necessary to increase the not-to-exceed (NTE) amount of the Agreement from \$75,000 to \$100,000 to provide for continuation of legal services for the purpose of addressing Phase 1 of SCE's 2015 GRC.

#### SECTION 1. AMENDMENT TO ORIGINAL AGREEMENT

1.1 Section 3 of the Agreement is amended to increase the "Not-to-Exceed" compensation amount from \$75,000 to \$100,000 for continuation of legal services as performed by Attorney to address issues pertaining to Phase 1 of SCE's 2015 GRC.

#### SECTION 2.

2.1 Except as otherwise specifically provided in this Second Amendment, the terms and conditions of the Agreement shall remain in full force and effect.

**SIGNATURE PAGES TO FOLLOW**

IN WITNESS HEREOF, the parties have executed this Second Amendment on the day and date signed by the City Attorney.

Dated: September 29, 2014

Braun Blaising McLaughlin & Smith PC

By: [Signature]  
Scott Blaising, Partner

Dated: 10.2.14

CITY OF MORENO VALLEY  
A Municipal Corporation

By: [Signature]  
Michelle Dawson, City Manager

Dated: 10/2/14

CITY OF MORENO VALLEY  
A Municipal Corporation

By: [Signature]  
Richard Teichert, Chief Financial Officer

Dated: 9-24-14

CITY OF MORENO VALLEY  
A Municipal Corporation

By: [Signature]  
Suzanne Bryant, City Attorney

Attachment: Second Amendment to Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

**FIRST AMENDMENT TO AGREEMENT  
FOR LEGAL SERVICES  
PROJECT: SCE'S 2015 GENERAL RATE CASE**

This First Amendment to the Agreement is made and entered into by and between the City of Moreno Valley, a municipal corporation, the Successor Agency to the Community Redevelopment Agency of the City of Moreno Valley and/or the Moreno Valley Community Services District, California, a municipal corporation, (hereafter referred to collectively as "City") and the law firm of Braun Blaising McLaughlin & Smith PC ("Attorney"), and becomes effective upon the date signed by the City Attorney.

**RECITALS**

WHEREAS, the City and Attorney entered into an Agreement entitled "AGREEMENT FOR LEGAL SERVICES," hereinafter referred to as "Agreement," dated March 19, 2014; and

WHEREAS, Attorney is serving in the capacity as an intervening party to address street lighting matters in Southern California Edison Company's ("SCE") General Rate Case ("GRC") at the California Public Utilities Commission ("CPUC"); and

WHEREAS, the City entered into Letter Agreements with other interested cities within SCE's service territory (collectively referred to as the Coalition for Affordable Street Lights, ("CASL") to participate and share in the cost of services as provided by Attorney in the performance of regulatory and legal services to address SCE's GRC; and

WHEREAS, Letter Agreements between City and individual participating cities to date will collectively reimburse City up to \$60,000 in the cost of services provided by Attorney to address SCE's GRC; and

WHEREAS, this amount of reimbursement funding includes commitments of \$30,000 that was most recently received from two of the participating cities (City of Huntington Beach and City of Murrieta); and;



WHEREAS, the amount of reimbursement funding along with the City's contribution to date total \$75,000 (\$15,000 from each participating city and City) for legal services to address Phase 1 of SCE's GRC; and,

WHEREAS, it is necessary to increase the not-to-exceed (NTE) amount of the Agreement from \$45,000 to \$75,000 to provide for continuation of legal services for the purpose of addressing Phase 1 of SCE's GRC.

### SECTION 1. AMENDMENT TO ORIGINAL AGREEMENT

1.1 Section 3 of the Agreement is amended to increase the "Not-to-Exceed" compensation amount from \$45,000 to \$75,000 for continuation of legal services as performed by Attorney to address issues pertaining to Phase 1 of SCE's GRC.

### SECTION 2.

2.1 Except as otherwise specifically provided in this First Amendment, the terms and conditions of the Agreement shall remain in full force and effect.

**SIGNATURE PAGES TO FOLLOW**

IN WITNESS HEREOF, the parties have executed this First Amendment on the day and date signed by the City Attorney.

Dated: July 7, 2014

Braun Blaising McLaughlin & Smith PC

By: [Signature]  
Scott Blaising, Partner

Dated: JULY 15, 2014

CITY OF MORENO VALLEY  
A Municipal Corporation

By: [Signature]  
Suzanne Bryant, City Attorney

Attachment: First Amendment to Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

Dated: 7/16/14

CITY OF MORENO VALLEY  
A Municipal Corporation

By:   
Richard Teicheft, Chief Financial Officer

Dated: 7.16.14

CITY OF MORENO VALLEY  
A Municipal Corporation

By:   
City Manager

Attachment: First Amendment to Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

## AGREEMENT FOR LEGAL SERVICES

This Agreement by and between the City of Moreno Valley, a municipal corporation, the Community Redevelopment Agency of the City of Moreno and/or the Moreno Valley Community Services District (hereafter referred to collectively as "City") and the law firm of **Braun Blaising McLaughlin & Smith PC** ("Attorneys"), is made and becomes effective upon the date signed by the City Attorney.

### Section 1. Subject of the Agreement

This Agreement is for legal services by Attorneys on behalf of City if and as requested by the City Attorney. City may, at its sole discretion, employ other attorneys to perform the same type of legal services.

### Section 2. Standard of Performance

Attorneys will perform all legal work referred to them in a professional manner pursuant to the standards of their profession and the rules and statutes governing their conduct.

- A. Attorneys will furnish all office space, equipment, labor, materials, supplies, reference and background data and information necessary to accomplish the assigned tasks, except as otherwise provided in this Agreement.
- B. Attorneys will provide monthly progress reports describing in detail what work has been completed to date and setting forth all necessary information to monitor the progress and effectiveness of the work.
- C. Attorneys will keep City and/or its designated agent fully informed of all developments relevant to the status and value of all cases in which Attorneys represent City and will promptly communicate any settlement offers to City and/or its designated agent.
- D. Upon reasonable notice, Attorneys will attend regularly or specially scheduled City Council meetings to advise City of developments concerning matters in which Attorneys represent City.

### Section 3. Compensation

A. Attorneys shall initiate the scope of services identified as Phase 1 in Attachment 1 and shall be compensated as follows:

Attorney time:	\$370 (2014)	per hour for partner, Scott Blaising
Rate Consultants:	\$245	per hour for Laura Norin, MRW & Assoc
	\$170	per hour for Briana Kobar, MRW & Assoc

All office, travel, trial, deposition and meeting time shall be billed at these rates. Except for reimbursable expenses defined below, such compensation shall be the sole and total remuneration for the services rendered pursuant to this Agreement.

The total not-to-exceed (NTE) compensation amount for legal services associated with initiation of the Phase 1 scope of services as described in Attachment 1 shall not exceed \$45,000.

B. Reimbursement of expenses

The City will reimburse actual, reasonable and necessary out-of-pocket expenses incurred by Attorneys in performing the services under this Agreement as follows:

1. Long distance telephone charges
2. Photocopying at no more than \$0.15 per page
3. Telecopying charges at no more than \$1.00 per page
4. Computerized legal research at the actual amount charged to Attorneys
5. Statutory fees, witness fees, reporters' per diem, stenographic transcriptions, jury fees and the cost of serving process.

To obtain reimbursement, Attorneys will submit a summary of these expenses, along with supporting receipts, within 30 days of the expense being incurred.

C. Expert consultants and witnesses

Expert consultants and witnesses may be retained by Attorneys on terms acceptable to the City, approved in advance, in which case City shall reimburse Attorneys or pay consultants or experts directly.

D. Invoice

Attorneys agree to invoice the City monthly. All charges must be itemized by Attorneys, showing in detail the work performed during the billing period, in line item format, so that each task is separately explained and has specific time recorded. Attorneys shall not charge the City for more than one attorney's time in appearing at a meeting or in court or for performing any tasks unless the City has expressly authorized the use of more than one attorney for the appearance or task.

E. Tax information

Attorneys agree to attach a completed federal W-9 form to this Agreement to facilitate tax reporting for payments under this Agreement.

#### **Section 4. Conflict of Interest**

Attorneys represent that they presently have no material financial interest other than that which may be held by the general public and shall not acquire any interest, direct or indirect, in any contract or decision made on behalf of City which may be affected by the services to be performed by the Attorneys under this Agreement. Attorneys further agree that they shall employ no person having any such interest. If Attorneys or their employees acquire a direct or indirect personal interest, such interest shall be immediately disclosed to the City and the interested individual shall abstain from any contracts or decisions under this Agreement.

In addition to the proscriptions regarding conflicts of interest imposed on attorneys by the Business and Professions Code and by Rule 3-310 of the California Rules of Professional Conduct, Attorneys represent that no attorney shall represent clients before any board, commission, committee or agency of the City or represent a client adverse to the City for a period of one year from the date of termination of this Agreement.

#### **Section 5. Indemnification and Hold Harmless**

Attorneys agree to defend and indemnify City for any claims or lawsuits against City which are based on contentions that negligence or misconduct by Attorneys proximately caused damage to the claimant or plaintiff.

City will defend and indemnify Attorneys for any claims or lawsuits against Attorneys which are based on contentions that negligence or misconduct by the City, and/or City's employees or agents, proximately caused damage to the claimant or plaintiff. City will also defend and indemnify Attorneys for claims and lawsuits which were expressly directed by the City, and/or City's employees or agents, contrary to Attorneys' professional advice.

No official or employee of City shall be personally liable for any default or liability under this Agreement.

#### **Section 6. Nondiscrimination**

In the performance of this Agreement, Attorneys shall not discriminate against any employee or applicant for employment because of race, religion, color, age, sex, national origin, sexual orientation or medical condition. Attorneys shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment, without regard to their race, religion, color, age, sex, national origin, sexual orientation or medical condition. Such actions shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training.

#### **Section 7. Insurance**

- A. General Liability Insurance: During the entire term of this Agreement, Attorneys agree to procure and maintain general liability insurance at their sole expense to protect against loss from liability imposed by law for damages on account of bodily injury, including death therefrom, suffered or alleged to be suffered by any person or persons whomsoever, resulting directly or indirectly from any act or activities of the

Attorneys or any person acting for the Attorneys or under its control or direction, and also to protect against loss from liability imposed by law for damages to any property of any persons caused directly or indirectly by or from acts or activities of Attorneys or any person acting for Attorneys or under its control or direction. Such liability and property damage insurance shall also provide for and protect the City against incurring any legal cost in defending claims for alleged loss. Such liability and property damage insurance shall be maintained in full force and effect throughout the term of the Agreement and any extension thereof in the minimum limits provided below:

- B. Automobile Liability: Attorneys shall procure and maintain, at their sole expense, and throughout the term of this Agreement and any extension thereof, Public Liability and Property Damage Insurance coverage for owned and non-owned automotive equipment operated on City premises. Such coverage limits shall not be less than \$500,000 combined single limit.
- C. Professional Liability Insurance: During the entire term of this Agreement, Attorneys shall procure and maintain, at their sole expense, professional liability insurance to protect the City, the Moreno Valley Community Services District, and the Community Redevelopment Agency of the City of Moreno Valley against liability arising from errors or omissions committed in the performance of their work with coverage limits of not less than \$1,000,000 per occurrence.
- D. Workers' Compensation Insurance: Attorneys shall procure and maintain, at their sole expense, workers' compensation insurance in such amounts as will fully comply with the laws of the state of California.
- E. Primary Coverage and Insurance Company Ratings: The coverages provided pursuant to this Agreement shall be primary insurance and not contributory with any other insurance. Insurance companies providing insurance hereunder shall be rated (A-: VII – Admitted) or better in the Best's Insurance Rating Guide.
- F. Notice to City, Insurance Coverage Change: A certificate of insurance or an appropriate insurance binder evidencing each of the above referenced insurance coverage shall be submitted prior to the execution of this Agreement. Such evidence of insurance shall be sent to the attention of the requesting department and shall reference a project number, where appropriate.

Solely as respect to work done by or on behalf of the named insured for the City, it is agreed that the City of Moreno Valley, the Moreno Valley Community Services District, and Community Redevelopment Agency of the City of Moreno Valley are added as additional insureds under the general liability policy. A policy endorsement or an appropriate insurance binder evidencing the required general liability insurance must accompany the certificate of insurance. The endorsement shall be signed by a person authorized by that insurer to bind coverage on its behalf.

The terms of the insurance policies or policies issued to provide the above insurance coverage may not be amended or canceled by the carrier, without thirty (30) days prior written notice by certified or registered mail or amendment or cancellation to  
 Agreement for Legal Services

the City, except that cancellation for nonpayment of premium shall require ten (10) days prior written notice by certified or registered mail. In the event that the said insurance is canceled, Attorneys shall, prior to the cancellation date, submit to the City Clerk new evidence of insurance in the amounts established.

**Section 8. Independent Contractor**

Attorneys, and anyone employed by Attorneys, are not and shall not be deemed to be employees of the City. Attorneys are solely responsible for the payment of employment taxes, workers' compensation and any similar taxes for any employees of Attorneys.

**Section 9. Files**

All legal files of Attorneys pertaining to the City shall be and remain the property of the City. Attorneys will control the physical location of such legal files during the term of this Agreement and shall be entitled to retain copies of such files upon termination of this Agreement.

**Section 10. Notices**

Any notices under this Agreement by either party to the other may be given by either personal delivery in writing or by mail. Notices must be delivered or mailed to the following:

If to Attorneys:

Scott Blaising, Partner  
Braun Blaising McLaughlin & Smith PC  
915 L Street, Suite 1270  
Sacramento, CA 95814

If to City:

Suzanne Bryant  
City Attorney  
City of Moreno Valley  
P. O. Box 88005  
Moreno Valley, CA 92552-0805

**Section 11. Entire Agreement of the Parties**

This Agreement represents the parties' final and mutual understanding. It replaces and supersedes any prior agreements, whether oral or written.

**Section 12. Nonassignment**

Neither this Agreement nor any portion shall be assigned by Attorneys without the prior written consent of City.



**Section 13. City Agent**

Suzanne Bryant, City Attorney, for the purpose of this Agreement, is the agent for the City. Whenever approval or authorization is required, Attorneys understand that the City Attorney has the authority to provide that approval or authorization.

**Section 14. Term of Agreement**

The initial term of this Agreement shall be from the date signed by the City Attorney until completion of the matter for which Attorneys were contracted. It is understood by and between the parties that City may also hire Attorneys for other matters subsequent to the execution of this Agreement. Therefore, this Agreement shall remain in full force and effect unless and until this Agreement is terminated as provided for herein, or until a replacement agreement is executed by the parties. New matters subsequent to the execution of this Agreement shall be accomplished by a unilateral letter assignment by the City. Attorneys shall undertake the subsequent assignment of a new matter upon the same terms and conditions set forth herein.

**Section 15. Termination**

This Agreement may be terminated by City with or without cause upon thirty (30) days written notice to Attorneys. City shall be responsible for payment of all services rendered and costs incurred by Attorneys prior to the termination date. Attorneys may terminate this Agreement with or without cause upon thirty (30) days written notice to City and only if City will suffer no actual or perceived harm or prejudice in any pending matter by Attorneys' termination. Upon Attorneys' termination of this Agreement, Attorneys, upon the request of the City, will continue to represent City on any specified matters pending at that time of the termination until completion or reassignment to new Attorneys, whichever occurs first. The rates and terms of compensation shall continue to be the same as set forth above.

**Section 16 Resolution of Fee Disputes**

The City is entitled to require that any fee dispute be resolved by binding arbitration in Riverside pursuant to the arbitration rules of the Riverside County Bar Association for legal fee disputes. In the event that the City chooses not to utilize the Riverside County Bar Association's arbitration procedures, the City agrees that all disputes regarding the professional services rendered or fees charged by Attorneys shall be submitted to binding arbitration in Riverside to be conducted by the American Arbitration Association in accordance with its commercial arbitration rules.

**Section 17. Modification**

This Agreement may not be modified or replaced except by another signed written agreement.

**Section 18. Partial Invalidity**

Should any provision of this Agreement be found invalid or unenforceable, the decision shall affect only the provision interpreted, and all remaining provisions shall remain enforceable.

**Section 19. No Waiver**

The waiver of any breach of any provisions of this Agreement does not waive any other breach of that term or any other term in this Agreement.

**Section 20. Attorneys' Fees**

If a party brings any action, including an action for declaratory relief to enforce or interpret the provisions of this Agreement, the prevailing party is entitled to reasonable attorneys' fees in addition to any other relief to which that party may be entitled. Such fees may be set by the court in the same action or in a separate action brought for that purpose.

**Section 21. Governing Law**

This Agreement shall be construed – and its performance enforced – under California law.

**Section 22. Survival**

All obligations arising prior to the termination of this Agreement and all provisions of this Agreement allocating responsibility or liability between the City and Attorneys survive the termination of this Agreement.

IN WITNESS THEREOF, the parties have executed this Agreement on the day and date signed by the City Attorney.

Dated: 2/14/2014

Firm: Braun Blaising McLaughlin & Smith PC

By: [Signature]  
Scott Blaising, Partner

Dated: 3-10-14

CITY OF MORENO VALLEY,  
A Municipal Corporation

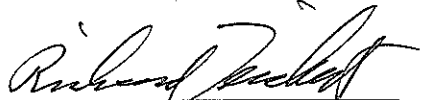
By: [Signature]  
Suzanne Bryant, City Attorney

W:\SHARED\2006 RFP Documents\Form Agreement for Legal Services.doc  
Last Modified: 03/15/06/RLH

Attachment: Legal Services Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

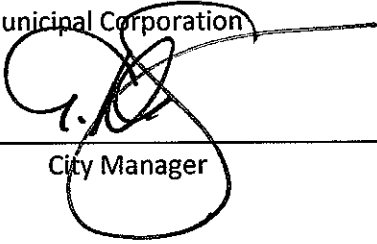
Dated: 3/19/14

CITY OF MORENO VALLEY,  
A Municipal Corporation

By:   
Richard Teichert, Chief Financial Officer

Dated: 3.19.14

CITY OF MORENO VALLEY,  
A Municipal Corporation

By:   
City Manager

Attachment: Legal Services Agreement (1597 : THIRD AMENDMENT TO AGREEMENT FOR LEGAL SERVICES)

Coalition for Affordable Street Lights (CASL)

## SCOPE OF SERVICES

-Regulatory Participation – SCE General Rate Case (Test Year 2015) -

January 2014

The following is a general description of activities involved in and estimated costs associated with intervening as a party and addressing street light matters in Southern California Edison Company's (SCE) general rate case (GRC) at the California Public Utilities Commission (CPUC). SCE's GRC has two phases – Phase 1, which generally relates to SCE's requested authorization of revenue to conduct various capital and maintenance activities, and Phase 2, which generally relates to the allocation of responsibility for this revenue among customer classes and the establishment or modification of SCE's rates and rate design methodologies.

Description of Key Regulatory Activity (As Directed by CASL's Participants)

- Review SCE's street light rate models and street light revenue and rate proposals
- Develop, propound and review data requests, seeking to obtain additional facts from SCE related to street light matters. In addition, respond to data requests submitted to CASL by other parties.
- Develop and submit opening and rebuttal testimony; review and analyze other parties' testimony
- Prepare for and participate in settlement discussions with SCE
- If necessary, prepare for and participate in evidentiary hearings (trial) at the CPUC
- Prepare and file post-hearing legal briefs on street light matters
- Prepare for and participate in *ex parte* meetings with CPUC commissioners and staff

Regulatory Team

CASL Participants' Staff. Staff from CASL's participating cities will be directly involved in providing guidance on regulatory matters, including settlement discussions with SCE. Staff will also provide technical assistance.

Braun Blasing McLaughlin & Smith (BBMS). BBMS provides regulatory and legal services to public agencies on matters before the CPUC. Scott Blasing will serve as BBMS's lead partner on this matter. Scott's billable rate is \$370 per hour.

MRW & Associates (MRW). MRW provides technical and economic support on regulatory matters before the CPUC. Laura Norin will be CASL's principal rate witness and technical support person. Laura will be assisted by Briana Kobor. Laura's billable rate is \$245 per hour; Briana's billable rate is \$170.

Estimate of Expected Costs

- Providing an estimate of costs associated with participation in a regulatory case is difficult because there are various factors that can influence costs, and there are various tracks that the case can take, including settlement. It is anticipated that, prior to initiating key tracks (such as discovery, submission of testimony, evidentiary hearings and settlement discussions), CASL's participants will provide guidance and cost limits on litigation activity.
- Based on past experience, it is estimated that full participation in the GRC will cost approximately \$200,000 (with costs split equally between Phase 1 and Phase 2). CASL participants may decide upon and establish lesser cost limits, which will guide the degree to which CASL participates in the GRC.



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL NUMBER ASSOCIATED WITH TENTATIVE TRACT 31592 (P13-078 - EAST OF PERRIS BLVD., NORTH OF MANZANITA AVE. ) INTO COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES) — AS AMENDMENT NO. 8

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### **RECOMMENDED ACTION**

#### **Recommendation:**

1. That the City Council acting as the legislative body of Community Facilities District No. 2014-01 (Maintenance Services) approve and adopt Resolution No. 2015-65, a Resolution of the City Council of the City of Moreno Valley, California, Ordering the Annexation of Territory to City of Moreno Valley Community Facilities District No. 2014-01 (Maintenance Services) and Approving the Amended Map for said District.

### **SUMMARY**

This action certifies the annexation of 3 parcels to Community Facilities District No. 2014-01 (Maintenance Services) ("District"). The annexation was requested by the property owner/developer as a required step in the development process. This action only affects 1 property owner, and not the general citizens or taxpayers of the City.

The City requires developers to mitigate the cost of certain impacts, such as the ongoing cost of street lighting, which will be created by their proposed development. The City established District to provide a financing tool for developers to mitigate the financial impact for those services.

On January 27, 2015, the City Council designated the future annexation area for the District to provide a simplified process for the development community to satisfy

conditions of approval on development. Upon receipt of a unanimous property owner petition requesting to annex the parcels into the District, an annexation can be ordered without additional public hearing. Once annexed, parcels will be subject to an annual special tax to fund the service they are receiving.

CV Communities, the property owner of Tentative Tract 31592 (139 Residential Lots to be located east of Perris Blvd., north of Manzanita Ave) has elected to utilize the financing tool and has submitted a landowner petition approving the annexation into District. The special tax rate area, service provided, and maximum special tax for the project can be found in the table on page 4.

## **DISCUSSION**

### *District Formation*

The District was formed by adoption of Resolution No. 2014-25 to provide an alternative financing tool for the development community. The District provides funding for ongoing public landscape maintenance and street lighting services. The Rate and Method of Apportionment (“RMA”) for the District details the different special tax rate areas and the formula to calculate the special tax rates for the services provided. After approval by the property owners, the City is authorized to levy a special tax onto the annual property tax bills for the services they are receiving. Residential Tract 31618 (located on the southwest corner of Moreno Beach Drive and Bay Avenue) formed the original boundaries of the District. To date, five annexations to the District have been completed.

### *Annexation to the District*

By its Ordinance No. 889, the City Council designated the entire territory of the City a future annexation area for the District. As a result, of this designation, development projects may be annexed to the District without additional public hearing as long as unanimous consent is provided by the owners of the territory to be annexed.

### *Amendment No. 8*

CV Communities (“Property Owner”) proposes to develop Tentative Tract 31592, a 139 lot single-family residential housing tract (east of Perris Blvd., north of Manzanita Ave). The development is required to provide an ongoing funding source for the operation of street lights planned to be installed as part of the development. The following options are available to assist the Property Owner in satisfying this condition of approval:

- 1) Annex into District and approve the special tax rate(s) applicable for that development to be levied annually on the property tax bills; or
- 2) Fund an endowment; or

- 3) Establish a homeowners association to provide the ongoing maintenance and operation of the improvements.

The Property Owner has elected to annex into the District and authorize a special tax for the residential street light tax rate area to be levied on the annual property tax bills of the parcels associated with its development. The special tax rate approved by the Property Owner can be found in the table in the Fiscal Impact section of this report. A process chart showing the procedure the Property Owner followed to annex into the District is included as Attachment 3. Successful completion of the annexation satisfies the project's condition of approval to provide an ongoing funding source for the operation of the street lights installed by the development.

The Mello-Roos Community Facilities Act of 1982 states that if there are fewer than 12 registered voters living within the proposed annexation area, an election of the landowners may be held. On August 13, 2015, the Office of the Riverside County Registrar of Voters confirmed there were no registered voters residing at Assessor's Parcel Numbers 474-040-032, 474-490-024, and 474-490-025 (the "Parcels"), allowing for a special election of the landowners to be conducted.

Annexation materials were provided to the Property Owner on August 10, 2015. The annexation materials included a cover letter, Landowner Petition, RMA, and a ballot envelope to return the petition.

The Property Owner submitted a completed landowner petition approving annexation into the District to the City Clerk. On September 10, 2015, the City Clerk reviewed the landowner petition and confirmed (Attachment 4) that the Property Owner unanimously approved the annexation of the APNs associated with their development into the District. Adoption of the attached Resolution (Attachment 1) adds the subject property to the Tax Rate Area for residential street lights (SL-01) within CFD No 2014-01 and directs Amendment No. 8 to the boundary map and an amended notice of special tax lien be recorded on title for the parcels associated with Tentative Tract 31592.

## **ALTERNATIVES**

1. **Adopt the proposed resolution to annex the property to the District.** *This action annexes the APNs associated with the development mentioned in this report into CFD No. 2014-01 and authorizes the levy of the special taxes on the annual property tax bill for only those 3 parcels the Property Owner approved for annexation.*
2. **Do not adopt the proposed resolution to annex the property to the District.** *If the attached resolution is not adopted, the City cannot annex the APNs associated with the development mentioned in this report into CFD No. 2014-01 and will not have authority to levy the annual special taxes onto the property tax bill per the Property Owner's request. The Property Owner would need to use a different funding mechanism to satisfy their conditions of approval, which may delay their development.*

3. **Do not adopt the proposed resolution to annex the property to the District but rather continue the item to a future Council meeting.** *This alternative may delay the development mentioned in this report.*

### **FISCAL IMPACT**

The fiscal year 2015/16 maximum special tax rate for the parcels annexing into the District's SL-01 Tax Rate Area is shown in the following table.

Amendment No. & Development	Assessor's Parcel Number	Services	Tax Rate Area	FY 2015/16 Maximum Special Tax
Amendment No. 8 CV Communities Tentative Tract 31592	474-040-032 474-490-024 474-490-025	Street Lighting Services	SL-01	\$207.25/parcel

The maximum special tax rates are subject to an annual inflation adjustment based on the change in the Consumer Price Index ("CPI") or five percent (5%), whichever is greater. Prior to the annual levy of the special tax, the City Council must authorize any proposed CPI increase each year. The annual special tax is collected on the Riverside County property tax bills.

Revenue received from the special taxes is restricted and can only be used to provide the services identified for and within each tax rate area. If the revenue projected at the maximum special tax rate exceeds what is necessary to fund the services within each Tax Rate Area, then a lower amount will be applied to the property tax bills for all properties in the District subject to that Tax Rate Area. The special tax for the District can only be collected on properties where property owners have previously approved the special tax to be levied on the annual property tax bill.

### **NOTIFICATION**

On August 10, 2015, the Property Owner was provided a landowner petition for the annexation of APNs associated with their project to the District.

### **PREPARATION OF STAFF REPORT**

Prepared by:  
Jennifer Terry,  
Senior Management Analyst

Department Head Approval:  
Ahmad Ansari, P.E.,  
Public Works Director/City Engineer

Concurred by:  
Candace E. Cassel,  
Special Districts Division Manager

### **CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.



**Community Image, Neighborhood Pride and Cleanliness.** Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

**ATTACHMENTS**

- 1. Resolution Ordering Annexation
- 2. CFD 2014-01 Amend 8 Map
- 3. Flowchart
- 4. Confirmation of Petition

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/23/15 5:09 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 11:39 AM
City Manager Approval	<u>✓ Approved</u>	10/07/15 1:43 PM

RESOLUTION NO. 2015-65

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, ORDERING THE ANNEXATION OF TERRITORY TO CITY OF MORENO VALLEY COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES) AND APPROVING THE AMENDED MAP FOR SAID DISTRICT

WHEREAS, by its Resolution No. 2014-25, the City Council established the City of Moreno Valley Community Facilities District No. 2014-01 (Maintenance Services) (the "CFD") pursuant to the Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311 *et seq.*) (the "Act"); and

WHEREAS, by its Ordinance No. 874, the City Council levied an annual special tax against all non-exempt parcels of real property within the CFD (the "Special Tax") to fund street lighting services and landscape maintenance services; and

WHEREAS, in order to permit landowners to efficiently annex developing parcels to the CFD, the City Council, by its Ordinance No. 889 designated the entire territory of the City as a future annexation area for the CFD and approved the second amended and restated rate and method of apportionment for the Special Tax; and

WHEREAS, the landowner of the parcels listed on Exhibit A to this Resolution, which is attached hereto and incorporated herein by reference, has submitted to the City a petition requesting and approving annexation of the listed parcels (the "Annexation Parcels") to the CFD; and

WHEREAS, the Annexation Parcels comprise the territory shown on the following boundary map (the "Boundary Map") "Amendment No. 8 to Boundaries of City of Moreno Valley Community Facilities District No. 2014-01 (Maintenance Services), City of Moreno Valley, County of Riverside, State of California", which is on file in the office of the City Clerk, available for public inspection and incorporated herein by reference; and

WHEREAS, the City Council desires to annex the Annexation Parcels to the CFD.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1. Recitals. The above recitals are all true and correct.

2. Annexation Approved. The Annexation Parcels are hereby added to and part of the CFD with full legal effect. Each of the Annexation Parcels is subject to the Special Tax associated with the Tax Rate Area(s) indicated on Exhibit A to this

1  
Resolution No. 2015-65  
Date Adopted: October 13, 2015

Attachment: Resolution Ordering Annexation [Revision 3] (1585 : PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL

Resolution.

3. Description of Services. The following is a general description of all services (the “Services”) provided in the CFD:

A. Landscape Maintenance Services: Maintaining, servicing, and operating landscape improvements and associated appurtenances located within the public right-of-way and within dedicated landscape easements for the CFD. These improvements may include but are not limited to parkways, medians, open space landscaping, fencing, monuments, ornamental lighting, drainage, turf, ground cover, shrubs, vines and trees, irrigation systems, and appurtenant facilities and structures. Fundable costs may include, but are not limited to: (i) contracting costs for landscape maintenance services, including litter removal, (ii) salaries and benefits of City staff, (iii) expenses related to equipment, apparatus, and supplies related to these services, (iv) City administrative and overhead costs associated with providing such services within the CFD, and (v) lifecycle costs associated with the repair and replacement of facilities.

B. Street Lighting Services: Maintaining, servicing, and operating street lights and appurtenant improvements. Fundable costs may include, but are not limited to: (i) contracting costs for street light maintenance, (ii) salaries and benefits of City staff, if the City directly provides street light maintenance services, (iii) utility expenses and the expense related to equipment, apparatus, and supplies related to these services and authorized by the Act, (iv) City administrative and overhead costs associated with providing such services for the CFD, and (v) lifecycle costs associated with the repair and replacement of facilities.

Each of the Annexation Parcels will only be provided with the services indicated on Exhibit A.

4. Amended Boundary Map. The Boundary Map is hereby approved. This map amends, and does not supersede, the existing maps of the CFD. The City Council directs that said map be filed with the Riverside County Recorder pursuant to Section 3113 of the Streets and Highways Code.

5. Notice of Special Tax Lien. The City Council directs that a revised notice of special tax lien be recorded pursuant to Section 3117.5 of the Streets and Highways Code with respect to the Annexation Parcels associated with the Boundary Map.

6. This Resolution shall be effective immediately upon adoption.

7. The City Clerk shall certify to the adoption of this Resolution, and shall maintain on file as a public record this Resolution.

8. The City Council declares that, should any provision, section, paragraph, sentence or word of this ordinance be rendered or declared invalid by any final court

2  
Resolution No. 2015-65  
Date Adopted: October 13, 2015

action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this ordinance as hereby adopted shall remain in full force and effect.

APPROVED AND ADOPTED this 13<sup>th</sup> day of October, 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

3  
Resolution No. 2015-65  
Date Adopted: October 13, 2015

Attachment: Resolution Ordering Annexation [Revision 3] (1585 : PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL

**RESOLUTION JURAT**

STATE OF CALIFORNIA            )  
COUNTY OF RIVERSIDE        ) ss.  
CITY OF MORENO VALLEY        )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 2015-65 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13<sup>th</sup> day of October, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)

4  
Resolution No. 2015-65  
Date Adopted: October 13, 2015

# EXHIBIT A

## List of Annexation Parcels

Boundary Map Amendment No.	Assessor's Parcel Numbers	Services	Tax Rate Area & Maintenance Category
Amendment No. 8	474-040-032 474-490-024 474-490-025	Street Lighting Services	SL-01

Based on current development plans, it is anticipated that the Annexation Group will be in the Maintenance Category listed above; however all taxes will be calculated as set forth in the Rate and Method of Apportionment.

The parcels associated with the boundary map constitute a separate Annexation Group for purpose of calculating the applicable Maintenance Category (where applicable) for each Tax Rate Area. The anticipated Maintenance Category (where applicable) is shown in parenthesis following the Tax Rate Area. All capitalized terms in this paragraph have the meanings set forth in the Rate and Method of Apportionment.

Attachment: Resolution Ordering Annexation [Revision 3] (1585 : PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL

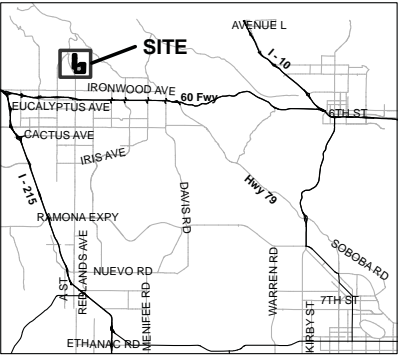
5  
Resolution No. 2015-65  
Date Adopted: October 13, 2015

**AMENDMENT NO. 8 TO BOUNDARIES  
OF CITY OF MORENO VALLEY COMMUNITY  
FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES)**

CITY OF MORENO VALLEY  
COUNTY OF RIVERSIDE  
STATE OF CALIFORNIA

(This map amends, by adding the additional territory shown hereon, the boundary map for City of Moreno Valley Community Facilities District No. 2014-01 (Maintenance Services), City of Moreno Valley, Riverside County, State of California, prior recorded at Book 76 of Maps of Assessment and Community Facilities Districts at page 69, in the office of the County Recorder for the County of Riverside, State of California.)

VICINITY MAP



FILED IN THE OFFICE OF THE CITY CLERK THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_.

CITY CLERK  
CITY OF MORENO VALLEY

I HEREBY CERTIFY THAT THE WITHIN MAP SHOWING AMENDED BOUNDARIES OF CITY OF MORENO VALLEY COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES), CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, WAS APPROVED BY THE CITY COUNCIL OF THE CITY OF MORENO VALLEY AT A REGULAR MEETING THEREOF, HELD ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_. BY ITS RESOLUTION NO. \_\_\_\_\_

CITY CLERK  
CITY OF MORENO VALLEY

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_, AT THE HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_\_ M. IN BOOK \_\_\_\_\_ PAGE(S) \_\_\_\_\_ OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICT AND INSTRUMENT NO. \_\_\_\_\_ IN THE OFFICE OF THE COUNTY RECORDER IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

COUNTY RECORDER  
COUNTY OF RIVERSIDE  
STATE OF CALIFORNIA

REFERENCE IS MADE TO THAT BOUNDARY MAP OF THE COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES) OF THE CITY OF MORENO VALLEY RECORDED WITH THE RIVERSIDE COUNTY RECORDER'S OFFICE ON FEBRUARY 20, 2014 IN BOOK 76 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, PAGE 69 AS INSTRUMENT NO. 2014-0066114.

REFERENCE IS FURTHER MADE TO ANNEXATION MAP NO. 2 OF COMMUNITY FACILITIES DISTRICT NO. 2014-01 (MAINTENANCE SERVICES) OF CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, CALIFORNIA (TERRITORY PROPOSED FOR ANNEXATION IN THE FUTURE, WITH THE CONDITION THAT PARCELS WITHIN THAT TERRITORY MAY BE ANNEXED ONLY WITH THE UNANIMOUS APPROVAL OF THE OWNER OR OWNERS OF EACH PARCEL OR PARCELS AT THE TIME THAT PARCEL OR THOSE PARCELS ARE ANNEXED) RECORDED WITH THE RIVERSIDE COUNTY RECORDER'S OFFICE ON DECEMBER 17, 2014 IN BOOK 77, PAGE 78 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS AS INSTRUMENT NO. 2014-0481134, WHICH DESIGNATED THE TERRITORY SHOWN HEREIN AS TERRITORY FOR FUTURE ANNEXATION TO THE COMMUNITY FACILITIES DISTRICT REFERENCED THEREON.

THE LINES AND DIMENSIONS OF EACH LOT OR PARCEL SHOWN ON THIS DIAGRAM SHALL BE THOSE LINES AND DIMENSIONS AS SHOWN ON THE RIVERSIDE COUNTY ASSESSOR'S MAPS FOR THOSE PARCELS LISTED.

THE RIVERSIDE COUNTY ASSESSOR'S MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH LOTS OR PARCELS.

MAP REFERENCE NUMBER	ASSESSORS PARCEL NUMBER
1	474-490-024
2	474-490-025
3	474-040-032

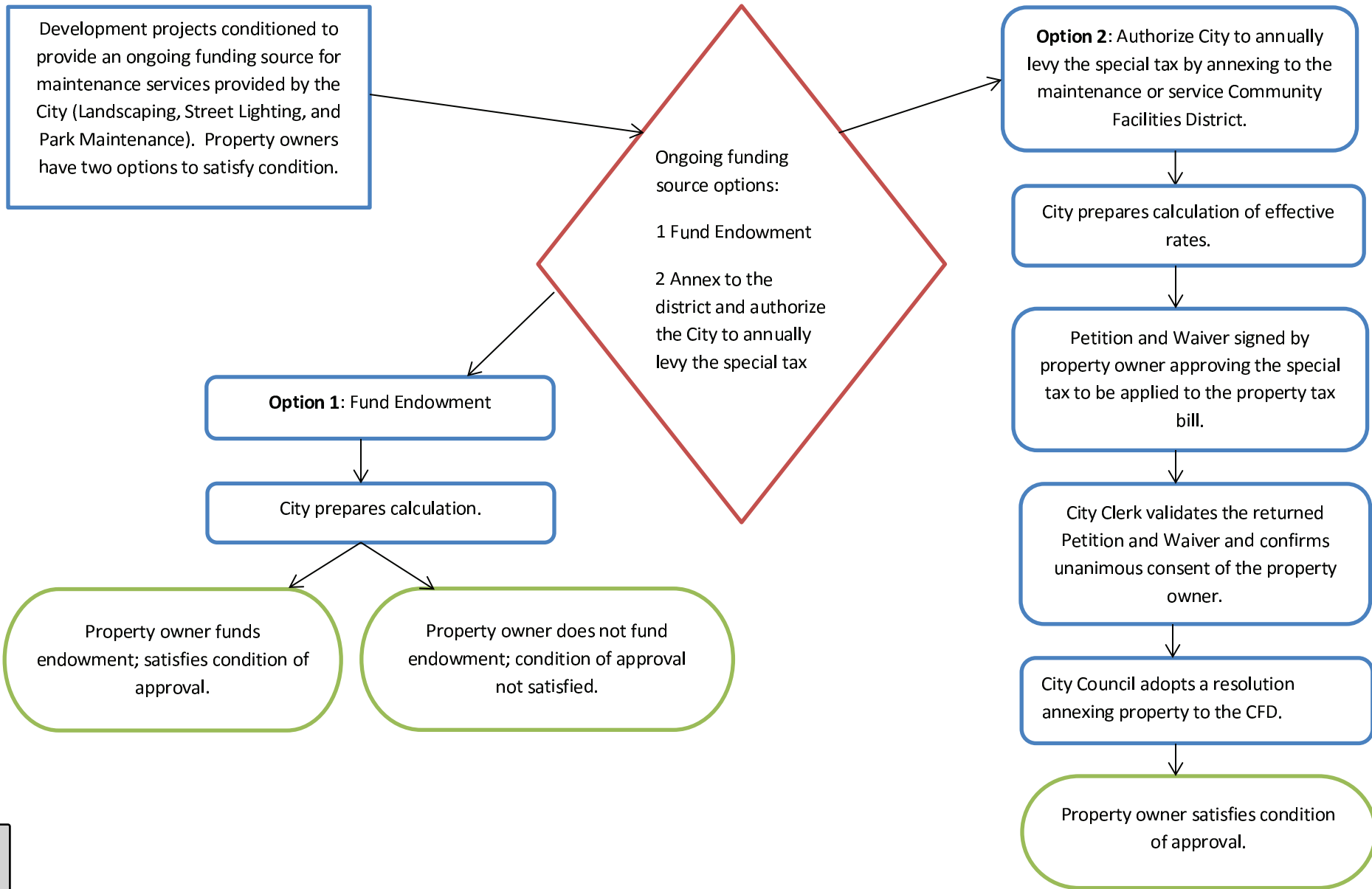
**Legend**

- Map Reference Number
- Additional area to CFD 2014-01
- Not A Part



A.9.b

## Process Flow for Property Owners/Developers to Satisfy Funding Requirement for Existing Maintenance or Service Tax Rates Areas in Community Facilities District No. 2014-01






**CERTIFICATE OF ELECTION OFFICIAL  
AND CONFIRMATION OF LANDOWNER PETITION**

STATE OF CALIFORNIA            )  
COUNTY OF RIVERSIDE        ) ss.  
CITY OF MORENO VALLEY        )

The undersigned, Election Official of the City of Moreno Valley, County of Riverside, State of California, Does Hereby Certify that on September 10, 2015, I did verify the completeness of the Landowner Petition for the annexation of property into

CITY OF MORENO VALLEY COMMUNITY FACILITIES DISTRICT NO. 2014-01  
(MAINTENANCE SERVICES) – AMENDMENT NO. 8

WITNESS my hand this 10<sup>th</sup> day of September, 2015.

  
\_\_\_\_\_  
ELECTION OFFICIAL  
CITY OF MORENO VALLEY  
STATE OF CALIFORNIA

Attachment: Confirmation of Petition (1585 : PURSUANT TO LANDOWNER PETITION, ANNEX ASSESSOR'S PARCEL NUMBER ASSOCIATED



## Report to City Council

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**TO:** Mayor and City Council Acting in its Capacity as President and Members of the Board of Directors of the Moreno Valley Community Services District (CSD)

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONES 01 AND E-7

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### **RECOMMENDED ACTION**

#### **Recommendations:**

1. Authorize Participation in Metropolitan Water District's (MWD) Turf Removal Program for a Rebate of up to \$372,252 (\$88,192 for the benefit of Community Services District (CSD) Zone E-7 (E-7) and up to \$284,060.00 for the benefit of CSD Landscape Maintenance District (LMD) 2014-02 Zone 01(01) landscape maintenance districts.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement (2015/16 Agreement) for Project No. SD-2015-01 for Landscape Maintenance Services (First Amendment) with Landcare, 1616 Marlborough Avenue, Building S, Riverside, CA 92507 to replace turf with drought tolerant landscape and irrigation materials (Additional Work) in those areas listed on Exhibits A and B of the First Amendment.
3. Approve budget adjustments to the CSD Zones E-7 and 01 budgets as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Landcare, which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, and the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.

5. Authorize the issuance of a change order for fiscal year 2015/16 to Landcare from the current not-to-exceed amount of \$201,768.56 to a new not-to-exceed amount of \$740,173.56 for an increase of \$538,405.00 (\$498,243.00 \$142,600.00 for Zone E-7 and \$395,805.00 for Zone 01 for Additional Work services).

## **SUMMARY**

This report recommends approval of the City's participation in Metropolitan Water District's (MWD) Turf Removal Rebate program, an amendment to the Independent Contractor Agreement (First Amendment) with Landcare (Contractor) to complete the project, and corresponding budget adjustments.

In response to the drought and the Governor's Executive Order B-29-15, an application was submitted to participate in MWD's Turf Removal Rebate program for Community Services District (CSD) Zone E-7 and Zone 01 of Landscape Maintenance District (LMD) 2014-02. MWD will rebate the City \$2 for every square foot of turf removed and replaced with drought tolerant landscaping. Where necessary, the irrigation system will be modified to drip irrigation to optimize water usage. In addition to turf, one of the medians in Zone 01 includes a planter which is not eligible for the rebate. To ensure consistency, the project includes replacement of the plant material with drought tolerant landscaping.

When complete, 44,096 square feet of turf in the public landscaping for CSD Zone E-7 and 142,030 square feet of turf in the public landscaping for Zone 01 of LMD 2014-02 will be removed and replaced with California Friendly Landscape. Attachment 2 is a map of the areas proposed for the project. The rebate is expected to cover \$88,192 (62%) of the cost for CSD Zone E-7 and \$284,060 (72%) of the cost for Zone 01 of LMD 2014-02 for the improvements. The balance of the project will be funded with available fund balances from the respective funds.

Completion of the project will demonstrate the City's commitment to conserve water, reduce ongoing water expenses for the landscape maintenance districts, and modernize the public landscaping within these areas.

## **DISCUSSION**

### *Drought Restrictions*

On April 1, 2015, the Governor issued Executive Order B-29-15 in response to the drought. The Executive Order "prohibits irrigation with potable water of ornamental turf on public street medians." On April 2, 2015, irrigation to the turf of these medians was turned off.

In response to the drought, and in compliance with water restrictions imposed by the State, Eastern Municipal Water District (EMWD) has been implementing water

restrictions. As of May 8, 2015, EMWD was in Stage 4a of its Water Shortage Contingency Plan. Stage 4a reduces outdoor water budgets by 10% of the monthly allocated billing unit. On September 30, 2015, EMWD moved to Stage 4b. Stage 4b reduces outdoor water budgets by an additional 20%, for a 30% total reduction. However, EMWD is requesting that agencies reduce outdoor use of potable water by 50%.

#### *Rebate Submission*

Because turf is a major consumer of water, an application for the removal of turf in parkways and medians within CSD Zone E-7 and Zone 01 of LMD 2014-02 landscape maintenance districts was submitted to MWD for its Turf Removal Rebate program. At the time, the program offered a \$2 rebate for every square foot of turf replaced with drought tolerant landscaping. The application was submitted in April, 2015 to replace 44,096 square feet of turf in CSD Zone E-7 and 142,030 square feet of turf in Zone 01 of LMD 2014-02. On August 8, 2015, the City received notification of its preauthorization of a rebate for up to \$88,192 for CSD Zone E-7 and \$284,060 for Zone 01 of LMD 2014-02, pending completion of the program requirements.

The turf must be replaced with drought tolerant landscaping and the project must be completed within 120 days of notification of preauthorization (December 8, 2015). MWD may allow an extension to February 8, 2015, if necessary, depending upon the circumstances.

#### *First Amendment to the Agreement*

After a competitive proposal process in May of 2014, the CSD and Contractor entered into an Independent Contractor Agreement (Agreement) to provide landscape maintenance services to the public landscaped parkways and medians of CSD Zone E-7 and Zone 01 of LMD 2014-02. Services include routine landscape maintenance (Base Work) and additional services as needed to include replants, mulch, irrigation and other landscape related services (Additional Work). The terms and provisions of the Agreement, including the costs for the Base Work and predetermined unit costs for Additional Work, were extended through fiscal year (FY) 2015/16 (2015/16 Agreement).

A proposal was solicited from the Contractor to replace 44,096 square feet of turf in CSD Zone E-7 and 142,030 square feet of turf and plant material in Zone 01 of LMD 2014-02 with drought tolerant landscaping and irrigation within the public landscape of CSD Zone E-7 and Zone 01 of LMD 2014-02. Work includes, but is not limited to removing turf, modifying the irrigation system and installing new landscape material. The landscaping will be drought tolerant and consistent with the California Friendly Landscape guidelines as well as the State's proposed Model Water Efficient Landscape Ordinance. The irrigation will be modified to drip irrigation to optimize water use for the new drought tolerant landscaping and to reduce the ongoing amount of water necessary to support the plant material. The cost proposed for these services is \$538,405 (\$142,600 for CSD Zone E-7 and \$395,805 for Zone 01 of LMD 2014-02) and is consistent with the predetermined unit costs in the Agreement.

Attached is the proposed First Amendment which amends the 2015/16 Agreement to include Additional Work services to remove the turf and plant material and replace it with drought tolerant landscaping. Removal of the turf and modification of the irrigation system will begin after approval of the Amendment. Installation of the drought tolerant landscaping will be based primarily on weather conditions. The ideal planting time is during cooler weather when the plants are best suited for survival and temperatures are cooler to limit water evaporation. However, the project must be completed by December 8, 2015, unless MWD grants an extension.

## **ALTERNATIVES**

1. Approve and authorize the recommended actions as presented in this staff report. *By selecting this alternative, the turf and plant material in the public landscape areas of CSD Zone E-7 and Zone 01 of LMD 2014-02 will be replaced with drought tolerant landscaping as part of MWD's Turf Removal Rebate program.*
2. Do not approve or authorize the recommended actions as presented in this staff report. *By selecting this alternative, the turf in the public landscape areas of CSD Zone E-7 and Zone 01 of LMD 2014-02 will not be replaced with drought tolerant landscaping and the City will not be able to meet program requirements for MWD's Turf Removal Rebate program.*

## **FISCAL IMPACT**

The CSD Zone E-7 and Zone 01 of LMD 2014-02 landscape maintenance districts are funded through parcel charges collected on the property tax bills. Parcel charges are levied on those properties that receive benefit from the public landscaping. These programs fund the landscape maintenance of parkways and medians within their respective areas.

Participation in MWD's Turf Removal Rebate program will have no impact on the General Fund. MWD will provide reimbursement up to \$538,405.00 for eligible costs associated with the project. Additional Work services included within the First Amendment are eligible for reimbursement from MWD's Turf Removal Rebate program. The rebate has been approved for reimbursement contingent upon completion of the program's requirements.

The proposed First Amendment includes a \$538,405 increase in compensation for Additional Work services to complete the project.

<b>Summary</b>		
<b>First Amendment to 2015/16 Agreement</b>		
<b>2015/16 Agreement Amount</b>		\$201,768.56
First Amendment Additional Work (Project)	\$538,405.00	
First Amendment		\$538,405.00
<b>Total 2015 /16 Agreement</b>		<b>\$740,173.56</b>

<i>Breakdown of Base Work and Additional Work</i>		
2015/16 Base Work	\$145,318.56	
Total Base Work		\$145,318.56
2015/16 Additional Work	\$56,450.00	
First Amendment Additional Work	<u>\$538,405.00</u>	
Total 2015/16 Additional Work		\$594,855.00
<b>Total 2015/16 Agreement</b>		<b><u>\$740,173.56</u></b>

The rebate will not cover the full cost of the project. Therefore, available fund balances are proposed to fund the difference between the First Amendment cost for the Additional Work services and the rebate as described in the table below. It is anticipated that a total of \$166,153.00 is necessary to complete the project.

District	First Amendment Contract Amount	Square Footage of Turf	Rebate (up to \$2/sq. ft.)	Use of Fund Balance
CSD Zone E-7	\$142,600.00	44,096	\$88,192.00	\$54,408.00
Zone 01 of LMD 2014-02	\$395,805.00	142,030	\$284,060.00	\$111,745.00
Totals	\$538,405.00	186,126	\$372,252.00	\$166,153.00

This project was not anticipated as part of the FY 2015/16 budget and requires a budget adjustment. Funds are available in the CSD Zone E-7 and Zone 01 of LMD 2014-02 fund balances to cover the upfront costs of the project. It is anticipated that the rebate will be received approximately 120 days after the request is submitted.

Description	Fund	GL Account No.	Type (Rev/Exp.)	FY Budget 15/16	Proposed Adjustments	FY 15/16 Amended Budget
Amendment	Zone E-7	5013-70-79-25713-620910	Exp.	\$55,500	\$142,600	\$198,100
Rebate	Zone E-7	5013-70-79-25705-589900	Rev.	\$0.00	\$88,192	\$88,192
Amendment	Zone 01	5014-70-79-25721-620910	Exp.	\$1,089,420	\$395,805	\$1,485,225
Rebate	Zone 01	5014-70-79-25721-589900	Rev.	\$0	\$284,060	\$284,060

## **NOTIFICATION**

Drought tolerant landscape renovation signs have been placed in the turf parkways and median in CSD Zone E-7 and Zone 01 of LMD 2014-02.

## **PREPARATION OF STAFF REPORT**

Prepared by:  
Sharon Sharp,  
Senior Management Analyst

Department Head Approval:  
Ahmad Ansari, P.E.,  
Public Works Director/City Engineer

Concurred by:  
Candace E. Cassel,  
Special Districts Division Manager

## **CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Community Image, Neighborhood Pride and Cleanliness.** Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

**ATTACHMENTS**

1. First Amendment to the 2015/16 Agreement
2. Maps of Affected Areas in Zone E-7 and Zone 01
3. Governor's Executive Order B-29-15
4. EMWD's Water Shortage Contingency Plan
5. State of California's Proposed Water Efficient Landscape Ordinance

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/29/15 7:14 PM
City Attorney Approval	<u>✓ Approved</u>	9/30/15 8:15 AM
City Manager Approval	<u>✓ Approved</u>	10/05/15 10:38 AM

**FIRST AMENDMENT TO THE  
2015/16 INDEPENDENT CONTRACTOR AGREEMENT  
PROJECT NO. SD-2015-01  
LANDSCAPE AND IRRIGATION DISTRICTS – WEST  
MAINTENANCE OF PARKWAY AND MEDIAN  
LANDSCAPING AND IRRIGATION**

This First Amendment to the Agreement is by and between the MORENO VALLEY COMMUNITY SERVICES DISTRICT, a municipal corporation, hereinafter referred to as “District” and Landcare, hereinafter referred to as “Contractor”. This First Amendment is made and entered into and effective on the date the City Manager signs this Amendment.

RECITALS:

Whereas, the District and Contractor entered into an Agreement entitled "INDEPENDENT CONTRACTOR AGREEMENT PROJECT NO. SD-2015-01 LANDSCAPE AND IRRIGATION DISTRICTS – WEST MAINTENANCE OF PARKWAY AND MEDIAN LANDSCAPING AND IRRIGATION" dated June 25, 2014 for maintenance of the District's parkway and median landscaping and irrigation systems in Zones 01 (Towngate), 01A (Renaissance Park), 08 (Shadow Mountain) and E-7 (Centerpointe) hereinafter referred to as “Original Agreement”.

Whereas, a First Amendment to the Original Agreement was approved on March 3, 2015 to increase services to include installation of new plants, mulch and trees (“Additional Work”) and increase compensation by \$46,625.00 (an increase from \$34,040.00 to \$80,665.00) for fiscal year (FY) 2014/15.

Whereas, landscape maintenance services as provided under the Original Agreement were sufficiently performed.

Whereas, the Original Agreement expired on June 30, 2015 and the District and Contractor entered into a new Agreement, dated August 6, 2015, which extended all of terms and provisions of the Original Agreement through June 30, 2016 (“New Agreement”).



*First Amendment to the 2015/16 Independent Contractor Agreement*  
*PROJECT NO. SD-2015-01 LANDSCAPE AND IRRIGATION DISTRICTS – WEST*  
*MAINTENANCE OF PARKWAY AND MEDIAN LANDSCAPING AND IRRIGATION*

Whereas, it is desirable to amend the New Agreement to replace turf with drought tolerant plant materials in certain parkways and medians as more fully described in Exhibit B (“Additional Work”), attached hereto, for FY 2015/16.

**SECTION 1. FIRST AMENDMENT TO AGREEMENT**

The New Agreement is hereby amended as follows:

1.1 Increase Additional Work services to replace turf with drought tolerant landscape materials in certain parkways and medians in Zone 01 (Towngate) and E-7 (Centerpoint) as more fully described in Exhibit B.

1.2 Increase compensation for Additional Work as listed in Exhibit A, by \$594,855.000 (an increase from \$56,450.00 to \$538,405.00).

**SECTION 2. AGREEMENT**

2.1 Except as otherwise specifically provided in this First Amendment, all other terms and conditions of the New Agreement shall remain in full force and effect.

**SIGNATURE PAGE TO FOLLOW**

First Amendment to the 2015/16 Independent Contractor Agreement  
PROJECT NO. SD-2015-01 LANDSCAPE AND IRRIGATION DISTRICTS – WEST  
MAINTENANCE OF PARKWAY AND MEDIAN LANDSCAPING AND IRRIGATION

IN WITNESS HEREOF, the parties have each caused their authorized representative to execute this First Amendment to the Agreement.

Moreno Valley Community Services District

Contractor: Landcare.

By: \_\_\_\_\_  
City Manager, Acting in the capacity of  
District Manager to the Moreno  
Valley Community Services District

By: \_\_\_\_\_  
  
Title: \_\_\_\_\_  
(President of Vice President)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

INTERNAL USE ONLY

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
Date

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(Corporate Secretary)

Date: \_\_\_\_\_

RECOMMENDED FOR APPROVAL:

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Date

Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

First Amendment to the 2015/16 Independent Contractor Agreement  
 PROJECT NO. SD-2015-01 LANDSCAPE AND IRRIGATION DISTRICTS – WEST  
 MAINTENANCE OF PARKWAY AND MEDIAN LANDSCAPING AND IRRIGATION

### Exhibit A

<b>2015/16</b>				
<b>Service Area</b>	<b>Base Amount</b> (Routine service)	<b>Additional Work Amount</b> (unanticipated expenses and reinvestments)	<b>First Amendment Additional Work Amount</b> (conversion of turf to drought tolerant plant materials in parkways and medians)	<b>Total</b>
<b>LMD 2014-02 Zone 01</b>	\$77,693.04	\$14,250.00	\$395,805.00	\$487,748.04
<b>LMD 2014-02 Zone 01A</b>	9,154.53	5,300.00	0.00	14,454.53
<b>LMD 2014-02 Zone 08</b>	22,231.58	27,000.00	0.00	49,231.58
<b>CSD Zone E-7</b>	<u>36,239.41</u>	<u>9,900.00</u>	<u>142,600.00</u>	<u>188,739.41</u>
<b>Total</b>	\$145,318.56	\$56,450.00	\$538,405.00	\$ 740,173.56

<b>Summary</b> <b>2015/16 Agreement as Amended</b>			
	<b>Base Amount</b>	<b>Total Additional Work Amount</b>	<b>Total Compensation</b>
<b>Total</b>	\$145,318.56	\$594,855.00	\$740,173.56



# LandCare

## City of Moreno Valley

Landscape Enhancement, Turf Conversion and Water  
Conservation Proposal

Exhibit B

# LandCare

## PLEASE READ - IMPORTANT NOTES REGARDING CONCEPTUAL IMAGES

1. **Photorealistic images are computer generated designs in concept only.** Every effort is made to depict the plant material as accurately as possible in color and mature form.
2. **Newly installed plant material will be smaller.** Plant material is depicted after a period of growth, generally 2½ - 3 years.
3. **Conceptual images are not to scale.** Planting layout and quantities may differ from what is shown.
4. **Flowering plants are shown in bloom.** Not all plants bloom concurrently and therefore will flower at different times.
5. **Flower colors are often affected by environmental conditions (pH, etc.);** therefore, exact colors may vary.
6. **Low Water Use Plantings:** Although plants used are low water use, during the first year all plants will be watered regularly to ensure establishment.
7. **Substitutions:** In the event that a particular plant is unavailable or is rejected due to poor quality, the designer, account manager and/or site supervisor reserve the right to make substitutions. Every effort will be made to obtain approval from the client prior to making a substitution when schedule allows.
8. **LandCare reserves its common law copyright and other property rights in these documents.**
9. **These documents remain the property of Landcare until final proposal is approved & accepted by client.**
10. **These documents are not to be reproduced, changed or copied in any form, nor assigned to a third party.**
11. **These documents are not for bidding or construction.**

# City of Moreno Valley



Landscape Enhancement  
Zone 1 - Centerpoint, Towngate, and Day St.  
Medians

# Proposal

## City of Moreno Valley - Zone 1 - Centerpoint, Towngate, and Day Street Medians

### Plant Material

<u>Quantity</u>	<u>Common/Scientific Name</u>	<u>Size</u>
1931	T.B.D. - (Lomandra, Kangaroo Paw, Lantana, Flax, Blue Fescue)	1 Gallon
400	Desert Carpet Acacia	1 Gallon

### Hardscape Materials

<u>Quantity</u>	<u>Material</u>	<u>Square Footage</u>
228	Yards –Landscape Mulch	34,470 SF @3"

### Irrigation

<u>Quantity</u>	<u>Material</u>
1	Retrofit existing irrigation system (17,235 SF high density drip line/17.235 low density drip line). All new planting beds and existing turf areas will be irrigated with drip line (netafim or similar) or drip emitters as necessary.

### Demolition

<u>Quantity</u>	<u>Description</u>
1	Removal of turf and existing plant material. Turf will be scalped and sprayed with roundup then removed at 2"- 3" depth and removed off site. Existing plant material not incorporated in new plan will be removed and disposed of off site.

**Project Summary:** LandCare, LLC proposes to provide all labor, equipment and materials necessary for the turf conversion and planter bed enhancement for Zone M for the City of Moreno Valley. Areas are to include the medians on Centerpoint, Towngate, and Day Streets as specified by the City of Morena Valley.

We propose to hereby furnish materials and labor – complete in accordance with above specifications, for the sum of : **\$78,805.00**

# City of Moreno Valley



## Landscape Enhancement Zone E-1 Parkway Turf



# City of Moreno Valley

## Zone E-1 - Parkway Turf



**Current**



**Enhancement**

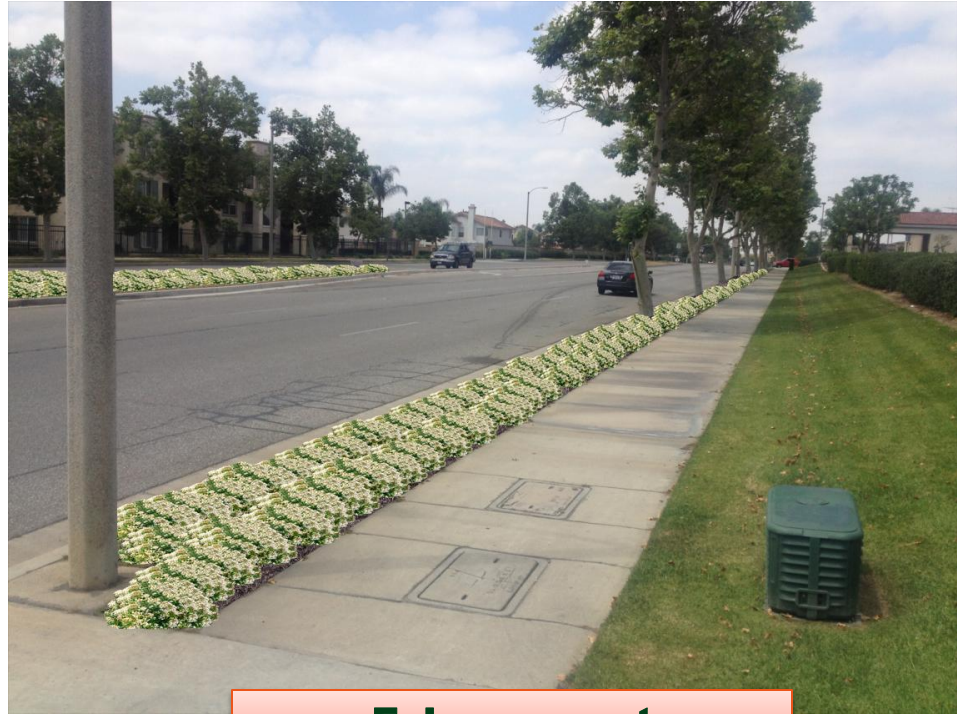
Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN

# City of Moreno Valley

## Zone E-1 - Parkway Turf



**Current**

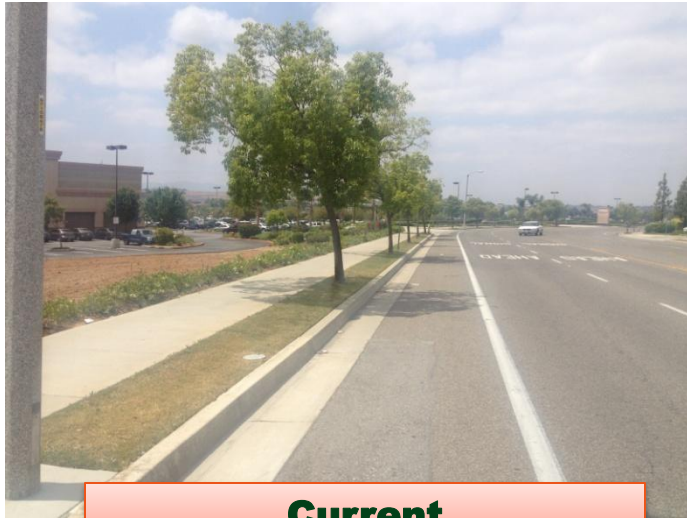


**Enhancement**

Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN

# City of Moreno Valley

## Zone E-1 - Parkway Turf



**Current**



**Enhancement**

Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN

# Proposal

## City of Moreno Valley - Zone E-1 - Parkway Turf

### Plant Material

<u>Quantity</u>	<u>Common/Scientific Name</u>	<u>Size</u>
9000	Star Jasmine (42" spacing)	1 Gallon
700	T.B.D. - (Lomandra, Kangaroo Paw, Lantana, Flax, )	1 Gallon

### Hardscape Materials

<u>Quantity</u>	<u>Material</u>	<u>Square Footage</u>
1004	Yards –Landscape Mulch	108,460 SF @3"

### Irrigation

<u>Quantity</u>	<u>Material</u>
1	Retrofit existing irrigation system (108,460 SF turf) All new planting beds and existing turf areas will be irrigated with drip line (netafim or similar) or drip emitters as necessary.

### Demolition

<u>Quantity</u>	<u>Material</u>
1	Turf will be scalped and sprayed with roundup then removed at 2"- 3" depth and removed off site. Existing plant material not incorporated in new plan will be removed and disposed of off site.

**Project Summary:** LandCare, LLC proposes to provide all labor, equipment and materials necessary for the turf conversion in the E-1 parkways as specified by the City of Morena Valley.

We propose to hereby furnish materials and labor – complete in accordance with above specifications, for the sum of : **\$317,000.00**

Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN

# City of Moreno Valley



## Landscape Enhancement Zone E-7 Parkway Turf

# Proposal

## City of Moreno Valley - Zone E-7 - Parkway turf

### Plant Material

<u>Quantity</u>	<u>Common/Scientific Name</u>	<u>Size</u>
4940	Star Jasmine (36" spacing)	1 Gallon

### Hardscape Materials

<u>Quantity</u>	<u>Material</u>	<u>Square Footage</u>
408	Yards –Landscape Mulch	44,096 SF @3"

### Irrigation

<u>Quantity</u>	<u>Material</u>
1	Retrofit existing irrigation system (44,096 SF turf) All new planting beds and existing turf areas will be irrigated with drip line (netafim or similar) or drip emitters as necessary.

### Demolition

<u>Quantity</u>	<u>Material</u>
1	Removal of turf and existing plant material. Turf will be scalped and sprayed with roundup then removed at 2"- 3" depth and removed off site. Existing plant material not incorporated in new plan will be removed and disposed of off site.

**Project Summary:** LandCare, LLC proposes to provide all labor, equipment and materials necessary for the turf conversion in the E-7 parkways as specified by the City of Moreno Valley.

We propose to hereby furnish materials and labor – complete in accordance with above specifications, for the sum of : **\$142,600.00**

Attachment: First Amendment to the 2015/16 Agreement (1618 : PARTICIPATION IN

*Thank you!*

We appreciate the opportunity to submit this presentation and proposal.

We would be more than happy to discuss or develop any of these conceptual designs in greater detail.

Inland Empire Branch  
1616 Marlborough Dr  
Riverside, CA 92507  
951-688-6880

Nicole Hill  
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# Moreno Valley Community Services District Landscaping & Irrigation

## Zone E-7 • Turf Rebate



Map Produced by Moreno Valley  
Geographic Information System  
File:G:\ArcMap\Special Districts\ZoneD\ZoneE7\_TurfRebate.mxd  
September 15, 2015

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Data and information on this map is subject to update and modification. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map. This map is not to be recycled or resold.

 Zone E-7 Landscape  
Attachment 2  
Page 1 of 4





# Moreno Valley Community Services District Landscaping & Irrigation

## Zone E-7 • Turf Rebate

<u>Address</u>	<u>Area ( Sq. Ft.)</u>
Elsworth	33,524
14083 Frederick	4,070
14347 Frederick	6,502

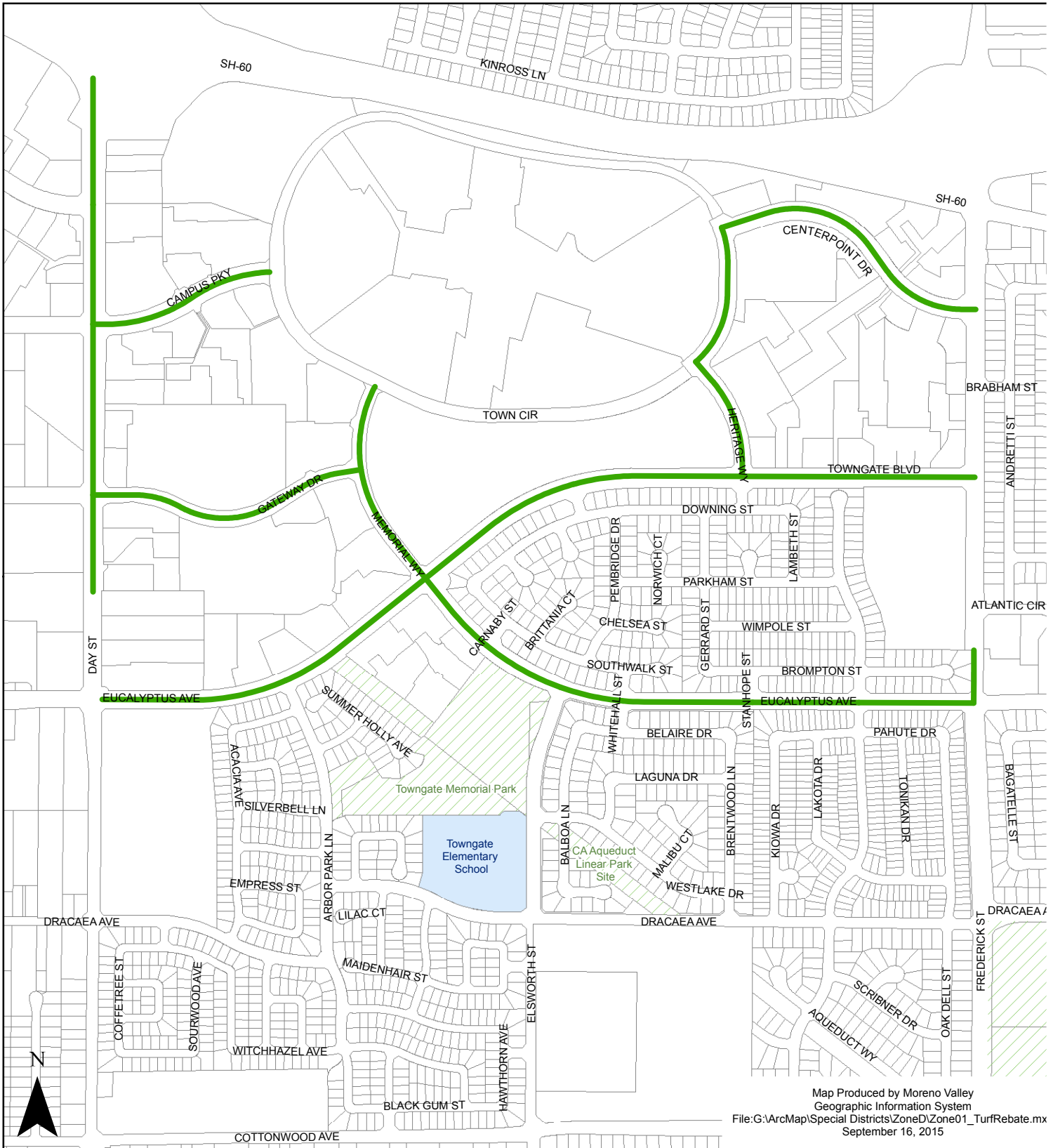
**Total Area, Service Area E-7:**                    **44,096 sq ft**  
**Total Acreage, Service Area E-7:**                    **1.01 acres**

Attachment: Maps of Affected Areas in Zone E-7 and Zone 01 (1618 : PARTICIPATION IN METROPOLITAN

# Moreno Valley Community Services District Landscape Maintenance District No. 2014-01

B.3.b

## Zone 01 • Turf Rebate



The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Data and information on this map is subject to update and modification. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map. This map is not to be recycled or resold.

— Zone 01

Map Produced by Moreno Valley  
Geographic Information System  
File:G:\ArcMap\Special Districts\ZoneD\Zone01\_TurfRebate.mxd  
September 16, 2015

Attachment: Maps of Affected Areas in Zone E-7 and Zone 01 (1618 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

# Moreno Valley Community Services District Landscape Maintenance District No. 2014-01

## Zone 01 • Turf Rebate

<u>MAP ID</u>	<u>Address</u>	<u>Area ( Sq. Ft.)</u>
Area 2	Towngate Circle (Southgate to Eucalyptus)	17,383
Area 2 & 5	Eastridge (Towngate - Frederick to Southgate)	22,426
Area 4	22658 Eucalyptus	5,595
Area 4	Eastridge	13,869
Area 4	Eucalyptus	11,155
Area 4	Gateway	25,600
Area 5	Heritage	1,302
Area 5	Centerpoint (Frederick to Towngate Circle)	27,064
Area 10	Campus	8,811
Area 10	Day St	8,825

**Total Area, Service Area 01:                    142,030 sq ft**  
**Total Acreage, Service Area 01:                    3.26 acres**

Attachment: Maps of Affected Areas in Zone E-7 and Zone 01 (1618 : PARTICIPATION IN METROPOLITAN

**Executive Department**  
State of California

**EXECUTIVE ORDER B-29-15**

**WHEREAS** on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

**WHEREAS** on April 25, 2014, I proclaimed a Continued State of Emergency to exist throughout the State of California due to the ongoing drought; and

**WHEREAS** California's water supplies continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins; and

**WHEREAS** the severe drought conditions continue to present urgent challenges including: drinking water shortages in communities across the state, diminished water for agricultural production, degraded habitat for many fish and wildlife species, increased wildfire risk, and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Bay Delta; and

**WHEREAS** a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond; and

**WHEREAS** new expedited actions are needed to reduce the harmful impacts from water shortages and other impacts of the drought; and

**WHEREAS** the magnitude of the severe drought conditions continues to present threats beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

**WHEREAS** under the provisions of section 8558(b) of the Government Code, I find that conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions with which local authority is unable to cope; and

**WHEREAS** under the provisions of section 8571 of the California Government Code, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay the mitigation of the effects of the drought.

**NOW, THEREFORE, I, EDMUND G. BROWN JR.**, Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately.



**IT IS HEREBY ORDERED THAT:**

1. The orders and provisions contained in my January 17, 2014 Proclamation, my April 25, 2014 Proclamation, and Executive Orders B-26-14 and B-28-14 remain in full force and effect except as modified herein.

**SAVE WATER**

2. The State Water Resources Control Board (Water Board) shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.
3. The Department of Water Resources (the Department) shall lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes. The Department shall provide funding to allow for lawn replacement programs in underserved communities, which will complement local programs already underway across the state.
4. The California Energy Commission, jointly with the Department and the Water Board, shall implement a time-limited statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.
5. The Water Board shall impose restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by Directive 2 of this Executive Order.
6. The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians.
7. The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

8. The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions. The Water Board is directed to adopt emergency regulations, as it deems necessary, pursuant to Water Code section 1058.5 to implement this directive. The Water Board is further directed to work with state agencies and water suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.

#### **INCREASE ENFORCEMENT AGAINST WATER WASTE**

9. The Water Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
10. The Water Board shall require frequent reporting of water diversion and use by water right holders, conduct inspections to determine whether illegal diversions or wasteful and unreasonable use of water are occurring, and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. Pursuant to Government Code sections 8570 and 8627, the Water Board is granted authority to inspect property or diversion facilities to ascertain compliance with water rights laws and regulations where there is cause to believe such laws and regulations have been violated. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
11. The Department shall update the State Model Water Efficient Landscape Ordinance through expedited regulation. This updated Ordinance shall increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. It will also require reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015. The Department shall provide information on local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance. The Department shall provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.
12. Agricultural water suppliers that supply water to more than 25,000 acres shall include in their required 2015 Agricultural Water Management Plans a detailed drought management plan that describes the actions and measures the supplier will take to manage water demand during drought. The Department shall require those plans to include quantification of water supplies and demands for 2013, 2014, and 2015 to the extent data is available. The Department will provide technical assistance to water suppliers in preparing the plans.

13. Agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands shall develop Agricultural Water Management Plans and submit the plans to the Department by July 1, 2016. These plans shall include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. The Department shall give priority in grant funding to agricultural water suppliers that supply water to 10,000 to 25,000 acres of land for development and implementation of Agricultural Water Management Plans.
14. The Department shall report to Water Board on the status of the Agricultural Water Management Plan submittals within one month of receipt of those reports.
15. Local water agencies in high and medium priority groundwater basins shall immediately implement all requirements of the California Statewide Groundwater Elevation Monitoring Program pursuant to Water Code section 10933. The Department shall refer noncompliant local water agencies within high and medium priority groundwater basins to the Water Board by December 31, 2015, which shall consider adopting regulations or taking appropriate enforcement to promote compliance.
16. The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings.

#### **INVEST IN NEW TECHNOLOGIES**

17. The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies such as renewable energy-powered desalination, integrated on-site reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.

#### **STREAMLINE GOVERNMENT RESPONSE**

18. The Office of Emergency Services and the Department of Housing and Community Development shall work jointly with counties to provide temporary assistance for persons moving from housing units due to a lack of potable water who are served by a private well or water utility with less than 15 connections, and where all reasonable attempts to find a potable water source have been exhausted.
19. State permitting agencies shall prioritize review and approval of water infrastructure projects and programs that increase local water supplies, including water recycling facilities, reservoir improvement projects, surface water treatment plants, desalination plants, stormwater capture, and greywater systems. Agencies shall report to the Governor's Office on applications that have been pending for longer than 90 days.

20. The Department shall take actions required to plan and, if necessary, implement Emergency Drought Salinity Barriers in coordination and consultation with the Water Board and the Department of Fish and Wildlife at locations within the Sacramento - San Joaquin delta estuary. These barriers will be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for essential human health and safety uses in 2015 and in the future.
21. The Water Board and the Department of Fish and Wildlife shall immediately consider any necessary regulatory approvals for the purpose of installation of the Emergency Drought Salinity Barriers.
22. The Department shall immediately consider voluntary crop idling water transfer and water exchange proposals of one year or less in duration that are initiated by local public agencies and approved in 2015 by the Department subject to the criteria set forth in Water Code section 1810.
23. The Water Board will prioritize new and amended safe drinking water permits that enhance water supply and reliability for community water systems facing water shortages or that expand service connections to include existing residences facing water shortages. As the Department of Public Health's drinking water program was transferred to the Water Board, any reference to the Department of Public Health in any prior Proclamation or Executive Order listed in Paragraph 1 is deemed to refer to the Water Board.
24. The California Department of Forestry and Fire Protection shall launch a public information campaign to educate the public on actions they can take to help to prevent wildfires including the proper treatment of dead and dying trees. Pursuant to Government Code section 8645, \$1.2 million from the State Responsibility Area Fire Prevention Fund (Fund 3063) shall be allocated to the California Department of Forestry and Fire Protection to carry out this directive.
25. The Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of securing alternate water supply necessary for continued power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Energy Commission is authorized to create and implement an alternative process to consider such petitions. This process may delegate amendment approval authority, as appropriate, to the Energy Commission Executive Director. The Energy Commission shall give timely notice to all relevant local, regional, and state agencies of any petition subject to this directive, and shall post on its website any such petition.



26. For purposes of carrying out directives 2–9, 11, 16–17, 20–23, and 25, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are hereby suspended. This suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that local action is required, as well as for any necessary permits or approvals required to complete these actions. This suspension, and those specified in paragraph 9 of the January 17, 2014 Proclamation, paragraph 19 of the April 25, 2014 proclamation, and paragraph 4 of Executive Order B-26-14, shall remain in effect until May 31, 2016. Drought relief actions taken pursuant to these paragraphs that are started prior to May 31, 2016, but not completed, shall not be subject to Division 13 (commencing with section 21000) of the Public Resources Code for the time required to complete them.
27. For purposes of carrying out directives 20 and 21, section 13247 and Chapter 3 of Part 3 (commencing with section 85225) of the Water Code are suspended.
28. For actions called for in this proclamation in directive 20, the Department shall exercise any authority vested in the Central Valley Flood Protection Board, as codified in Water Code section 8521, et seq., that is necessary to enable these urgent actions to be taken more quickly than otherwise possible. The Director of the Department of Water Resources is specifically authorized, on behalf of the State of California, to request that the Secretary of the Army, on the recommendation of the Chief of Engineers of the Army Corps of Engineers, grant any permission required pursuant to section 14 of the Rivers and Harbors Act of 1899 and codified in section 48 of title 33 of the United States Code.
29. The Department is directed to enter into agreements with landowners for the purposes of planning and installation of the Emergency Drought Barriers in 2015 to the extent necessary to accommodate access to barrier locations, land-side and water-side construction, and materials staging in proximity to barrier locations. Where the Department is unable to reach an agreement with landowners, the Department may exercise the full authority of Government Code section 8572.
30. For purposes of this Executive Order, chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.

31. In order to ensure that equipment and services necessary for drought response can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended for directives 17, 20, and 24. Approval by the Department of Finance is required prior to the execution of any contract entered into pursuant to these directives.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

**I FURTHER DIRECT** that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

**IN WITNESS WHEREOF** I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 1<sup>st</sup> day of April 2015.

\_\_\_\_\_  
EDMUND G. BROWN JR.  
Governor of California

**ATTEST:**

\_\_\_\_\_  
ALEX PADILLA  
Secretary of State





CITY OF MORENO VALLEY  
PUBLIC WRKS/SPECIAL DSTRCT  
OR CURRENT RESIDENT  
23822 MARCH MEMORIAL DR  
MORENO VALLEY, CA 92553



## Important Notice Regarding Potential Further Reductions In Your Water Budget!

August 14, 2015

Dear Valued Customer:

Eastern Municipal Water District (EMWD) is currently in Stage 4a of its Water Shortage Contingency Plan in response to the exceptional drought conditions that continue to affect the State of California. A Stage 4 drought status reduces customers' outdoor water budgets according to the following levels:

- Stage 4a - Outdoor water budgets reduced 10 percent (EMWD current status)
- Stage 4b - Outdoor water budgets reduced up to 50 percent
- Stage 4c - Outdoor water budgets reduced up to 100 percent

Stage 4 also eliminates the Tier 3 (Excessive) water use category. That means all water used above your indoor and outdoor water budgets will be charged at the Tier 4 (Wasteful) water use rate.

### Where are we at now with our water savings?

In May, the State Water Resources Control Board (the State Water Board) ordered customers of cities and water agencies in the state to reduce water consumption between eight and 36 percent, with the intent of achieving Governor Brown's drought directive for a 25 percent total reduction in statewide water consumption. Under the State Water Board's order, EMWD customers are required after June 1, 2015 to reduce overall water use by 28 percent (compared to 2013 data).

In June, EMWD customers reduced overall water use by 15 percent – far short of the State mandated reductions. While approximately 70 percent of our customers are now consistently using less than 50 percent of their outdoor water budgets, many customers are still falling short of the target. As a result, we received a notice of violation from the State Water Board with direction to take additional steps necessary to further reduce our customers' water usage.


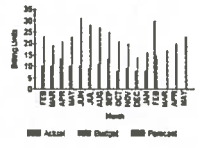
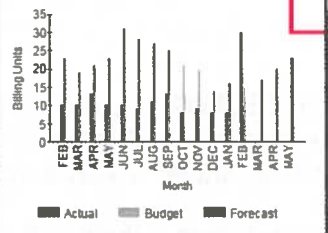
### What could happen next?

In order to avoid penalties being imposed on our customers by the State Water Board, EMWD will consider moving to a Stage 4b drought status in September. This action will depend on additional water use reduction through the end of August. **Moving to Stage 4b drought status would reduce customers' outdoor water budgets up to 50 percent.**

MAY 25 2015 2:37 PM

**What do we need you to do?**

If you are already using 50 percent or less of your outdoor water budget, please keep up the good work! We really appreciate your efforts. You can see if you are meeting this reduction on your bill:

 P.O. Box 8300 Perris, CA 92572-8300 WITHIN SOUTHERN CALIFORNIA 800-428-3803 OUTSIDE SOUTHERN CALIFORNIA 951-928-3777 WEBSITE www.emwd.org		CUSTOMER NAME: EMWD CUSTOMER ACCOUNT 123456-01 SERVICE ADDRESS: 3278 TRAMBLE RD SERVICE PERIOD: 01/13/15 to 02/12/15 BILL DATE: 02/13/15 NO. OF DAYS: 30 DUE DATE: 02/29/15 NEXT READ DATE: 03/13/15																																									
<b>Summary of Charges</b> Balance Forward 0.00 Water Charges 208.38 Sewer Charges 91.11 <b>TOTAL AMOUNT DUE 298.49</b>		<b>Previous Charges</b> Amount of Last Bill 62.67 Payment Received - Thank You 01/13/15 51.11 Balance Forward 9.89																																									
<b>Water Charges</b> Water Service 30 Day(s) 367/day 11.01 Supply and Reliability Capital Projects 30 Day(s) 05753/day 1.73 Indoor Use 7 billing units 1 79300/unit 12.55 Outdoor Use 9 billing units 3 28000/unit 29.52 Excesses 0 billing units 5 07900/unit 0.00 Wasteful 14 billing units 10 75500/unit 150.57 <b>Total Water Charges 30 billing units 205.38</b>		<b>Water Charges</b> Water Service 30 Day(s) 367/day 11.01 Supply and Reliability Capital Projects 30 Day(s) 05753/day 1.73 Water Use 7 billing units 1 79300/unit 12.55 Outdoor Use 9 billing units 3 28000/unit 29.52 Excesses 0 billing units 5 07900/unit 0.00 Wasteful 14 billing units 10 75500/unit 150.57 <b>Total Water Charges 30 billing units 205.38</b>																																									
<b>Water Usage History</b> Current Year <table border="1"> <tr><th>Month</th><th># Days</th><th>Billing Units</th><th>Usage In Gal.</th><th>Average GPD*</th></tr> <tr><td>Feb 12</td><td>30</td><td>30</td><td>22446</td><td>748</td></tr> <tr><td>Jan 13</td><td>31</td><td>8</td><td>5894</td><td>176</td></tr> <tr><td>Dec 12</td><td>29</td><td>8</td><td>5894</td><td>214</td></tr> </table> Previous Year <table border="1"> <tr><th>Month</th><th># Days</th><th>Billing Units</th><th>Usage In Gal.</th><th>Average GPD*</th></tr> <tr><td>Feb 13</td><td>32</td><td>10</td><td>7430</td><td>234</td></tr> <tr><td>Jan 13</td><td>30</td><td>8</td><td>5894</td><td>199</td></tr> <tr><td>Dec 12</td><td>29</td><td>8</td><td>5894</td><td>208</td></tr> </table> * 1 Billing Unit = 748 Gallons * GPD = Gallons per Day		Month	# Days	Billing Units	Usage In Gal.	Average GPD*	Feb 12	30	30	22446	748	Jan 13	31	8	5894	176	Dec 12	29	8	5894	214	Month	# Days	Billing Units	Usage In Gal.	Average GPD*	Feb 13	32	10	7430	234	Jan 13	30	8	5894	199	Dec 12	29	8	5894	208	<b>Sewer Charges</b> Sewer Service 30 Day(s) 1827/May 31.11 Other Agency Charges 30 Day(s) 254.38 <b>Total Current Charges 298.49</b>	
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<b>Water Budget/Sewer Block Data</b> Indoor Allocation 7 BU Based on Household Size 3 people Outdoor Allocation 9 BU Landscape Area 1 823 sq ft Sewer Block 2		<b>Water Budget/Sewer Block Data</b> Indoor Allocation 7 BU Based on Household Size 3 people Outdoor Allocation 9 BU Landscape Area 1 920 sq ft Sewer Block 2																																									
																																											
IMPORTANT CUSTOMER MESSAGES ARE LOCATED IN THIS AREA.																																											

Water Charges	Period/Quantity	Rate	Amount
Water Service	30 Day(s)	367/day	11.01
Supply and Reliability Capital Projects	30 Day(s)	05753/day	1.73
Indoor Use	7 billing units	1 79300/unit	12.55
Outdoor Use	9 billing units	3 28000/unit	29.52
Excesses	0 billing units	5 07900/unit	0.00
Wasteful	14 billing units	10 75500/unit	150.57
<b>Total Water Charges</b>	<b>30 billing units</b>		<b>205.38</b>

Water Budget/Sewer Block Data	
Indoor Allocation	7 BU
Based on Household Size	3 people
Outdoor Allocation	9 BU
Landscape Area	1 920 sq ft
Sewer Block 2	

Make sure your Outdoor Use is 50 percent or less of your Outdoor Allocation

**If you are using more than 50 percent of your outdoor water budget, please reduce your outdoor watering immediately.**

**What can you do to cut your outdoor watering in half?**

- **Cut the number of days you water in half!** Watering only 1-2 days per week is an excellent way to use 50 percent or less of your outdoor water budget!
- **Cut the time you water in half.** For example, if you're currently watering for 6 minutes at a time, reduce it to 3 minutes.
- **Use your outdoor water budget as your guide.** If your outdoor water budget is 22 billing units, cut down your water use to only use 11 of those billing units. Keep in mind that outdoor budgets change every month due to weather conditions. Your billing statement provides a 3-month forecast of upcoming budgets. For more information on reading your billing statement, please visit our website at [www.emwd.org](http://www.emwd.org). For more water saving tips, please visit [www.emwd.org/WaterWiseTips](http://www.emwd.org/WaterWiseTips).

**What else can you do to save water?**

You can let us know if you see water waste! Water waste reports may be submitted via the following methods:

- Online: [www.emwd.org/reportwaterwaste](http://www.emwd.org/reportwaterwaste)
- Email: [conservation@emwd.org](mailto:conservation@emwd.org)
- Phone: 951-928-3777, ext. 3306
- Mail: EMWD, Attn.: Water Waste, PO Box 8300, Perris, CA 92572-8300
- Mobile App: Available on Android and iPhone platforms  
Search for "EMWD Water Waste Reporter"

Thank you for your efforts to comply with the State Water Board's order and to save water during this historic drought!

For up-to-date drought status information, please visit [www.emwd.org/drought](http://www.emwd.org/drought) or call our Drought Status Hotline at 951-928-3777 ext. 4540. You can also go to [www.emwd.org/billestimator](http://www.emwd.org/billestimator) to see how your bill could be impacted if you exceed your water budget.

Sincerely,  
EMWD Customer Service Department

**Model Water Efficient Landscape Ordinance**  
**September 10, 2009**  
**June 12, 2015 (Public Draft)**

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1618 : PARTICIPATION IN METROPOLITAN WATER

California Code of Regulations  
 Title 23. Waters  
 Division 2. Department of Water Resources  
 Chapter 2.7. Model Water Efficient Landscape Ordinance

**§ 490. Purpose.**

(a) The State Legislature has found:

- (1) that the waters of the state are of limited supply and are subject to ever increasing demands;
- (2) that the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;
- (3) that it is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;
- (4) that landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development; ~~and~~
- (5) that landscape design, installation, maintenance and management can and should be water efficient; and
- (6) that Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use.

(b) Consistent with these legislative findings, the purpose of this model ordinance is to:

- (1) promote the values and benefits of landscaping practices that integrate and transcend the conservation and efficient use of water; landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- (2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects by using a whole system watershed approach in landscapes of any size and scale that requires cross-sector collaboration to achieve the many benefits possible;
- (3) establish provisions for water management practices and water waste prevention for existing landscapes;
- (4) use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount;
- (5) promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;
- (6) encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered-rate structure; and
- (7) encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Model Water Efficient Landscape Ordinance or its local landscape ordinance.

(c) Regenerative landscape systems that are planned, designed, installed, managed and maintained with the watershed based approach can improve California's environmental conditions and achieve sustainability goals. Consistent with the legislative findings and purpose of the Ordinance, achievable goals include:

- (1) Increasing carbon storage, water retention and productive plant growth by improving soils through reducing compaction, incorporating organic matter and minimizing cut and fill grading.
- (2) Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting long lived climate appropriate shade trees in urban areas.

- (3) Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water.
- (4) Protecting air and water quality by reducing power equipment use and landfill trips, selecting locally sourced materials, and using mulch and efficient irrigation equipment to prevent erosion.
- (5) Protecting existing habitat and creating new habitat by choosing local native plants wherever possible and including climate appropriate non-native plants when necessary, and avoiding pesticides and invasive plants.

Note: Authority cited: Section 65593, Government Code. Reference: Sections 65591, 65593, 65596, Government Code.

### § 490.1 Applicability

(a) After ~~January 1, 2010~~ November 1, 2015, this ordinance shall apply to all of the following landscape projects:

- (1) new construction projects with a landscape area greater than 500 square feet requiring a building or landscape permit, plan check or design review;
- (2) rehabilitated landscape projects with an aggregated landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
- ~~(1) new construction and rehabilitated landscapes for public agency projects and private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review;~~
- ~~(2) new construction and rehabilitated landscapes which are developer installed in single family and multi family projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;~~
- ~~(3) new construction landscapes which are homeowner provided and/or homeowner hired in single family and multi family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review;~~
- (3) ~~(4)~~ existing landscapes limited to Sections 493, 493.1 and 493.2; and
- (4) ~~(5)~~ cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 492.4, 492.11 and 492.12; and existing cemeteries are limited to Sections 493, 493.1 and 493.2.

(b) This ordinance does not apply to:

- (1) registered local, state or federal historical sites;
- (2) ecological restoration projects that do not require a permanent irrigation system;
- (3) mined-land reclamation projects that do not require a permanent irrigation system; or
- (4) existing plant collections, as part of botanical gardens and arboretums open to the public.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 491. Definitions.

The terms used in this ordinance have the meaning set forth below:

- (a) “applied water” means the portion of water supplied by the irrigation system to the landscape.
- (b) “automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- (c) “backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- (d) “Certificate of Completion” means the document required under Section 492.9.

- (e) “certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation designer certification program and Irrigation Association’s Certified Irrigation Designer program.
- (f) “certified landscape irrigation auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation auditor certification program and Irrigation Association’s Certified Landscape Irrigation Auditor program.
- (g) “check valve” or “anti-drain valve” means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.
- (h) “common interest developments” means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.
- (i) “conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.
- (j) “drip irrigation” means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (k) “ecological restoration project” means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (l) “effective precipitation” or “usable rainfall” (Eppt) means the portion of total precipitation which becomes available for plant growth.
- (m) “emitter” means a drip irrigation emission device that delivers water slowly from the system to the soil.
- (n) “established landscape” means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.
- (o) “establishment period of the plants” means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth.
- (p) “Estimated Total Water Use” (ETWU) means the total water used for the landscape as described in Section 492.4.
- (q) “ET adjustment factor” (ETAF) means a factor of 0.75 for residential areas and 0.4 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. A combined plant mix with a site-wide average of 0.5 0.425 for residential areas and 0.37 for other areas is the basis of the plant factor portion of this calculation. For purposes of the ETAF, the average irrigation efficiency is 0.7485 for residential and 0.92 for non-residential areas. Therefore, the ETAF Adjustment Factor for residential and non-residential is  $(0.75)/(0.425/0.857)$  and  $(0.4)/(0.37/0.92)$ , respectively. The ETAF for a new and existing Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.
- (r) “evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- (s) “flow rate” means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- (t) “friable” means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.
- (u) “graywater” means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. “Graywater”



includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Pursuant to Health and Safety Code Section 17922.12.

(v) ~~(t)~~ “hardscapes” means any durable material (pervious and non-pervious).

(w) ~~(u)~~ “homeowner-provided landscaping” means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings.

(x) ~~(v)~~ “hydrozone” means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

(y) ~~(w)~~ “infiltration rate” means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

(z) ~~(x)~~ “invasive plant species” means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. “Noxious weeds” means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(aa) ~~(y)~~ “irrigation audit” means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association’s Landscape Irrigation Auditor Certification program.

(bb) ~~(z)~~ “irrigation efficiency” (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this ordinance is 0.8574 for residential areas and 0.92 for non-residential areas, averaged on a site-wide basis. Greater irrigation efficiency can be expected from well designed and maintained systems.

(cc) ~~(aa)~~ “irrigation survey” means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

(dd) ~~(bb)~~ “irrigation water use analysis” means a review of water use data based on meter readings and billing data.

(ee) ~~(cc)~~ “landscape architect” means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ff) ~~(dd)~~ “landscape area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

(gg) ~~(ee)~~ “landscape contractor” means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(hh) “landscape designer” means a person permitted by the Business and Profession Code to prepare plans, drawings, and specifications for the selection, placement, or use of plants for single family dwellings. They may prepare drawings for the conceptual design and placement of tangible objects and landscape features. A landscape designer may not prepare construction documents, details, or specifications for tangible landscape objects or landscape features or prepare grading and drainage plans for the alteration of sites.

(ii) ~~(ff)~~ “Landscape Documentation Package” means the documents required under Section 492.3.

(jj) ~~(gg)~~ “landscape project” means total area of landscape in a project as defined in “landscape area” for the purposes of this ordinance, meeting requirements under Section 490.1.

(kk) ~~(hh)~~ “lateral line” means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

(ll) ~~(ii)~~ “local agency” means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

(mm) ~~(jj)~~ “local water purveyor” means any entity, including a public agency, city, county, or private water company that provides retail water service.

(nn) ~~(kk)~~ “low volume irrigation” means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(oo) ~~(H)~~ “main line” means the pressurized pipeline that delivers water from the water source to the valve or outlet.

(pp) “master valve” is an electric valve installed at the supply point which controls water flow into the main piping system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

(qq) ~~(mm)~~ “Maximum Applied Water Allowance” (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. It is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0.

(rr) “median” is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

(ss) ~~(nn)~~ “microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

(tt) “microspray” means a microirrigation emission device with one or more orifices to convert irrigation water pressure to water discharge with a flow rate not to exceed 30 gallons per hour (113.5 litres per hour) at the largest area of coverage available for the nozzle series when operated at 30 psi (206.8kPa). Microsprays are inclusive of “microbubblers”, microspinners” and “microspray jets.” (From ASABE/ICC 802-2014 Landscape Irrigation and Emitter Standard.)

(uu) ~~(oo)~~ “mined-land reclamation projects” means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

(vv) ~~(pp)~~ “mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

(ww) ~~(qq)~~ “new construction” means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

(xx) ~~(rr)~~ “operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

(yy) ~~(ss)~~ “overhead sprinkler irrigation systems” means systems that deliver water through the air (e.g., spray heads and rotors).

(zz) (~~tt~~) “overspray” means the irrigation water which is delivered beyond the target area.

(aaa) “parkway” means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(bbb) (~~uu~~) “permit” means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(ccc) (~~vv~~) “pervious” means any surface or material that allows the passage of water through the material and into the underlying soil.

(ddd) (~~ww~~) “plant factor” or “plant water use factor” is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for low water use plants is 0 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the Department of Water Resources 2000 publication “Water Use Classification of Landscape Species”. Plant factors may also be obtained from horticultural researchers from academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR).

(eee) (~~xx~~) “precipitation rate” means the rate of application of water measured in inches per hour.

(fff) (~~yy~~) “project applicant” means the individual or entity submitting a Landscape Documentation Package required under Section 492.3 to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

(ggg) (~~zz~~) “rain sensor” or “rain sensing shutoff device” means a component which automatically suspends an irrigation event when it rains.

(hhh) (~~aaa~~) “record drawing” or “as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(iii) (~~bbb~~) “recreational area” means areas, excluding private single family residential areas, dedicated to active play recreation or public assembly such as parks, sports fields, picnic grounds, amphitheaters and or golf courses tees, fairways and greens.

(jii) (~~eee~~) “recycled water”, “reclaimed water”, or “treated sewage effluent water” means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(kkk) (~~ddd~~) “reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A Section 495.1, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated.

(lll) (~~eee~~) “rehabilitated landscape” means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.

(mmm) (~~fff~~) “runoff” means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

(nnn) (~~ggg~~) “soil moisture sensing device” or “soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(ooo) (~~hhh~~) “soil texture” means the classification of soil based on its percentage of sand, silt, and clay.

(ppp) (~~iii~~) “Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, and water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

~~(qqq)~~ ~~(jjj)~~ “sprinkler head” means a device which delivers water through a nozzle.

~~(rrr)~~ ~~(kkk)~~ “static water pressure” means the pipeline or municipal water supply pressure when water is not flowing.

~~(sss)~~ ~~(lll)~~ “station” means an area served by one valve or by a set of valves that operate simultaneously.

~~(ttt)~~ ~~(mmm)~~ “swing joint” means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

~~(uuu)~~ ~~(nnn)~~ “turf” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

~~(vvv)~~ ~~(ooo)~~ “valve” means a device used to control the flow of water in the irrigation system.

~~(www)~~ “water budget” is a reasonable estimate of the amount of irrigation water required for a specific landscape. Basic water budget calculations require measured areas of each irrigated hydrozone and reference evapotranspiration for the area to be landscaped.

~~(xxx)~~ ~~(ppp)~~ “water conserving plant species” means a plant species identified as having a low plant factor.

~~(yyy)~~ ~~(qqq)~~ “water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

~~(zzz)~~ ~~(rrr)~~ “watering window” means the time of day irrigation is allowed.

~~(aaaa)~~ ~~(sss)~~ “WUCOLS” means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, and the Department of Water Resources and the Bureau of Reclamation, 2000 2014.

Note: Authority Cited: Section 65595, Government Code. Reference: Sections 65592, 65596, Government Code.

#### **§ 492. Provisions for New Construction or Rehabilitated Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.1 Compliance with Landscape Documentation Package.**

(a) Prior to construction, the local agency shall:

- (1) provide the project applicant with the ordinance and procedures for permits, plan checks, or design reviews;
- (2) review the Landscape Documentation Package submitted by the project applicant;
- (3) approve or deny the Landscape Documentation Package;
- (4) issue a permit or approve the plan check or design review for the project applicant; and
- (5) upon approval of the Landscape Documentation Package, submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

(b) Prior to construction, the project applicant shall:

- (1) submit a Landscape Documentation Package to the local agency.

(c) Upon approval of the Landscape Documentation Package by the local agency, the project applicant shall:

- (1) receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;
- (2) submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and
- (3) submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.2 Penalties.**

(a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.3 Elements of the Landscape Documentation Package.**

(a) The Landscape Documentation Package shall include the following six (6) elements:

- (1) project information;
  - (A) date
  - (B) project applicant
  - (C) project address (if available, parcel and/or lot number(s))
  - (D) total landscape area (square feet)
  - (E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
  - (F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
  - (G) checklist of all documents in Landscape Documentation Package
  - (H) project contacts to include contact information for the project applicant and property owner
  - (I) applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
- (2) Water Efficient Landscape Worksheet;
  - (A) hydrozone information table
  - (B) water budget calculations
    1. Maximum Applied Water Allowance (MAWA)
    2. Estimated Total Water Use (ETWU)
- (3) soil management report;
- (4) landscape design plan;
- (5) irrigation design plan; and
- (6) grading design plan.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.4 Water Efficient Landscape Worksheet.**

(a) A project applicant shall complete the Water Efficient Landscape Worksheet which contains two sections (see sample worksheet in Appendix B):

- (1) a hydrozone information table (see Appendix B, Section A) for the landscape project; and
- (2) a water budget calculation (see Appendix B, Section B) for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project

applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

(b) Water budget calculations shall adhere to the following requirements:

(1) The plant factor used shall be from WUCOLS. Plant factors may also be obtained from horticultural researchers with academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

(2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

(3) All Special Landscape Areas shall be identified and their water use calculated as described below.

(4) ETAF for Special Landscape Areas shall not exceed 1.0.

(c) Maximum Applied Water Allowance

The Maximum Applied Water Allowance shall be calculated using the equation:

Residential Areas:  $MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

Non-Residential:  $MAWA = (ET_o) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project. The ETo values used in these calculations are from the Reference Evapotranspiration Table in Appendix A, for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

(1) Example MAWA calculation for a residential landscape project: a hypothetical landscape project in Fresno, CA with an irrigated landscape area of 50,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of recycled water). To calculate MAWA, the annual reference evapotranspiration value for Fresno is 51.1 inches as listed in the Reference Evapotranspiration Table in Appendix A.

$MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons per year)

0.57 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.53 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

$MAWA = (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 0)]$   
 $= 1,108,870 \text{ } \underline{792,050} \text{ gallons per year}$

To convert from gallons per year to hundred-cubic-feet per year:

$= 1,108,870 \text{ } \underline{792,050} / 748 = 1,482 \underline{059} \text{ hundred-cubic-feet per year}$   
(100 cubic feet = 748 gallons)

(2) In this next hypothetical example, the residential landscape project in Fresno, CA has the same ETo value of 51.1 inches and a total landscape area of 50,000 square feet. Within the 50,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.

$$\begin{aligned}
 \text{MAWA} &= (\text{ET}_o) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \\
 \text{MAWA} &= (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 2,000 \text{ square feet})] \\
 &= 31.68 \times [235,000 + 1,0600] \text{ gallons per year} \\
 &= 31.68 \times 3526,0600 \text{ gallons per year} \\
 &= 1,127,808823,680 \text{ gallons per year or } 1,101,508 \text{ hundred-cubic-feet per year}
 \end{aligned}$$

(d) Estimated Total Water Use.

The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed MAWA.

$$\text{ETWU} = (\text{ET}_o)(0.62) \left( \frac{\text{PF} \times \text{HA}}{\text{IE}} + \text{SLA} \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- ET<sub>o</sub> = Reference Evapotranspiration (inches)
- PF = Plant Factor from WUCOLS (see Section 491)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per year)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas)

(1) Example ETWU calculation: landscape area is 50,000 square feet; plant water use type, plant factor, and hydrozone area are shown in the table below. The ET<sub>o</sub> value is 51.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, and area irrigated with recycled water) in this example.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	17,000	5,6800
2	High	0.7	102,000	147,900
3	Medium	0.5	156,000	78,5000
4	Low	0.3	147,000	42,1200
5	Low	0.2	180,000	23,0600
			Sum	24,70017,500

\*Plant Factor from WUCOLS

$$\begin{aligned}
 \text{ETWU} &= (51.1)(0.62) \left( \frac{17,500}{0.85} + 0 \right) \\
 &= 1,102,116 \text{ } 652,276 \text{ gallons per year}
 \end{aligned}$$

Compare ETWU with MAWA: For this example MAWA = (51.1) (0.62) [(0.57 x 50,000) + (0.53 x 0)] = 1,108,870 792,050 gallons per year. The ETWU (1,102,116 652,276 gallons per year) is less than MAWA (1,108,870 792,050 gallons per year). In this example, the water budget complies with the MAWA.

(2) Example ETWU calculation: total landscape area is 50,000 square feet, 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area

(SLA). The reference evapotranspiration value is 51.1 inches per year. The plant type, plant factor, and hydrozone area are shown in the table below.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	<u>17,000</u>	<u>85,600</u>
2	High	0.7	<u>19,000</u>	<u>6,3700</u>
3	Medium	0.5	<u>145,000</u>	<u>7,0500</u>
4	Low	0.3	<u>147,000</u>	<u>4,2400</u>
5	Low	0.2	<u>180,000</u>	<u>32,600</u>
			Sum	<u>1623,3500</u>
6	SLA	1.0	2,000	2,000

\*Plant Factor from WUCOLS

$$ETWU = (51.1)(0.62) \left( \frac{16,300}{0.85} + 2,000 \right)$$

$$= (31.68) (33,099 \underline{19,176} + 2,000)$$

$$= 1,111,936 \underline{670,898} \text{ gallons per year}$$

Compare ETWU with MAWA. For this example:

$$MAWA = (51.1) (0.62) [(0.57 \times 50,000) + (0.53 \times 2,000)]$$

$$= 31.68 \times [235,000 + \underline{1,0600}]$$

$$= 31.68 \times \underline{35,600} \underline{26,000}$$

$$= 1,127,808 \underline{823,680} \text{ gallons per year}$$

The ETWU (1,111,936670,898 gallons per year) is less than MAWA (1,127,808823,680 gallons per year). For this example, the water budget complies with the MAWA.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.5 Soil Management Report.**

(a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:

- (1) Submit soil samples to a laboratory for analysis and recommendations.
  - (A) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
  - (B) The soil analysis may include:
    - 1. soil texture;
    - 2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
    - 3. pH;
    - 4. total soluble salts;
    - 5. sodium;
    - 6. percent organic matter; and
    - 7. recommendations.
- (2) The project applicant, or his/her designee, shall comply with one of the following:
  - (A) If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or



- (B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.
- (3) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.
- (4) The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.6 Landscape Design Plan.

(a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) Plant Material

(A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:

1. protection and preservation of native species and natural vegetation;
2. selection of water-conserving plant and turf species, especially local native plants;
3. selection of plants based on local climate suitability, disease and pest resistance;
4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and
5. selection of plants from local and regional landscape program plant lists.

(B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).

(C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:

1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

(D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

(E) Turf is prohibited in street medians.

(F) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

(G) ~~(E)~~ A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per

Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.

(H) ~~(F)~~ The use of invasive and/or noxious plant species is strongly discouraged.

(I) ~~(G)~~ The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

(2) Water Features

(A) Recirculating water systems shall be used for water features.

(B) Where available, recycled water shall be used as a source for decorative water features.

(C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

(D) Pool and spa covers are highly recommended.

(E) Recreational water features (swimming pools, splash pads or similar) must recirculate water.

(3) Soil Preparation, Mulch and Amendments

(A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition.

(B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).

(C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area (unless contra-indicated by soil test) shall be incorporated to a depth of six inches into the soil. Soils with greater than 25% organic matter in the top 6 inches of soil are exempt from adding compost.

(D) ~~(A)~~ A minimum ~~two~~ three inch (23") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(E) ~~(B)~~ Stabilizing mulching products shall be used on slopes.

(F) ~~(C)~~ The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

(G) Organic mulch materials should take precedence over inorganic materials in instances where it is suitable, ecologically possible, and the material does not pose a fire hazard. Composted organic material, in particular that which includes post-consumer material, should be considered over more compacted products such as bark, wood chips, etc.

~~(D) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).~~

(b) The landscape design plan, at a minimum, shall:

(1) delineate and label each hydrozone by number, letter, or other method;

(2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;

(3) identify recreational areas;

(4) identify areas permanently and solely dedicated to edible plants;

(5) identify areas irrigated with recycled water;

(6) identify type of mulch and application depth;

(7) identify soil amendments, type, and quantity;

(8) identify type and surface area of water features;

(9) identify hardscapes (pervious and non-pervious);

(10) identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to: are provide in Section 492.16.

(A) infiltration beds, swales, and basins that allow water to collect and soak into the ground;

(B) constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and

(C) pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.

(11) identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, eisterns, etc.) as discussed in Section 492.16 and their 24-hour retention or infiltration capacity;

(12) identify any applicable graywater discharge piping, system components and area(s) of distribution;

(13) ~~(12)~~ contain the following statement: “I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan”; and

(14) ~~(13)~~ bear the signature of a licensed landscape architect, licensed landscape contractor, landscape designer or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code and Section 1351, Civil Code.

### § 492.7 Irrigation Design Plan.

(a) This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers’ recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) System

(A) ~~Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management shall be required for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000sq.ft. (the level at which Water Code 535 applies)-and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:~~

1. a customer service meter dedicated to landscape use provided by the local water purveyor; or

2. a privately owned meter or submeter.

(B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data and non-volatile memory shall be required for irrigation scheduling in all irrigation systems.

(C) The installation of a pressure regulator is required ~~The irrigation systems shall be designed~~ to ensure that the dynamic pressure at each emission device is within the manufacturer’s recommended pressure range for optimal performance.

1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators,

booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

2. Static water pressure, dynamic or operating pressure and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

(D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

(E) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

(F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

(G) ~~High~~ Flow sensors that detect ~~and report~~ high flow conditions created by system damage or malfunction are ~~recommended~~ required.

(H) Master valves are required on all projects.

(I) ~~(H)~~ The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

(J) ~~(I)~~ Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(K) ~~(J)~~ The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(L) ~~(K)~~ The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.

(M) The irrigation system must be designed and installed in such a manner that a precipitation rate of 1.0 inches per hour is not exceeded in any portion of the landscape.

(N) ~~(L)~~ It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

(O) ~~(M)~~ In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(P) ~~(N)~~ Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(Q) ~~(O)~~ Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(R) ~~(P)~~ Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

(S) ~~(Q)~~ Check valves or anti-drain valves are required for all irrigation systems.

(T) ~~(R)~~ Narrow or irregularly shaped Areas of, including turf, less than ~~ten~~ eight (108) feet in width in any direction shall be irrigated with subsurface irrigation or ~~low volume irrigation system other technology that produces no runoff or overspray.~~

(U) ~~(S)~~ Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may

include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(~~I~~H). Prevention of overspray and runoff must be confirmed during the irrigation audit.

(V) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

(A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

(B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

(C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees.

(D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
2. the plant factor of the higher water using plant is used for calculations.

(E) Individual hydrozones that mix high and low water use plants shall not be permitted.

(F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.

(b) The irrigation design plan, at a minimum, shall contain:

- (1) location and size of separate water meters for landscape;
- (2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
- (3) static water pressure at the point of connection to the public water supply;
- (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- (5) recycled water irrigation systems as specified in Section 492.14;
- (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
- (7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.8 Grading Design Plan.

(a) For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.

(1) The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

- (A) height of graded slopes;
- (B) drainage patterns;
- (C) pad elevations;
- (D) finish grade; and
- (E) stormwater retention improvements, if applicable.

(2) To prevent excessive erosion and runoff, it is highly recommended that project applicants:

- (A) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
- (B) avoid disruption of natural drainage patterns and undisturbed soil; and
- (C) avoid soil compaction in landscape areas.

(3) The grading design plan shall contain the following statement: “I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan” and shall bear the signature of a licensed professional as authorized by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.9 Certificate of Completion.

(a) The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:

(1) project information sheet that contains:

- (A) date;
- (B) project name;
- (C) project applicant name, telephone, and mailing address;
- (D) project address and location; and
- (E) property owner name, telephone, and mailing address;

(2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

(A) where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification;

(3) irrigation scheduling parameters used to set the controller (see Section 492.10);

(4) landscape and irrigation maintenance schedule (see Section 492.11);

(5) irrigation audit report (see Section 492.12); and

(6) soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 492.5).

(b) The project applicant shall:

(1) submit the signed Certificate of Completion to the local agency for review;

(2) ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

(c) The local agency shall:

(1) receive the signed Certificate of Completion from the project applicant;

(2) approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.10 Irrigation Scheduling.**

(a) For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

- (1) Irrigation scheduling shall be regulated by automatic irrigation controllers.
- (2) Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.
- (3) For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.
- (4) Parameters used to set the automatic controller shall be developed and submitted for each of the following:
  - (A) the plant establishment period;
  - (B) the established landscape; and
  - (C) temporarily irrigated areas.
- (5) Each irrigation schedule shall consider for each station all of the following that apply:
  - (A) irrigation interval (days between irrigation);
  - (B) irrigation run times (hours or minutes per irrigation event to avoid runoff);
  - (C) number of cycle starts required for each irrigation event to avoid runoff;
  - (D) amount of applied water scheduled to be applied on a monthly basis;
  - (E) application rate setting;
  - (F) root depth setting;
  - (G) plant type setting;
  - (H) soil type;
  - (I) slope factor setting;
  - (J) shade factor setting; and
  - (K) irrigation uniformity or efficiency setting.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.11 Landscape and Irrigation Maintenance Schedule.**

- (a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- (b) A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing and obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.

(d) A project applicant is encouraged to implement sustainable Best Practices ~~or environmentally-friendly practices~~ for overall all landscape maintenance activities.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.12 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) All landscape irrigation audits shall be conducted by a local agency irrigation auditor or a third party certified landscape irrigation auditor that is not the designer or installer of the landscape.

(b) For new construction and rehabilitated landscape projects installed after January 1, 2010, as described in Section 490.1:

(1) the project applicant shall submit an irrigation audit report with the Certificate of Completion to the local agency that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule;

(2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.13 Irrigation Efficiency.**

(a) For the purpose of determining Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.8571 for residential areas and 0.92 for non-residential areas. Irrigation systems shall be designed, maintained, and managed to meet or exceed a site-wide ~~average~~ landscape irrigation efficiency of 0.8571 for residential areas and 0.92 for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.14 Recycled Water.**

(a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted as described in Section 492.14(b).

(b) Irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.

(c) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

(d) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for Special Landscape Areas shall not exceed 1.0.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.15 Graywater Systems.**

(a) Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards.



### **§ 492.165 Stormwater Management and Rainwater Retention.**

(a) Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.

(b) Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans.

(c) All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to § 492.6(a)(3).

(d) It is recommended that project also incorporate any of the following elements to improve on-site stormwater retention:

- Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
- Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
- Incorporate pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
- Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water retention.
- Incorporate rain gardens, cisterns, and other rain harvesting or catchment.
- Incorporate infiltration beds, swales, basins and drywells to retain stormwater and increase percolation into the soil.
- Consider constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants.

~~(e) Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.~~

(e) It is strongly recommended that retention and infiltration capacity sufficient to prevent runoff from roof surfaces and the landscape area from either the one inch, 24-hour rain event or the 85<sup>th</sup> percentile, 24-hour rain event, and such additional capacity, if any, as may be required by any applicable local or regional regulation, be provided.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### **§ 492.176 Public Education.**

(a) Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.

(1) A local agency or water supplier/purveyor shall provide information to owners of permitted renovations and new single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes based on a water budget.

(b) Model Homes. All model homes ~~shall be landscaped and that are landscaped shall~~ use signs and written information to demonstrate the principles of water efficient landscapes described in this ordinance.

(1) Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

(2) Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes. Information available shall include detailed specifications on how to hire trained and licensed landscape architects, contractors, designers and maintenance workers and the benefits of using such professionals.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.187 Environmental Review.**

(a) The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

Note: Authority cited: Section 21082, Public Resources Code. Reference: Sections 21080, 21082, Public Resources Code.

**§ 493. Provisions for Existing Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.1 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) This section, 493.1, shall apply to all existing landscapes that were installed before ~~January 1, 2010~~ November 1, 2015 and are over one acre in size.

(1) For all landscapes in 493.1(a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as:  $MWA = (0.8)(ET_o)(LA)(0.62)$ .

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.2 Water Waste Prevention.**

(a) Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.

(b) Restrictions regarding overspray and runoff may be modified if:

(1) the landscape area is adjacent to permeable surfacing and no runoff occurs; or

(2) the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

Note: Authority cited: Section 65594, Government Code. Reference: Section 65596, Government Code.

**§ 494. Effective Precipitation.**

(a) A local agency may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

$MAWA = (ET_o - Eppt) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$  for residential areas.

$MAWA = (ET_o - Eppt) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$  for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 495. Reporting.**

(a) Local agencies responsible for administering the ordinance shall report on implementation and enforcement by December 31, 2015. Subsequently, reporting will be due by January 31<sup>st</sup> of each year.

Reports should be submitted as follows.

(b) Local agencies are to address the following:

- (1) Define the reporting period. For the initial reporting, local agencies are encouraged to report as far back as records for implementation of their ordinances allow. At a minimum, the reporting period shall commence on November 1, 2015. The end of the reporting period shall be no sooner than December 15, 2015. In subsequent years, reporting will be for the calendar year.
- (2) State if using a locally modified Water Efficient Landscape Ordinance (WELO) or the MWELO. If using a locally modified WELO, how is it different than MWELO, and are there any exemptions specified?
- (3) State the entity responsible for implementing the ordinance.
- (4) State number and types of projects subject to the ordinance during the specified reporting period.
- (5) State the total area (in square feet or acres) subject to the ordinance over the reporting period, if available.
- (6) Provide the number of new housing starts, new commercial projects, and landscape retrofits during the reporting period.
- (7) Describe the procedure for review of projects subject to the ordinance.
- (8) Describe actions taken to verify compliance. Is a plan check performed; if so, by what entity? Is a site inspection performed; if so, by what entity? Is a post-installation audit required; if so, by whom?
- (9) Describe enforcement measures.
- (10) Explain challenges to implementing and enforcing the ordinance.
- (11) Describe educational and other needs to properly apply the ordinance.

## Appendices.

Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>ALAMEDA</b>													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
<b>ALPINE</b>													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
<b>AMADOR</b>													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
<b>BUTTE</b>													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
<b>CALAVERAS</b>													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
<b>COLUSA</b>													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
<b>CONTRA COSTA</b>													
<del>Benicia</del>	<del>1.3</del>	<del>1.4</del>	<del>2.7</del>	<del>3.8</del>	<del>4.9</del>	<del>5.0</del>	<del>6.4</del>	<del>5.5</del>	<del>4.4</del>	<del>2.9</del>	<del>1.2</del>	<del>0.7</del>	<del>40.3</del>
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
<b>DEL NORTE</b>													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
<b>EL DORADO</b>													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
<b>FRESNO</b>													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8
<b>GLENN</b>													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
<b>HUMBOLDT</b>													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
<b>IMPERIAL</b>													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
<b>INYO</b>													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
<b>KERN</b>													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9

**Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.**

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>KINGS</b>													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7
<b>LAKE</b>													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
<b>LASSEN</b>													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
<b>LOS ANGELES</b>													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
<b>MADERA</b>													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
<b>MARIN</b>													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
<b>MARIPOSA</b>													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
<b>MENDOCINO</b>													

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
<b>MERCED</b>													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5
<b>MODOC</b>													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
<b>MONO</b>													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
<b>MONTEREY</b>													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
<b>NAPA</b>													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
<b>NEVADA</b>													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
<b>ORANGE</b>													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
<b>PLACER</b>													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2
<b>PLUMAS</b>													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
<b>RIVERSIDE</b>													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	<b>3.1</b>	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9
<b>RIVERSIDE</b>													
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Desert	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
<b>SACRAMENTO</b>													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
<b>SAN BENITO</b>													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
<b>SAN BERNARDINO</b>													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2



<b>SAN DIEGO</b>													
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0
<b>SAN FRANCISCO</b>													
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1
<b>SAN JOAQUIN</b>													
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0
<b>SAN JOAQUIN</b>													
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5
<b>SAN LUIS OBISPO</b>													
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1
<b>SAN MATEO</b>													
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
<b>SANTA BARBARA</b>													
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6

<b>SANTA CLARA</b>													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
<b>SANTA CRUZ</b>													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
<b>SHASTA</b>													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8
<b>SIERRA</b>													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
<b>SISKIYOU</b>													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
<b>SOLANO</b>													
<u>Benicia</u>	<u>1.3</u>	<u>1.4</u>	<u>2.7</u>	<u>3.8</u>	<u>4.9</u>	<u>5.0</u>	<u>6.4</u>	<u>5.5</u>	<u>4.4</u>	<u>2.9</u>	<u>1.2</u>	<u>0.7</u>	<u>40.3</u>
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
<b>SONOMA</b>													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
<b>STANISLAUS</b>													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7

Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
<b>SUTTER</b>													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
<b>TEHAMA</b>													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
<b>TRINITY</b>													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
<b>TULARE</b>													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
<b>TUOLUMNE</b>													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
<b>VENTURA</b>													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
<b>YOLO</b>													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
<b>YUBA</b>													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

\* The values in this table were derived from:

- 1) California Irrigation Management Information System (CIMIS);
- 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
- 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922,
- 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

**Appendix B – Sample Water Efficient Landscape Worksheet.**

**WATER EFFICIENT LANDSCAPE WORKSHEET**

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.  
Please complete all sections (A and B) of the worksheet.

**SECTION A. HYDROZONE INFORMATION TABLE**

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
<b>Total</b>				<b>100%</b>

**\* Hydrozone**  
*HW = High Water Use Plants*  
*MW = Moderate Water Use Plants*  
*LW = Low Water Use Plants*

**\*\*Irrigation Method**  
*MS = Micro-spray*  
*S = Spray*  
*R = Rotor*  
*B= Bubbler*  
*D= Drip*  
*O = Other*

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1618 : PARTICIPATION IN METROPOLITAN WATER

**SECTION B. WATER BUDGET CALCULATIONS**

**Section B1. Maximum Applied Water Allowance (MAWA)**

The project's Maximum Applied Water Allowance shall be calculated using these equations:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
- ETo = Reference Evapotranspiration from Appendix A (inches per year)
- 0.5, 0.47 = ET Adjustment Factor (ETAF) for residential and non-residential areas, respectively
- LA = Landscaped Area includes Special Landscape Area (square feet)
- 0.62 = Conversion factor (to gallons per square foot per year)
- SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
- 0.3, 0.5, 0.6 = the additional ET Adjustment Factors for Special Landscape Area in residential and non-residential areas, respectively (1.0-0.5=0.5), (1.0-0.4=0.6) (1.0-0.7=0.3)

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Effective Precipitation (Eppt)**

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Section B2. Estimated Total Water Use (ETWU)**

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ET_o)(0.62) \left( \frac{PF \times HA}{IE} + SLA \right)$$

where:

- ETWU = Estimated total water use per year (gallons per year)
- ET<sub>o</sub> = Reference Evapotranspiration (inches per year)
- PF = Plant Factor from WUCOLS (see Definitions)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per square foot)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas, averaged site-wide)

**Hydrozone Table for Calculating ETWU**

Please complete the hydrozone table(s). Use as many tables as necessary.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)	Area (HA) (square feet)	PF x HA (square feet)
			Sum	
	SLA			

**Estimated Total Water Use = \_\_\_\_\_ gallons**

Show calculations.

## Appendix C – Sample Certificate of Completion.

### CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

#### PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

#### Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

#### Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

#### Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

\_\_\_\_\_

Property Owner Signature

Date

#### Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency \_\_\_\_\_
2. Date the Landscape Documentation Package was approved by the local agency \_\_\_\_\_
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor \_\_\_\_\_

**PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE**

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

\*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

**PART 3. IRRIGATION SCHEDULING**

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

**PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE**

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

**PART 5. LANDSCAPE IRRIGATION AUDIT REPORT**

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

**PART 6. SOIL MANAGEMENT REPORT**

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per ordinance Section 492.65.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.65.





## Report to City Council

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**TO:** Mayor and City Council Acting in its Capacity as President and Members of the Board of Directors of the Moreno Valley Community Services District (CSD)

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONE D

---

### **RECOMMENDED ACTION**

#### **Recommendations:**

1. Authorize participation in Metropolitan Water District's (MWD) Turf Removal Program for a rebate of up to \$529,058.00 for the benefit of Community Services District (CSD) Zone D landscape maintenance district.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement (2015/16 Agreement) for Project No. DSG-2/12-13 for Landscape Maintenance Services (First Amendment) with Mariposa Landscape Services, Inc., 15529 Arrow Highway, Irwindale, CA 91706 to: 1) replace turf with drought tolerant landscape and irrigation materials (Additional Work) in those areas listed on Exhibits A and B of the First Amendment and 2) increase the frequency of routine landscape maintenance (Base Work) for Tract 20715.
3. Approve a budget adjustment to the CSD Zone D budget as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Mariposa Landscapes, Inc., which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, which may include future Amendments to capture unforeseen costs associated with the turf conversion that may be performed to receive available rebate allowance, and

the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.

5. Authorize the issuance of a change order for fiscal year 2015/16 to Mariposa Landscapes, Inc. from the current not-to-exceed amount of \$279,888.44 to a new not-to-exceed amount of \$779,355.21 for an increase of \$499,466.77 (\$498,243.00 for Additional Work services and an annual increase of \$1,223.77 for Base Work services).
6. Authorize the City Manager to execute subsequent change orders up to a not-to-exceed 10% contingency amount of \$49,824.30 should the need arise.

## **SUMMARY**

This report recommends approval of the CSD's participation in Metropolitan Water District's (MWD) Turf Removal Rebate program, an amendment to the Independent Contractor Agreement (First Amendment) with Mariposa Landscapes, Inc. (Contractor) to complete the project, and the corresponding budget adjustments.

In response to the drought and the Governor's Executive Order B-29-15, an application was submitted to participate in MWD's Turf Removal Rebate program for Community Services District (CSD) Zone D's landscape maintenance district. MWD will rebate the City \$2 for every square foot of turf removed and replaced with drought tolerant landscaping. Where necessary, the irrigation system will be modified to drip irrigation to optimize water usage.

When complete, twenty-three Zone D residential housing tracts will benefit from the project and, 264,529 square feet of turf in the public landscaping will be removed and replaced with California Friendly Landscape. Attachment 2 is a map of the areas proposed for the project. The rebate is expected to cover the full cost of the improvements and may include recovery of eligible staff costs to manage the project.

Completion of the project will demonstrate the CSD's commitment to conserve water, reduce ongoing water expenses for the landscape maintenance district, and modernize the public landscaping within these areas.

## **DISCUSSION**

### *Drought Restrictions*

On April 1, 2015, the Governor issued Executive Order B-29-15 in response to the drought. The Executive Order "prohibits irrigation with potable water of ornamental turf on public street medians". On April 2, 2015, irrigation to the turf of these medians was turned off.

In response to the drought, and in compliance with water restrictions imposed by the State, Eastern Municipal Water District (EMWD) has been implementing water

restrictions. As of May 8, 2015, EMWD was in Stage 4a of its Water Shortage Contingency Plan. Stage 4a reduces outdoor water budgets by 10% of the monthly allocated billing unit. On September 30, 2015, EMWD moved to Stage 4b. Stage 4b reduces outdoor water budgets by an additional 20%, for a 30% total reduction. However, EMWD is requesting that agencies reduce outdoor use of potable water by 50%.

#### *Rebate Submission*

Because turf is a major consumer of water, an application for the removal of turf in parkways and medians within the CSD's Zone D landscape maintenance district was submitted to MWD for its Turf Removal Rebate program. At the time, the program offered a \$2 rebate for every square foot of turf replaced with drought tolerant landscaping. The application was submitted in April, 2015 to replace 264,529 square feet of turf. On August 8, 2015, the CSD received notification of its preauthorization of a rebate for up to \$529,058.00, pending completion of the program requirements.

The turf must be replaced with drought tolerant landscaping and the project must be completed within 120 days of notification of preauthorization (December 8, 2015). MWD may allow an extension to February 8, 2015, if necessary, depending upon the circumstances.

#### *First Amendment to the Agreement*

After a competitive proposal process in June of 2012, the CSD and Contractor entered into an Independent Contractor Agreement (Agreement) to provide landscape maintenance services to the public landscaped parkways and medians of the residential housing tracts within Zone D. Services include routine landscape maintenance ("Base Work") and additional services as needed to include replants, mulch, irrigation and other landscape related services (Additional Work). The terms and provisions of the Agreement, including the costs for the Base Work and predetermined unit costs for Additional Work, were extended through fiscal year (FY) 2015/16 (2015/16 Agreement).

A proposal was solicited from the Contractor to replace 264,529 square feet of turf with drought tolerant landscaping and irrigation within the public landscape of certain Zone D tracts. Work includes, but is not limited to removing turf, modifying the irrigation system and installing new landscape material. The landscaping will be drought tolerant and consistent with the California Friendly Landscape guidelines as well as the State's proposed Model Water Efficient Landscape Ordinance. The irrigation will be modified to drip irrigation to optimize water use for the new drought tolerant landscaping and to reduce the ongoing amount of water necessary to support the plant material. The cost proposed for these services is \$498,243.00 and is consistent with the predetermined unit costs in the Agreement.

Attached is the proposed First Amendment which amends the 2015/16 Agreement to include Additional Work services to remove the turf and plant materials and replace it with drought tolerant landscaping. Removal of the turf and modification of the irrigation

system will begin after approval of the Amendment. Installation of the drought tolerant landscaping will be based primarily on weather conditions. The ideal planting time is during cooler weather when the plants are best suited for survival and temperatures are cooler to limit water evaporation. However, the project must be completed by December 8, 2015, unless MWD grants an extension.

Additionally, the First Amendment increases the frequency of routine landscape maintenance for the public landscaping associated with Tract 20715 (northwest corner of Kitching Street and Krameria Avenue). It is proposed to increase the service level from reduced service to standard service. The reduced service schedule provides landscape maintenance four times a year, with monthly litter removal and irrigation monitoring. The standard service schedule provides landscape maintenance one time every four weeks, with weekly litter removal and irrigation monitoring. Sufficient revenue is received from Tract 20715's annual parcel charge to cover the increase in cost associated with this change (an annual increase of \$1,223.77).

## **ALTERNATIVES**

1. Approve and authorize the recommended actions as presented in this staff report. *By selecting this alternative, the turf and plant material in the public landscape areas of certain Zone D tracts will be replaced with drought tolerant landscaping as part of MWD's Turf Removal Rebate program. Additionally, the public landscaping for Tract 20715 will receive an increase in the frequency of routine landscape maintenance service.*

2. Do not approve nor authorize the recommended actions as presented in this staff report. *By selecting this alternative, the public landscape of certain Zone D tracts will not be replaced with drought tolerant landscaping and will the CSD will not be able to meet program requirements for MWD's Turf Removal Rebate program. Additionally, Tract 20715 will not receive an increase in the frequency of routine landscape maintenance service.*

## **FISCAL IMPACT**

The CSD Zone D landscape maintenance district is funded through a parcel charge collected on the property tax bills. The parcel charge is levied on those properties that receive benefit from the public landscaping. The program funds the landscape maintenance of certain parkways and medians.

Participation in MWD's Turf Removal Rebate program will have no impact on the General Fund. MWD will provide reimbursement up to \$529,058.00 for eligible costs associated with the project. Additional Work services included within the First Amendment and recovery of costs for staff time to manage the project are eligible for reimbursement from MWD's Turf Removal Rebate program. The rebate has been approved for reimbursement through the rebate contingent upon completion of the program's requirements.

The proposed First Amendment includes a \$498,243.00 increase in compensation for Additional Work services to complete the project and an annual \$1,223.77 increase in compensation for Base Work to increase the frequency of landscape maintenance service for Tract 20715. Funding for the increase in service level of landscape maintenance for Tract 20715 will come from a parcel charge levied on Tract 20715 properties.

<b>Summary First Amendment to 2015/16 Agreement</b>		
<b>2015/16 Agreement Amount</b>		\$279,888.44
First Amendment Additional Work (Project)	\$498,243.00	
Base Work (Tract 20715 Service Level)	<u>\$1,223.77</u>	
First Amendment		\$499,466.77
<b>Total 2015/16 Agreement</b>		<b><u>\$779,355.21</u></b>
<i>Breakdown of Base Work and Additional Work</i>		
2015/16 Base Work	\$197,188.44	
First Amendment Base Work	<u>\$1,232.77</u>	
Total Base Work		\$198,412.21
2015/16 Additional Work	\$82,700.00	
First Amendment Additional Work	<u>\$498,243.00</u>	
Total 2015/16 Additional Work		\$580,943.00
<b>Total 2015/16 Agreement</b>		<b><u>\$779,355.21</u></b>

Due to the age of the facilities within these areas, a 10% contingency has been included within this report to cover unforeseen circumstances which may be discovered while completing the project. The rebate is anticipated to cover the full cost of the project. It is anticipated that \$548,067.30, which includes a 10% contingency, is necessary to complete the project.

<b>District</b>	<b>First Amendment Contract Amount</b>	<b>10% Contingency</b>	<b>Square Footage of Turf</b>	<b>Rebate (up to \$2/sq. ft.)</b>	<b>Use of Fund Balance</b>
CSD Zone D	\$498,243.00	\$49,824.30	264,529	\$529,058.00	\$19,009.30

This project was not anticipated as part of the FY 2015/16 budget and requires a budget adjustment. Funds are available in the CSD Zone D fund balance to cover the upfront costs of the project. Provided terms of the rebate have been fully satisfied, the rebate will cover the full cost of the project and replenish Zone D's fund balance. It is anticipated that reimbursement of funds will be received approximately 120 days after

the request is submitted.

*Apportions/Budget Adjustments*

Description	Fund	GL Account No.	Type (Rev/Exp.)	FY 15/16 Budget	Proposed Adjustments	FY 15/16 Amended Budget
Amendment + 10% Contingency	Zone D	5111-70-79-25704-620910	Exp.	\$339,900	\$529,058	\$868,958
Rebate	Zone D	5111-70-79-25704-589900	Rev.	\$0	\$529,058	\$529,058

**NOTIFICATION**

Drought tolerant landscape renovation signs have been placed in the turf parkways and median of the twenty-three Zone D residential tracts.

**PREPARATION OF STAFF REPORT**

Prepared By:  
Sharon Sharp,  
Senior Management Analyst

Department Head Approval:  
Ahmad Ansari, P.E.,  
Public Works Director/City Engineer

Concurred By:  
Candace Cassel,  
Special Districts Program Manager

**CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Community Image, Neighborhood Pride and Cleanliness.** Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

**ATTACHMENTS**

1. First Amendment to the 2015/16 Agreement
2. Map of Affected Zone D Tracts
3. Governor's Executive Order B-29-15
4. EMWD's Water Shortage Contingency Plan
5. State of California's Proposed Water Efficient Landscape Ordinance

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/05/15 9:20 AM
City Attorney Approval	<u>✓ Approved</u>	10/05/15 10:33 AM

City Manager Approval

✓ Approved

10/05/15 2:18 PM

**FIRST AMENDMENT TO THE  
2015/16 INDEPENDENT CONTRACTOR AGREEMENT  
RFP NO. DSG-2/12-13  
PROJECT NO. DSG-2/12-13  
MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE D  
MAINTENANCE OF PARKWAY & MEDIAN  
LANDSCAPING AND IRRIGATION**

This First Amendment to the Agreement is by and between the MORENO VALLEY COMMUNITY SERVICES DISTRICT, a municipal corporation, hereinafter referred to as "District" and Mariposa Landscapes, Inc., hereinafter referred to as "Contractor". This First Amendment is made and entered into effective on the date the City Manager signs this Amendment.

RECITALS:

Whereas, the District and Contractor entered into an Agreement, entitled "INDEPENDENT CONTRACTOR AGREEMENT RFP NO. DSG-2/12-13 PROJECT NO. SD-2015-01 MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE D MAINTENANCE OF PARKWAY & MEDIAN LANDSCAPING AND IRRIGATION" dated July 10, 2012 for maintenance of the District's parkway and median landscaping and irrigation systems in Zone D, hereinafter referred to as "Original Agreement".

Whereas, a First Amendment to the Original Agreement was approved on June 20, 2013 to 1) convert 3,670 sq. ft. of turf into planter materials (Tract 21616) and decrease compensation for routine maintenance ("Base Work") by \$1,498.44 (a decrease from \$155,784.00 to \$154,285.56 for Base Work) and 2) increase services for irrigation repairs and replants ("Additional Work") and increase compensation by \$10,100.00 (an increase from \$7,100.00 to \$17,200.00 for Additional Work) for fiscal year (FY) 2012/13.

Whereas, a First Extension Agreement was approved on July 9, 2013 to 1) extend the terms and provisions of the Original Agreement through June 30, 2014, 2) amend the Original Agreement to increase the frequency of irrigator inspection services to a bi-monthly (every two



*First Amendment to the 2015/16 Independent Contractor Agreement*  
 RFP NO. DSG-2/12-13 PROJECT NO. DSG-2/12-13 MORENO VALLEY COMMUNITY SERVICES  
 DISTRICT ZONE D MAINTENANCE OF PARKWAY & MEDIAN LANDSCAPING AND IRRIGATION

week) schedule and 3) increase compensation for the Base Work by a 1.93% CPI adjustment (an increase from \$154,285.56 to \$157,263.27 for Base Work) for FY 2013/14.

Whereas, a Second Amendment to the Original Agreement was approved on October 10, 2013 to 1) add approximately 228,890 sq. ft. of landscape area (Zone D standard service areas) to be maintained on a routine basis (Base Work), 2) increase the frequency of routine parkway and median maintenance (Base Work) for certain areas and 3) increase Base Work compensation for the added landscape area and areas that increased service frequency at a negotiated rate of \$0.011 per. sq. ft., for a total increase of \$28,137.01 for the remaining 9 months of FY 2013/14 (a total increase from \$157,263.27 to \$185,400.28 for Base Work), 4) increase services for irrigation repairs and replants ("Additional Work") and 5) increase compensation for Additional Work for reinvestment, mulch and irrigation repairs by \$81,014.00 (an increase from \$20,000.00 to \$101,014.00 for Additional Work).

Whereas, a Second Extension Agreement was approved on June 23, 2014 to 1) extend all of the terms and provisions of the Original Agreement, as amended for 12 months of Base Work, 2) add 18,253 sq. ft. of landscape area to be maintained on a routine basis (Base Work), (Tract 32715) for 5 months, 3) increase compensation for Base Work by \$10,382.85 (an increase from \$185,400.28 to \$195,783.13) and 4) decrease the amount of reinvestment for Additional Work for irrigation repairs and the compensation for Additional Work by \$59,814.00 (a decrease from \$101,014.00 to \$41,200.00) for FY 2014/15.

Whereas, a Third Amendment to the Original Agreement was approved on November 25, 2014 to 1) increase the frequency of service for Tract 20715 for 8 months of service, 2) increase the compensation for Base Work by \$816.08 (an increase from \$195,783.13 to \$196,599.21), 3) increase Additional Work for reinvestments by \$48,945.00 (an increase from \$41,200.00 to \$90,145.00) for FY 2014/15.

*First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. DSG-2/12-13 PROJECT NO. DSG-2/12-13 MORENO VALLEY COMMUNITY SERVICES  
DISTRICT ZONE D MAINTENANCE OF PARKWAY & MEDIAN LANDSCAPING AND IRRIGATION*

Whereas, landscape maintenance services as provided under the Second Extension Agreement, as amended, were sufficiently performed.

Whereas, the Original Agreement expired on June 30, 2015 and the District and Contractor entered into a new Agreement, dated August 24, 2015, which extended all of the terms and provisions of the Original Agreement, as amended for 12 months of Base Work, through June 30, 2016 ("New Agreement").

Whereas, it is desirable to amend the Agreement to 1) replace turf with drought tolerant landscape materials in certain parkways and medians, as more fully described in Exhibit B, attached hereto ("Additional Work") and 2) increase the frequency of routine maintenance for Tract 20715 for 12 months of service and increase compensation for Base Work by \$1,223.77 (an increase from \$197,188.44 to \$198,412.21 for Base Work).

#### SECTION 1. FIRST AMENDMENT TO AGREEMENT

The New Agreement is hereby amended as follows:

1.1 Increase Additional Work services to replace turf with drought tolerant landscape materials in certain parkways and medians as more fully detailed in Exhibit B.

1.2 Increase the frequency of routine maintenance service for Tract 20715 from reduced to standard level of service, per the CSD Zone D General Service Level Guidelines (General Management Policy # 2.30).

1.3 Increase compensation for Additional Work, as listed in Exhibit A, by \$498,243.00 (an increase from \$82,700.00 to \$580,943.00).

1.4 Increase compensation for Base Work by \$1,223.77 (an increase from \$197,188.44 to \$198,412.21).

*First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. DSG-2/12-13 PROJECT NO. DSG-2/12-13 MORENO VALLEY COMMUNITY SERVICES  
DISTRICT ZONE D MAINTENANCE OF PARKWAY & MEDIAN LANDSCAPING AND IRRIGATION*

**SECTION 2. AGREEMENT**

2.1 Except as otherwise specifically provided in this First Amendment, all other terms and conditions of the New Agreement shall remain in full force and effect.

**SIGNATURE PAGE TO FOLLOW**

**Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL**

First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. DSG-2/12-13 PROJECT NO. DSG-2/12-13 MORENO VALLEY COMMUNITY SERVICES  
DISTRICT ZONE D MAINTENANCE OF PARKWAY & MEDIAN LANDSCAPING AND IRRIGATION

IN WITNESS HEREOF, the parties have each caused their authorized representative to execute this First Amendment to the Agreement.

Moreno Valley Community Services District

Contractor: Landcare.

By: \_\_\_\_\_  
City Manager, Acting in the capacity of  
District Manager to the Moreno  
Valley Community Services District

By: \_\_\_\_\_  
  
Title: \_\_\_\_\_  
(President of Vice President)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

INTERNAL USE ONLY

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(Corporate Secretary)

\_\_\_\_\_  
Date

Date: \_\_\_\_\_

RECOMMENDED FOR APPROVAL:

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Date

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

Standard Service Tracts <sup>1</sup>						
Tract Number	Planter Sq. Ft.	Turf Sq. Ft.	2015/16 Monthly Contract Cost	2015/16 Annual Contract Cost	Turf Conversion Cost	2015/16 Total Base & Turf Conversion Contract Amt
12305	722	0	\$ 7.94	\$ 95.30	\$ -	\$ 95.30
12773	13,806	0	\$ 151.87	\$ 1,822.39	\$ -	\$ 1,822.39
12902	7,344	0	\$ 80.78	\$ 969.41	\$ -	\$ 969.41
14387/12268	2,712	0	\$ 29.83	\$ 357.98	\$ -	\$ 357.98
16769	10,700	0	\$ 117.70	\$ 1,412.40	\$ -	\$ 1,412.40
18283	11,388	0	\$ 125.27	\$ 1,503.22	\$ -	\$ 1,503.22
18512/21322	18,585	41,355	\$ 659.34	\$ 7,912.08	\$ 79,272.00	\$ 87,184.08
18784/20906	30,432	0	\$ 334.75	\$ 4,017.02	\$ -	\$ 4,017.02
19032	9,132	0	\$ 100.45	\$ 1,205.42	\$ -	\$ 1,205.42
19141	5,838	0	\$ 64.22	\$ 770.62	\$ -	\$ 770.62
19142	3,950	0	\$ 43.45	\$ 521.40	\$ -	\$ 521.40
19210	9,270	0	\$ 101.97	\$ 1,223.64	\$ -	\$ 1,223.64
19233	4,960	0	\$ 54.56	\$ 654.72	\$ -	\$ 654.72
19474	7,240	0	\$ 79.64	\$ 955.68	\$ -	\$ 955.68
19496	3,600	0	\$ 39.60	\$ 475.20	\$ -	\$ 475.20
19509	18,328	0	\$ 201.61	\$ 2,419.30	\$ -	\$ 2,419.30
19529	3,330	0	\$ 36.63	\$ 439.56	\$ -	\$ 439.56
19533	7,400	0	\$ 81.40	\$ 976.80	\$ -	\$ 976.80
19541	0	5,325	\$ 58.58	\$ 702.90	\$ 10,608.00	\$ 11,310.90
19675	2,550	0	\$ 28.05	\$ 336.60	\$ -	\$ 336.60
19852	28,800	0	\$ 316.80	\$ 3,801.60	\$ -	\$ 3,801.60
19912	3,400	8,350	\$ 129.25	\$ 1,551.00	\$ 16,350.00	\$ 17,901.00
19937	10,370	10,520	\$ 229.79	\$ 2,757.48	\$ 21,847.00	\$ 24,604.48
20120	250	3,500	\$ 41.25	\$ 495.00	\$ 6,588.00	\$ 7,083.00
20197	13,680	0	\$ 150.48	\$ 1,805.76	\$ -	\$ 1,805.76
20404	36,138	0	\$ 397.52	\$ 4,770.22	\$ -	\$ 4,770.22
20718	23,004	0	\$ 253.04	\$ 3,036.53	\$ -	\$ 3,036.53
20715 <sup>2</sup>	28,740	22,510	\$ 563.75	\$ 6,765.00	\$ 40,842.00	\$ 47,607.00
20869	2,100	0	\$ 23.10	\$ 277.20	\$ -	\$ 277.20
21345	6,600	0	\$ 72.60	\$ 871.20	\$ -	\$ 871.20
21597	910	32,320	\$ 365.53	\$ 4,386.36	\$ 59,522.00	\$ 63,908.36
21616	23,528	0	\$ 258.81	\$ 3,105.70	\$ -	\$ 3,105.70
21806	0	5,975	\$ 65.73	\$ 788.70	\$ 10,129.00	\$ 10,917.70
22093	8,873	0	\$ 97.60	\$ 1,171.24	\$ -	\$ 1,171.24
22371	17,844	0	\$ 196.28	\$ 2,355.41	\$ -	\$ 2,355.41
22889	16,438	0	\$ 180.82	\$ 2,169.82	\$ -	\$ 2,169.82
22999	1,404	1,800	\$ 35.24	\$ 422.93	\$ 3,028.00	\$ 3,450.93

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

<b>Standard Service Tracts (cont.)<sup>1</sup></b>						
<b>Tract Number</b>	<b>Planter Sq. Ft.</b>	<b>Turf Sq. Ft.</b>	<b>2015/16 Monthly Contract Cost</b>	<b>2015/16 Annual Contract Cost</b>	<b>Turf Conversion Cost</b>	<b>2015/16 Total Contract Amt</b>
30967	18,013	0	\$ 198.14	\$ 2,377.72	\$ -	\$ 2,377.72
31129	13,580	0	\$ 149.38	\$ 1,792.56	\$ -	\$ 1,792.56
31257	26,686	0	\$ 293.55	\$ 3,522.55	\$ -	\$ 3,522.55
31268	7,058	0	\$ 77.64	\$ 931.66	\$ -	\$ 931.66
31269	7,450	0	\$ 81.95	\$ 983.40	\$ -	\$ 983.40
31269-1	43,723	0	\$ 480.95	\$ 5,771.44	\$ -	\$ 5,771.44
31284	28,321	0	\$ 311.53	\$ 3,738.37	\$ -	\$ 3,738.37
31424	8,750	0	\$ 96.25	\$ 1,155.00	\$ -	\$ 1,155.00
31591	16,445	0	\$ 180.90	\$ 2,170.74	\$ -	\$ 2,170.74
32625	17,826	0	\$ 196.09	\$ 2,353.03	\$ -	\$ 2,353.03
32715	30,968	0	\$ 340.65	\$ 4,087.78	\$ -	\$ 4,087.78
<b>Subtotal:</b>	<b>612,186</b>	<b>131,655</b>	<b>\$ 8,182.25</b>	<b>\$ 98,187.01</b>	<b>\$ 248,186.00</b>	<b>\$ 346,373.01</b>

Reduced Service Tracts <sup>1</sup>						
Tract Number	Planter Sq Ft.	Turf Sq Ft.	2015/16 Monthly Contract Cost	2015/16 Annual Contract Cost	Turf Conversion Cost	2015/16 Total Contract Amt
10191/18468	10,871	0	\$ 97.85	\$ 1,174.20	\$ -	1,174.20
11848	9,066	0	\$ 81.54	\$ 978.48	\$ -	978.48
13576/19080/19081	20,291	0	\$ 182.42	\$ 2,189.04	\$ -	2,189.04
13585	2,000	4,600	\$ 213.03	\$ 2,556.36	\$ 8,769.00	11,325.36
15387	9,049	0	\$ 81.54	\$ 978.48	\$ -	978.48
15433	24,161	0	\$ 218.13	\$ 2,617.56	\$ -	2,617.56
16768	16,281	0	\$ 146.78	\$ 1,761.36	\$ -	1,761.36
16770	5,830	0	\$ 51.98	\$ 623.76	\$ -	623.76
17033	9,990	0	\$ 89.70	\$ 1,076.40	\$ -	1,076.40
17176	21,097	0	\$ 190.61	\$ 2,287.32	\$ -	2,287.32
17334	37,680	0	\$ 339.43	\$ 4,073.16	\$ -	4,073.16
17387	4,384	0	\$ 39.75	\$ 477.00	\$ -	477.00
17457	3,444	0	\$ 33.64	\$ 403.68	\$ -	403.68
17867	13,778	0	\$ 124.35	\$ 1,492.20	\$ -	1,492.20
18930	1,000	37,849	\$ 349.62	\$ 4,195.44	\$ 72,149.00	76,344.44
19143	4,864	0	\$ 43.83	\$ 525.96	\$ -	525.96
19208	17,680	0	\$ 159.01	\$ 1,908.12	\$ -	1,908.12
19363	13,320	0	\$ 120.28	\$ 1,443.36	\$ -	1,443.36
19434	13,242	0	\$ 118.24	\$ 1,418.88	\$ -	1,418.88
19500	3,636	0	\$ 32.62	\$ 391.44	\$ -	391.44
19518/18372	12,634	0	\$ 114.16	\$ 1,369.92	\$ -	1,369.92
19551	36,364	0	\$ 327.20	\$ 3,926.40	\$ -	3,926.40
19685	62,530	0	\$ 562.65	\$ 6,751.80	\$ -	6,751.80
19799	17,652	0	\$ 157.99	\$ 1,895.88	\$ -	1,895.88
19862	340	5,025	\$ 79.51	\$ 954.12	\$ 9,129.00	10,083.12
19957	6,810	0	\$ 61.16	\$ 733.92	\$ -	733.92
20030	11,200	0	\$ 100.91	\$ 1,210.92	\$ -	1,210.92
20032	14,076	0	\$ 126.39	\$ 1,516.68	\$ -	1,516.68
20072	23,550	0	\$ 212.01	\$ 2,544.12	\$ -	2,544.12
20272	47,816	3,400	\$ 460.72	\$ 5,528.64	\$ 5,645.00	11,173.64
20301	3,800	3,400	\$ 187.55	\$ 2,250.60	\$ 6,124.00	8,374.60
20525	16,500	0	\$ 148.82	\$ 1,785.84	\$ -	1,785.84
20552	13,498	5,960	\$ 175.32	\$ 2,103.84	\$ 8,626.00	10,729.84
20660	127	11,785	\$ 108.05	\$ 1,296.60	\$ 21,340.00	22,636.60
20859	4,000	29,630	\$ 302.73	\$ 3,632.76	\$ 59,260.00	62,892.76
20941	2,145	7,455	\$ 163.09	\$ 1,957.08	\$ 14,554.00	16,511.08

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

Reduced Service Tracts (cont.) <sup>1</sup>						
Tract Number	Planter Sq Ft.	Turf Sq Ft.	2015/16 Monthly Contract Cost	2015/16 Annual Contract Cost	Turf Conversion Cost	2015/16 Total Contract Amt
21113	1,700	10,500	\$ 176.34	\$ 2,116.08	\$ 17,357.00	19,473.08
21332	12,940	6,500	\$ 175.32	\$ 2,103.84	\$ 12,705.00	14,808.84
21333	54,500	0	\$ 490.28	\$ 5,883.36	\$ -	5,883.36
21737	1,280	2,640	\$ 136.59	\$ 1,639.08	\$ 5,877.00	7,516.08
22276	6,995	4,695	\$ 104.99	\$ 1,259.88	\$ 8,522.00	9,781.88
22277	20,485	0	\$ 184.49	\$ 2,213.88	\$ -	2,213.88
23046	16,000	0	\$ 143.72	\$ 1,724.64	\$ -	1,724.64
24721	6,882	0	\$ 62.18	\$ 746.16	\$ -	746.16
27526	16,373	0	\$ 147.80	\$ 1,773.60	\$ -	1,773.60
28882	20,983	0	\$ 188.57	\$ 2,262.84	\$ -	2,262.84
29038	6,243	0	\$ 56.06	\$ 672.72	\$ -	672.72
30027	45,833	0	\$ 412.82	\$ 4,953.84	\$ -	4,953.84
32018	7,865	0	\$ 70.33	\$ 843.96	\$ -	843.96
<b>Subtotal:</b>	<b>732,785</b>	<b>133,439</b>	<b>\$ 8,352.10</b>	<b>\$ 100,225.20</b>	<b>\$ 250,057.00</b>	<b>\$ 350,282.20</b>
<b>Totals:</b>	<b>1,344,971</b>	<b>265,094</b>	<b>\$ 16,534.35</b>	<b>\$ 198,412.21</b>	<b>\$ 498,243.00</b>	<b>\$ 696,655.21</b>
<b>Totals</b>						
Total FY 2015/16 Base Contract Amount						\$ 198,412.21
Additional Work - Turf Conversion Cost						\$ 498,243.00
Additional Work - emergency or necessary services non-tract specific						\$ 32,700.00
Additional Work - Reinvestment (replants and/or mulch) non-tract specific						\$ 50,000.00
Additional Work Total						\$ 580,943.00
<b>Total Contract Amount for FY 2015/16</b>						<b>\$ 779,355.21</b>

<sup>1</sup> Standard Service = 4 week rotation

<sup>1</sup> Reduced Service = 12 week rotation

<sup>2</sup> Tract 20715 Service increased from Reduced to Standard for FY 2015/16. Base contract increase of \$102.01 per month. An increase of \$1,223.77 for fiscal year 2015/16.

<sup>3</sup> Service Areas Subject to Turf Rebate for Conversion of Turf to Drought Tolerant Plant Materials



**PROPOSAL**

Wednesday, April 15, 2015

Daniel Monto – Landscape Services Supervisor  
City of Moreno Valley  
14331 Frederick St.  
Moreno Valley, CA 92553  
Phone 951-616-7297 Fax

**Re: Re-landscape Parkland Ave. median from Cold Spring to Heacock St.**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf medians on Parkland Ave. with Honcho plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 5 new drip irrigation systems for the new plant material.
6. Install (3,512) 1 gal. plants common to this area.
7. Install 245 yards of mulch 2" thick.
8. Install (30) 15 gal. Crape myrtle trees.
9. Stump grind only (30) on median on Parkland from Mark Twain to end on West side (includes small parkway strip on south side of Parkland just west of Mark Twain as well) Total ..... \$2,700.00  
This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$79,272.00  
Seventy-Nine Thousand Two Hundred Seventy-Two And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 15 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477



Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax



Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 19**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Area 19. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 3 new drip irrigation systems for the new plant material.
6. Install (83) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (83) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (83) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (83) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (41) 1 gal. Lantana camara "New Gold".
11. Install (41) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (36) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 30 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$10,608.00  
 Ten Thousand Six Hundred Eight And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

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Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 22**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Area 22. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 3 new drip irrigation systems for the new plant material.
6. Install (139) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (139) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (139) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (139) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (69) 1 gal. Lantana camara "New Gold".
11. Install (69) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (69) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 47 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$16,350.00  
 Sixteen Thousand Three Hundred Fifty And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 23**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 3 new drip irrigation systems for the new plant material.
6. Install (188) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (188) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (188) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (188) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (95) 1 gal. Lantana camara "New Gold".
11. Install (95) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (95) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 65 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$21,847.00  
 Twenty-One Thousand Eight Hundred Forty-Seven And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date



**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
City of Moreno Valley  
14331 Frederick St.  
Moreno Valley, CA 92553  
Phone 951-616-7297 Fax

**Re: Re-landscape Area 24**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Area 24. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 2 new drip irrigation systems for the new plant material.
6. Install (50) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (50) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (50) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (50) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (25) 1 gal. Lantana camara "New Gold".
11. Install (25) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (25) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 20 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$6,588.00  
Six Thousand Five Hundred Eighty-Eight And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
City of Moreno Valley  
14331 Frederick St.  
Moreno Valley, CA 92553  
Phone 951-616-7297 Fax

**Re: Re-landscape Area 30**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 6 new drip irrigation systems for the new plant material.
6. Install (600) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (600) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (600) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (600) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (300) 1 gal. Lantana camara "New Gold".
11. Install (300) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (350) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 200 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$59,522.00  
Fifty-Nine Thousand Five Hundred Twenty-Two And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 32**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 2 new drip irrigation systems for the new plant material.
6. Install (104) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (104) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (104) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (104) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (53) 1 gal. Lantana camara "New Gold".
11. Install (53) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (55) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 36 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$10,129.00  
 Ten Thousand One Hundred Twenty-Nine And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 36**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install (50) flats of star Jasmine.
6. Install (6) yards of mulch 1" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$3,028.00  
 Three Thousand Twenty-Eight And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
 Andres Perez - Supervisor  
 andres@mariposa-ca.com  
 626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
 Signature and Date



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 51**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 1 new drip irrigation systems for the new plant material.
6. Install (79) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (79) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (79) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (79) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (39) 1 gal. Lantana camara "New Gold".
11. Install (39) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (39) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 28 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$8,769.00  
 Eight Thousand Seven Hundred Sixty-Nine And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL





**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 77**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install (95) flats of star Jasmine.
6. Install (11) yards of mulch 1" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$5,645.00  
 Five Thousand Six Hundred Forty-Five And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
 Andres Perez - Supervisor  
 andres@mariposa-ca.com  
 626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
 Signature and Date



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 80**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install (170) flats of star Jasmine.
6. Install (20) yards of mulch 1" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$8,626.00  
 Eight Thousand Six Hundred Twenty-Six And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
 Andres Perez - Supervisor  
 andres@mariposa-ca.com  
 626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
 Signature and Date



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 81**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 3 new drip irrigation systems for the new plant material.
6. Install (212) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (212) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (213) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (213) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (107) 1 gal. Lantana camara "New Gold".
11. Install (107) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (100) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 73 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$21,340.00  
 Twenty-One Thousand Three Hundred Forty And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 82**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 3 new drip irrigation systems for the new plant material.
6. Install (413) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (413) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (413) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (413) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (207) 1 gal. Lantana camara "New Gold".
11. Install (207) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (195) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 139 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$40,842.00  
 Forty Thousand Eight Hundred Forty-Two And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 83**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 7 new drip irrigation systems for the new plant material.
6. Install (548) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (548) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (548) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (548) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (274) 1 gal. Lantana camara "New Gold".
11. Install (274) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (270) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 182 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$59,260.00  
 Fifty-Nine Thousand Two Hundred Sixty And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477





**Limits**

Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 84**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 2 new drip irrigation systems for the new plant material.
6. Install (131) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (131) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (131) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (131) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (66) 1 gal. Lantana camara "New Gold".
11. Install (66) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (64) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 46 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$14,554.00  
 Fourteen Thousand Five Hundred Fifty-Four And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
City of Moreno Valley  
14331 Frederick St.  
Moreno Valley, CA 92553  
Phone 951-616-7297 Fax

**Re: Re-landscape Area 85**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 1 new drip irrigation systems for the new plant material.
6. Install (188) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (188) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (188) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (188) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (94) 1 gal. Lantana camara "New Gold".
11. Install (94) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (93) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 64 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$17,357.00  
Seventeen Thousand Three Hundred Fifty-Seven And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 86**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 2 new drip irrigation systems for the new plant material.
6. Install (108) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (108) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (108) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (108) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (54) 1 gal. Lantana camara "New Gold".
11. Install (54) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (55) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 38 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$12,705.00  
 Twelve Thousand Seven Hundred Five And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

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Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 88**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 1 new drip irrigation systems for the new plant material.
6. Install (43) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (43) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (43) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (43) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (43) 1 gal. Lantana camara "New Gold".
11. Install (43) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install 16 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$5,877.00  
 Five Thousand Eight Hundred Seventy-Seven And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL





Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 89**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install (132) flats of star Jasmine.
6. Install (15) yards of mulch 1" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$8,522.00  
 Eight Thousand Five Hundred Twenty-Two And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
 Andres Perez - Supervisor  
 andres@mariposa-ca.com  
 626-392-3050 cell (626) 960-8477 fax

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Daniel Monto – Landscape Services Supervisor  
 Signature and Date



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

M A R I P O S A  
L A N D S C A P E S I N C

PROPOSAL

Wednesday, July 1, 2015

Daniel Monto - Landscape Services Supervisor  
City of Moreno Valley  
14331 Frederick St.  
Moreno Valley, CA 92553  
Phone 951-616-7297 Fax

Re: Re-landscape Area 62

**Description** This proposal provides for all labor, material and equipment to perform the following services at Area 62. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
  2. Cut the dead grass as low as possible.
  3. Remove the grass along the sidewalk approx. 24" w.
  4. Cancel existing irrigation systems.
  5. Install (5) new drip irrigation systems for the new plant material.
  6. Install (704) 1 gal. Hesperaloe parviflora "Red Yucca".
  7. Install (704) 1 gal. Lantana montevidensis "Trailing Lanta".
  8. Install (704) 1 gal. Acacia Redondes "Low Boy Acacia
  9. Install (704) 1 gal. Leucophyllum frutencens "Green Cloud.
  10. Install (352) 1 gal. Lantana camara "New Gold".
  11. Install (352) 1 gal. Muhlenbergia rigens "Deer Grass".
  12. Install (375) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
  13. Install 233 yards of mulch 2" thick.
  14. Install (21) 15 gal. Crape myrtles trees.
  15. Stump grind only (21) Sycamore .....\$2,625.00
- This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work.....\$72,149.00  
Seventy-Two Thousand One Hundred Forty-Nine And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477



**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto - Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 72**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 1 new drip irrigation systems for the new plant material.
6. Install (87) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (87) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (87) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (87) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (43) 1 gal. Lantana camara "New Gold".
11. Install (43) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install (45) 5 gal. Caesalpinia pulcherrima "Red Bird of Paradise".
13. Install 31 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$9,129.00  
 Nine Thousand One Hundred Twenty-Nine And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.

Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

---

Daniel Monto – Landscape Services Supervisor  
Signature and Date

**PROPOSAL**

Wednesday, July 1, 2015

Daniel Monto – Landscape Services Supervisor  
 City of Moreno Valley  
 14331 Frederick St.  
 Moreno Valley, CA 92553  
 Phone 951-616-7297 Fax

**Re: Re-landscape Area 78**

**Description** This proposal provides for all labor, material and equipment to perform the following services at Parkland Ave. Medians. This project has been discussed with Mr. Daniel Monto.

1. Spray all the turf areas with Gly Star plus herbicide.
2. Cut the dead grass as low as possible.
3. Remove the grass along the sidewalk approx. 24" w.
4. Cancel existing irrigation systems.
5. Install 1 new drip irrigation systems for the new plant material.
6. Install (57) 1 gal. Hesperaloe parviflora "Red Yucca".
7. Install (57) 1 gal. Lantana montevidensis "Trailing Lanta".
8. Install (57) 1 gal. Acacia Redondes "Low Boy Acacia
9. Install (57) 1 gal. Leucophyllum frutencens "Green Cloud.
10. Install (57) 1 gal. Lantana camara "New Gold".
11. Install (57) 1 gal. Muhlenbergia rigens "Deer Grass".
12. Install 21 yards of mulch 2" thick.

This price is based on landscape maintenance prevailing wage.

**Price** Total price for above described work..... \$6,124.00  
 Six Thousand One Hundred Twenty-Four And 00/100 Dollars

**Terms:** Total due upon completion.

**Exclusions:** Construction prevailing wage any unforeseen underground obstacles, and anything not mentioned.

**Time** Project start date is currently 20 days after acceptance.

**Limits** Time limit for the acceptance of this proposal is 30 calendar days from the above date.



15529 ARROW HIGHWAY, IRWINDALE, CA 91706  
 CA. LANDSCAPE CONTRACTORS LICENSE NO. 592268  
 TEL. 626 • 960 • 0196 FAX 626 • 960 • 8477

Attachment: First Amendment to the 2015/16 Agreement (1617 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL



Respectfully submitted,  
Andres Perez - Supervisor  
andres@mariposa-ca.com  
626-392-3050 cell (626) 960-8477 fax

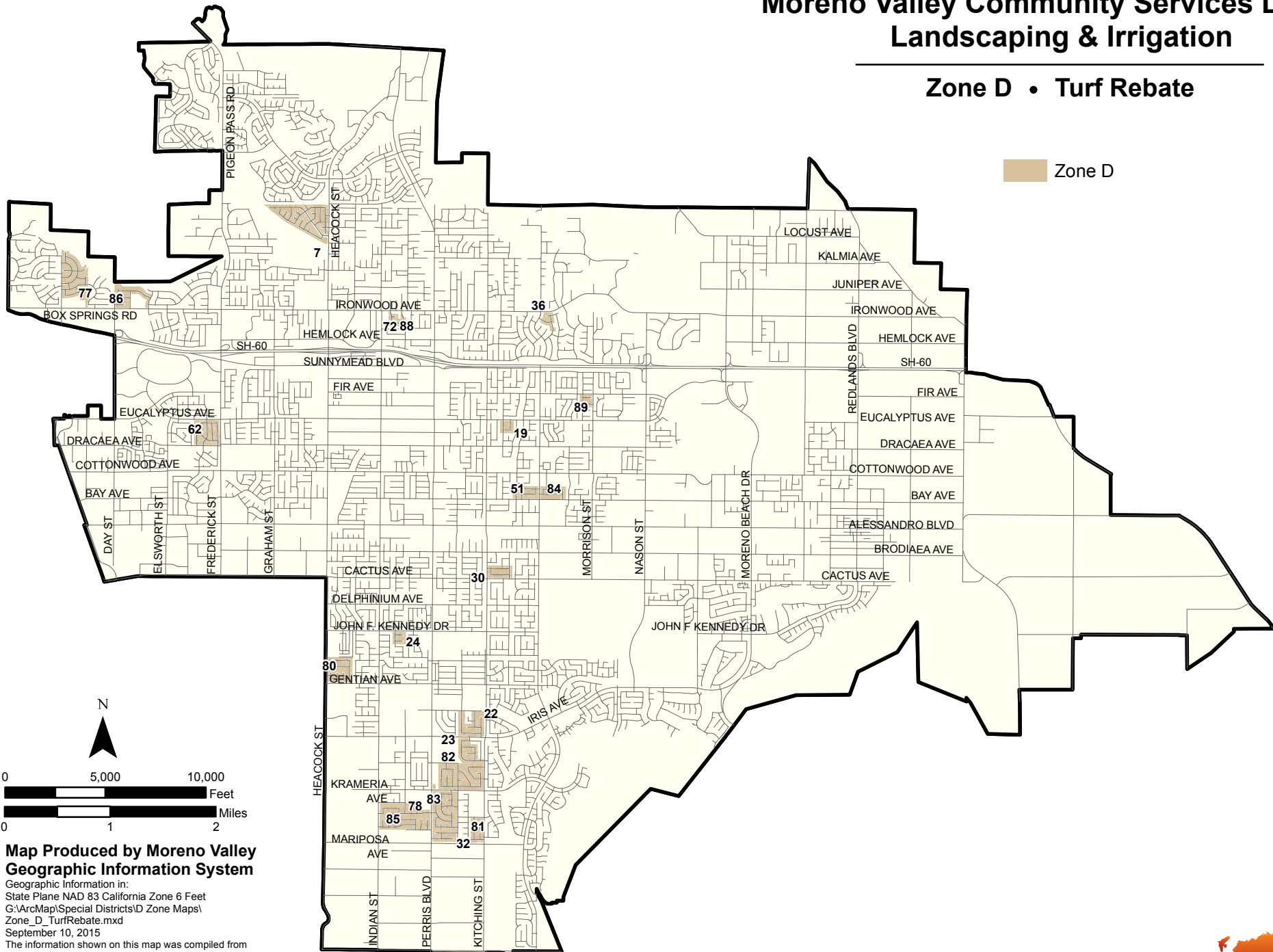
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Daniel Monto – Landscape Services Supervisor  
Signature and Date

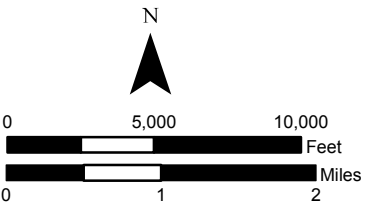


# Moreno Valley Community Services District Landscaping & Irrigation

## Zone D • Turf Rebate



Zone D



### Map Produced by Moreno Valley Geographic Information System

Geographic Information in:  
 State Plane NAD 83 California Zone 6 Feet  
 G:\ArcMap\Special Districts\D Zone Maps\  
 Zone\_D\_TurfRebate.mxd  
 September 10, 2015

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.

# Moreno Valley Community Services District Landscaping & Irrigation

## Zone D • Turf Rebate

<u>MAP ID</u>	<u>Tract Number</u>	<u>Area ( Sq. Ft.)</u>
7	TR 18512/21322	22,814
7	TR 18512/21322	18,541
19	TR 19541	5,325
22	TR 19912	8,350
23	TR 19937	10,520
24	TR 20120	3,280
30	TR 21597	32,320
32	TR 21806	5,975
36	TR 22999	1,800
51	TR 13585	4,600
62	TR 18930	37,849
72	TR 19862	5,025
77	TR 20272	3,400
78	TR 20301	3,400
80	TR 20552	5,960
81	TR 20660	11,785
82	TR 20715	22,510
83	TR 20859	29,630
84	TR 20941	7,455
85	TR 21113	10,500
86	TR 21332	6,155
88	TR 21737	2,640
89	TR 22276	4,695

**Total Area, Service Area D:                      264,529 sq ft**  
**Total Acreage, Service Area D:                      6.07 acres**

Attachment: Map of Affected Zone D Tracts (1617 : PARTICIPATION IN METROPOLITAN WATER

**Executive Department**  
State of California

**EXECUTIVE ORDER B-29-15**

**WHEREAS** on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

**WHEREAS** on April 25, 2014, I proclaimed a Continued State of Emergency to exist throughout the State of California due to the ongoing drought; and

**WHEREAS** California's water supplies continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins; and

**WHEREAS** the severe drought conditions continue to present urgent challenges including: drinking water shortages in communities across the state, diminished water for agricultural production, degraded habitat for many fish and wildlife species, increased wildfire risk, and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Bay Delta; and

**WHEREAS** a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond; and

**WHEREAS** new expedited actions are needed to reduce the harmful impacts from water shortages and other impacts of the drought; and

**WHEREAS** the magnitude of the severe drought conditions continues to present threats beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

**WHEREAS** under the provisions of section 8558(b) of the Government Code, I find that conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions with which local authority is unable to cope; and

**WHEREAS** under the provisions of section 8571 of the California Government Code, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay the mitigation of the effects of the drought.

**NOW, THEREFORE, I, EDMUND G. BROWN JR.**, Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately.



**IT IS HEREBY ORDERED THAT:**

1. The orders and provisions contained in my January 17, 2014 Proclamation, my April 25, 2014 Proclamation, and Executive Orders B-26-14 and B-28-14 remain in full force and effect except as modified herein.

**SAVE WATER**

2. The State Water Resources Control Board (Water Board) shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.
3. The Department of Water Resources (the Department) shall lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes. The Department shall provide funding to allow for lawn replacement programs in underserved communities, which will complement local programs already underway across the state.
4. The California Energy Commission, jointly with the Department and the Water Board, shall implement a time-limited statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.
5. The Water Board shall impose restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by Directive 2 of this Executive Order.
6. The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians.
7. The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

8. The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions. The Water Board is directed to adopt emergency regulations, as it deems necessary, pursuant to Water Code section 1058.5 to implement this directive. The Water Board is further directed to work with state agencies and water suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.

#### **INCREASE ENFORCEMENT AGAINST WATER WASTE**

9. The Water Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
10. The Water Board shall require frequent reporting of water diversion and use by water right holders, conduct inspections to determine whether illegal diversions or wasteful and unreasonable use of water are occurring, and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. Pursuant to Government Code sections 8570 and 8627, the Water Board is granted authority to inspect property or diversion facilities to ascertain compliance with water rights laws and regulations where there is cause to believe such laws and regulations have been violated. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
11. The Department shall update the State Model Water Efficient Landscape Ordinance through expedited regulation. This updated Ordinance shall increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. It will also require reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015. The Department shall provide information on local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance. The Department shall provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.
12. Agricultural water suppliers that supply water to more than 25,000 acres shall include in their required 2015 Agricultural Water Management Plans a detailed drought management plan that describes the actions and measures the supplier will take to manage water demand during drought. The Department shall require those plans to include quantification of water supplies and demands for 2013, 2014, and 2015 to the extent data is available. The Department will provide technical assistance to water suppliers in preparing the plans.

13. Agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands shall develop Agricultural Water Management Plans and submit the plans to the Department by July 1, 2016. These plans shall include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. The Department shall give priority in grant funding to agricultural water suppliers that supply water to 10,000 to 25,000 acres of land for development and implementation of Agricultural Water Management Plans.
14. The Department shall report to Water Board on the status of the Agricultural Water Management Plan submittals within one month of receipt of those reports.
15. Local water agencies in high and medium priority groundwater basins shall immediately implement all requirements of the California Statewide Groundwater Elevation Monitoring Program pursuant to Water Code section 10933. The Department shall refer noncompliant local water agencies within high and medium priority groundwater basins to the Water Board by December 31, 2015, which shall consider adopting regulations or taking appropriate enforcement to promote compliance.
16. The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings.

#### **INVEST IN NEW TECHNOLOGIES**

17. The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies such as renewable energy-powered desalination, integrated on-site reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.

#### **STREAMLINE GOVERNMENT RESPONSE**

18. The Office of Emergency Services and the Department of Housing and Community Development shall work jointly with counties to provide temporary assistance for persons moving from housing units due to a lack of potable water who are served by a private well or water utility with less than 15 connections, and where all reasonable attempts to find a potable water source have been exhausted.
19. State permitting agencies shall prioritize review and approval of water infrastructure projects and programs that increase local water supplies, including water recycling facilities, reservoir improvement projects, surface water treatment plants, desalination plants, stormwater capture, and greywater systems. Agencies shall report to the Governor's Office on applications that have been pending for longer than 90 days.

20. The Department shall take actions required to plan and, if necessary, implement Emergency Drought Salinity Barriers in coordination and consultation with the Water Board and the Department of Fish and Wildlife at locations within the Sacramento - San Joaquin delta estuary. These barriers will be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for essential human health and safety uses in 2015 and in the future.
21. The Water Board and the Department of Fish and Wildlife shall immediately consider any necessary regulatory approvals for the purpose of installation of the Emergency Drought Salinity Barriers.
22. The Department shall immediately consider voluntary crop idling water transfer and water exchange proposals of one year or less in duration that are initiated by local public agencies and approved in 2015 by the Department subject to the criteria set forth in Water Code section 1810.
23. The Water Board will prioritize new and amended safe drinking water permits that enhance water supply and reliability for community water systems facing water shortages or that expand service connections to include existing residences facing water shortages. As the Department of Public Health's drinking water program was transferred to the Water Board, any reference to the Department of Public Health in any prior Proclamation or Executive Order listed in Paragraph 1 is deemed to refer to the Water Board.
24. The California Department of Forestry and Fire Protection shall launch a public information campaign to educate the public on actions they can take to help to prevent wildfires including the proper treatment of dead and dying trees. Pursuant to Government Code section 8645, \$1.2 million from the State Responsibility Area Fire Prevention Fund (Fund 3063) shall be allocated to the California Department of Forestry and Fire Protection to carry out this directive.
25. The Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of securing alternate water supply necessary for continued power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Energy Commission is authorized to create and implement an alternative process to consider such petitions. This process may delegate amendment approval authority, as appropriate, to the Energy Commission Executive Director. The Energy Commission shall give timely notice to all relevant local, regional, and state agencies of any petition subject to this directive, and shall post on its website any such petition.

26. For purposes of carrying out directives 2–9, 11, 16–17, 20–23, and 25, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are hereby suspended. This suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that local action is required, as well as for any necessary permits or approvals required to complete these actions. This suspension, and those specified in paragraph 9 of the January 17, 2014 Proclamation, paragraph 19 of the April 25, 2014 proclamation, and paragraph 4 of Executive Order B-26-14, shall remain in effect until May 31, 2016. Drought relief actions taken pursuant to these paragraphs that are started prior to May 31, 2016, but not completed, shall not be subject to Division 13 (commencing with section 21000) of the Public Resources Code for the time required to complete them.
27. For purposes of carrying out directives 20 and 21, section 13247 and Chapter 3 of Part 3 (commencing with section 85225) of the Water Code are suspended.
28. For actions called for in this proclamation in directive 20, the Department shall exercise any authority vested in the Central Valley Flood Protection Board, as codified in Water Code section 8521, et seq., that is necessary to enable these urgent actions to be taken more quickly than otherwise possible. The Director of the Department of Water Resources is specifically authorized, on behalf of the State of California, to request that the Secretary of the Army, on the recommendation of the Chief of Engineers of the Army Corps of Engineers, grant any permission required pursuant to section 14 of the Rivers and Harbors Act of 1899 and codified in section 48 of title 33 of the United States Code.
29. The Department is directed to enter into agreements with landowners for the purposes of planning and installation of the Emergency Drought Barriers in 2015 to the extent necessary to accommodate access to barrier locations, land-side and water-side construction, and materials staging in proximity to barrier locations. Where the Department is unable to reach an agreement with landowners, the Department may exercise the full authority of Government Code section 8572.
30. For purposes of this Executive Order, chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.



31. In order to ensure that equipment and services necessary for drought response can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended for directives 17, 20, and 24. Approval by the Department of Finance is required prior to the execution of any contract entered into pursuant to these directives.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

**I FURTHER DIRECT** that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

**IN WITNESS WHEREOF** I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 1<sup>st</sup> day of April 2015.

\_\_\_\_\_  
EDMUND G. BROWN JR.  
Governor of California

**ATTEST:**

\_\_\_\_\_  
ALEX PADILLA  
Secretary of State





CITY OF MORENO VALLEY  
PUBLIC WRKS/SPECIAL DSTRCT  
OR CURRENT RESIDENT  
23822 MARCH MEMORIAL DR  
MORENO VALLEY, CA 92553



## Important Notice Regarding Potential Further Reductions In Your Water Budget!

August 14, 2015

Dear Valued Customer:

Eastern Municipal Water District (EMWD) is currently in Stage 4a of its Water Shortage Contingency Plan in response to the exceptional drought conditions that continue to affect the State of California. A Stage 4 drought status reduces customers' outdoor water budgets according to the following levels:

- Stage 4a - Outdoor water budgets reduced 10 percent (EMWD current status)
- Stage 4b - Outdoor water budgets reduced up to 50 percent
- Stage 4c - Outdoor water budgets reduced up to 100 percent

Stage 4 also eliminates the Tier 3 (Excessive) water use category. That means all water used above your indoor and outdoor water budgets will be charged at the Tier 4 (Wasteful) water use rate.

### Where are we at now with our water savings?

In May, the State Water Resources Control Board (the State Water Board) ordered customers of cities and water agencies in the state to reduce water consumption between eight and 36 percent, with the intent of achieving Governor Brown's drought directive for a 25 percent total reduction in statewide water consumption. Under the State Water Board's order, EMWD customers are required after June 1, 2015 to reduce overall water use by 28 percent (compared to 2013 data).


In June, EMWD customers reduced overall water use by 15 percent – far short of the State mandated reductions. While approximately 70 percent of our customers are now consistently using less than 50 percent of their outdoor water budgets, many customers are still falling short of the target. As a result, we received a notice of violation from the State Water Board with direction to take additional steps necessary to further reduce our customers' water usage.

### What could happen next?

In order to avoid penalties being imposed on our customers by the State Water Board, EMWD will consider moving to a Stage 4b drought status in September. This action will depend on additional water use reduction through the end of August. **Moving to Stage 4b drought status would reduce customers' outdoor water budgets up to 50 percent.**

What do we need you to do?

If you are already using 50 percent or less of your outdoor water budget, please keep up the good work! We really appreciate your efforts. You can see if you are meeting this reduction on your bill:

 <p>P.O. Box 8300 Perris, CA 92572-8300</p> <p>WITHIN SOUTHERN CALIFORNIA 800-428-3803 OUTSIDE SOUTHERN CALIFORNIA 951-928-3777 WEBSITE <a href="http://www.emwd.org">www.emwd.org</a></p>		<p>CUSTOMER NAME: EMWD CUSTOMER ACCOUNT: 123456-01 SERVICE ADDRESS: 3278 TRAMBLE RD SERVICE PERIOD: 01/13/15 to 02/12/15 BILL DATE: 02/13/15 NO. OF DAYS: 30 DUE DATE: 02/29/15 NEXT READ DATE: 03/13/15</p>																																			
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Make sure your **Outdoor Use** is 50 percent or less of your **Outdoor Allocation**

**If you are using more than 50 percent of your outdoor water budget, please reduce your outdoor watering immediately.**

What can you do to cut your outdoor watering in half?

- **Cut the number of days you water in half!** Watering only 1-2 days per week is an excellent way to use 50 percent or less of your outdoor water budget!
- **Cut the time you water in half.** For example, if you're currently watering for 6 minutes at a time, reduce it to 3 minutes.
- **Use your outdoor water budget as your guide.** If your outdoor water budget is 22 billing units, cut down your water use to only use 11 of those billing units. Keep in mind that outdoor budgets change every month due to weather conditions. Your billing statement provides a 3-month forecast of upcoming budgets. For more information on reading your billing statement, please visit our website at [www.emwd.org](http://www.emwd.org). **For more water saving tips, please visit [www.emwd.org/WaterWiseTips](http://www.emwd.org/WaterWiseTips).**

What else can you do to save water?

You can let us know if you see water waste! Water waste reports may be submitted via the following methods:

- Online: [www.emwd.org/reportwaterwaste](http://www.emwd.org/reportwaterwaste)
- Email: [conservation@emwd.org](mailto:conservation@emwd.org)
- Phone: 951-928-3777, ext. 3306
- Mail: EMWD, Attn.: Water Waste, PO Box 8300, Perris, CA 92572-8300
- Mobile App: Available on Android and iPhone platforms  
Search for "EMWD Water Waste Reporter"

Thank you for your efforts to comply with the State Water Board's order and to save water during this historic drought!

For up-to-date drought status information, please visit [www.emwd.org/drought](http://www.emwd.org/drought) or call our Drought Status Hotline at 951-928-3777 ext. 4540. You can also go to [www.emwd.org/billestimator](http://www.emwd.org/billestimator) to see how your bill could be impacted if you exceed your water budget.

Sincerely,  
EMWD Customer Service Department

**Model Water Efficient Landscape Ordinance**  
**September 10, 2009**  
**June 12, 2015 (Public Draft)**

California Code of Regulations  
 Title 23. Waters  
 Division 2. Department of Water Resources  
 Chapter 2.7. Model Water Efficient Landscape Ordinance

**§ 490. Purpose.**

(a) The State Legislature has found:

- (1) that the waters of the state are of limited supply and are subject to ever increasing demands;
- (2) that the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;
- (3) that it is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;
- (4) that landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development; ~~and~~
- (5) that landscape design, installation, maintenance and management can and should be water efficient; and
- (6) that Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use.

(b) Consistent with these legislative findings, the purpose of this model ordinance is to:

- (1) promote the values and benefits of landscaping practices that integrate and transcend the conservation and efficient use of water; landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- (2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects by using a whole system watershed approach in landscapes of any size and scale that requires cross-sector collaboration to achieve the many benefits possible;
- (3) establish provisions for water management practices and water waste prevention for existing landscapes;
- (4) use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount;
- (5) promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;
- (6) encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered-rate structure; and
- (7) encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Model Water Efficient Landscape Ordinance or its local landscape ordinance.

(c) Regenerative landscape systems that are planned, designed, installed, managed and maintained with the watershed based approach can improve California's environmental conditions and achieve sustainability goals. Consistent with the legislative findings and purpose of the Ordinance, achievable goals include:

- (1) Increasing carbon storage, water retention and productive plant growth by improving soils through reducing compaction, incorporating organic matter and minimizing cut and fill grading.
- (2) Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting long lived climate appropriate shade trees in urban areas.

- (3) Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water.
- (4) Protecting air and water quality by reducing power equipment use and landfill trips, selecting locally sourced materials, and using mulch and efficient irrigation equipment to prevent erosion.
- (5) Protecting existing habitat and creating new habitat by choosing local native plants wherever possible and including climate appropriate non-native plants when necessary, and avoiding pesticides and invasive plants.

Note: Authority cited: Section 65593, Government Code. Reference: Sections 65591, 65593, 65596, Government Code.

### § 490.1 Applicability

(a) After ~~January 1, 2010~~ November 1, 2015, this ordinance shall apply to all of the following landscape projects:

- (1) new construction projects with a landscape area greater than 500 square feet requiring a building or landscape permit, plan check or design review;
- (2) rehabilitated landscape projects with an aggregated landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
- ~~(1) new construction and rehabilitated landscapes for public agency projects and private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review;~~
- ~~(2) new construction and rehabilitated landscapes which are developer installed in single family and multi family projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;~~
- ~~(3) new construction landscapes which are homeowner provided and/or homeowner hired in single family and multi family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review;~~
- (3) ~~(4)~~ existing landscapes limited to Sections 493, 493.1 and 493.2; and
- (4) ~~(5)~~ cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 492.4, 492.11 and 492.12; and existing cemeteries are limited to Sections 493, 493.1 and 493.2.

(b) This ordinance does not apply to:

- (1) registered local, state or federal historical sites;
- (2) ecological restoration projects that do not require a permanent irrigation system;
- (3) mined-land reclamation projects that do not require a permanent irrigation system; or
- (4) existing plant collections, as part of botanical gardens and arboretums open to the public.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 491. Definitions.

The terms used in this ordinance have the meaning set forth below:

- (a) “applied water” means the portion of water supplied by the irrigation system to the landscape.
- (b) “automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- (c) “backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- (d) “Certificate of Completion” means the document required under Section 492.9.

- (e) “certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation designer certification program and Irrigation Association’s Certified Irrigation Designer program.
- (f) “certified landscape irrigation auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation auditor certification program and Irrigation Association’s Certified Landscape Irrigation Auditor program.
- (g) “check valve” or “anti-drain valve” means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.
- (h) “common interest developments” means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.
- (i) “conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.
- (j) “drip irrigation” means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (k) “ecological restoration project” means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (l) “effective precipitation” or “usable rainfall” (Eppt) means the portion of total precipitation which becomes available for plant growth.
- (m) “emitter” means a drip irrigation emission device that delivers water slowly from the system to the soil.
- (n) “established landscape” means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.
- (o) “establishment period of the plants” means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth.
- (p) “Estimated Total Water Use” (ETWU) means the total water used for the landscape as described in Section 492.4.
- (q) “ET adjustment factor” (ETAF) means a factor of 0.75 for residential areas and 0.4 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. A combined plant mix with a site-wide average of 0.5 0.425 for residential areas and 0.37 for other areas is the basis of the plant factor portion of this calculation. For purposes of the ETAF, the average irrigation efficiency is 0.7485 for residential and 0.92 for non-residential areas. Therefore, the ETAF Adjustment Factor for residential and non-residential is  $(0.75) \div (0.425 / 0.857)$  and  $(0.4) \div (0.37 / 0.92)$ , respectively. The ETAF for a new and existing Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.
- (r) “evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- (s) “flow rate” means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- (t) “friable” means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.
- (u) “graywater” means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. “Graywater”

includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Pursuant to Health and Safety Code Section 17922.12.

(v) ~~(t)~~ “hardscapes” means any durable material (pervious and non-pervious).

(w) ~~(u)~~ “homeowner-provided landscaping” means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings.

(x) ~~(v)~~ “hydrozone” means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

(y) ~~(w)~~ “infiltration rate” means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

(z) ~~(x)~~ “invasive plant species” means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. “Noxious weeds” means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(aa) ~~(y)~~ “irrigation audit” means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association’s Landscape Irrigation Auditor Certification program.

(bb) ~~(z)~~ “irrigation efficiency” (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this ordinance is 0.8574 for residential areas and 0.92 for non-residential areas, averaged on a site-wide basis. Greater irrigation efficiency can be expected from well designed and maintained systems.

(cc) ~~(aa)~~ “irrigation survey” means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

(dd) ~~(bb)~~ “irrigation water use analysis” means a review of water use data based on meter readings and billing data.

(ee) ~~(cc)~~ “landscape architect” means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ff) ~~(dd)~~ “landscape area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

(gg) ~~(ee)~~ “landscape contractor” means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(hh) “landscape designer” means a person permitted by the Business and Profession Code to prepare plans, drawings, and specifications for the selection, placement, or use of plants for single family dwellings. They may prepare drawings for the conceptual design and placement of tangible objects and landscape features. A landscape designer may not prepare construction documents, details, or specifications for tangible landscape objects or landscape features or prepare grading and drainage plans for the alteration of sites.



- (ii) ~~(ff)~~ “Landscape Documentation Package” means the documents required under Section 492.3.
- (jj) ~~(gg)~~ “landscape project” means total area of landscape in a project as defined in “landscape area” for the purposes of this ordinance, meeting requirements under Section 490.1.
- (kk) ~~(hh)~~ “lateral line” means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.
- (ll) ~~(ii)~~ “local agency” means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.
- (mm) ~~(jj)~~ “local water purveyor” means any entity, including a public agency, city, county, or private water company that provides retail water service.
- (nn) ~~(kk)~~ “low volume irrigation” means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (oo) ~~(H)~~ “main line” means the pressurized pipeline that delivers water from the water source to the valve or outlet.
- (pp) “master valve” is an electric valve installed at the supply point which controls water flow into the main piping system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.
- (qq) ~~(mm)~~ “Maximum Applied Water Allowance” (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. It is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0.
- (rr) “median” is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.
- (ss) ~~(nn)~~ “microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.
- (tt) “microspray” means a microirrigation emission device with one or more orifices to convert irrigation water pressure to water discharge with a flow rate not to exceed 30 gallons per hour (113.5 litres per hour) at the largest area of coverage available for the nozzle series when operated at 30 psi (206.8kPa). Microsprays are inclusive of “microbubblers”, “microspinners” and “microspray jets.” (From ASABE/ICC 802-2014 Landscape Irrigation and Emitter Standard.)
- (uu) ~~(oo)~~ “mined-land reclamation projects” means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.
- (vv) ~~(pp)~~ “mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.
- (ww) ~~(qq)~~ “new construction” means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.
- (xx) ~~(rr)~~ “operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.
- (yy) ~~(ss)~~ “overhead sprinkler irrigation systems” means systems that deliver water through the air (e.g., spray heads and rotors).

(zz) (~~tt~~) “overspray” means the irrigation water which is delivered beyond the target area.

(aaa) “parkway” means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(bbb) (~~uu~~) “permit” means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(ccc) (~~vv~~) “pervious” means any surface or material that allows the passage of water through the material and into the underlying soil.

(ddd) (~~ww~~) “plant factor” or “plant water use factor” is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for low water use plants is 0 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the Department of Water Resources 2000 publication “Water Use Classification of Landscape Species”. Plant factors may also be obtained from horticultural researchers from academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR).

(eee) (~~xx~~) “precipitation rate” means the rate of application of water measured in inches per hour.

(fff) (~~yy~~) “project applicant” means the individual or entity submitting a Landscape Documentation Package required under Section 492.3 to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

(ggg) (~~zz~~) “rain sensor” or “rain sensing shutoff device” means a component which automatically suspends an irrigation event when it rains.

(hhh) (~~aaa~~) “record drawing” or “as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(iii) (~~bbb~~) “recreational area” means areas, excluding private single family residential areas, dedicated to active play recreation or public assembly such as parks, sports fields, picnic grounds, amphitheaters and or golf courses tees, fairways and greens.

(jii) (~~eee~~) “recycled water”, “reclaimed water”, or “treated sewage effluent water” means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(kkk) (~~ddd~~) “reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A Section 495.1, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated.

(lll) (~~eee~~) “rehabilitated landscape” means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.

(mmm) (~~fff~~) “runoff” means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

(nnn) (~~ggg~~) “soil moisture sensing device” or “soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(ooo) (~~hhh~~) “soil texture” means the classification of soil based on its percentage of sand, silt, and clay.

(ppp) (~~iii~~) “Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, and water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.

~~(qqq)~~ ~~(jjj)~~ “sprinkler head” means a device which delivers water through a nozzle.

~~(rrr)~~ ~~(kkk)~~ “static water pressure” means the pipeline or municipal water supply pressure when water is not flowing.

~~(sss)~~ ~~(lll)~~ “station” means an area served by one valve or by a set of valves that operate simultaneously.

~~(ttt)~~ ~~(mmm)~~ “swing joint” means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

~~(uuu)~~ ~~(nnn)~~ “turf” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

~~(vvv)~~ ~~(ooo)~~ “valve” means a device used to control the flow of water in the irrigation system.

~~(www)~~ “water budget” is a reasonable estimate of the amount of irrigation water required for a specific landscape. Basic water budget calculations require measured areas of each irrigated hydrozone and reference evapotranspiration for the area to be landscaped.

~~(xxx)~~ ~~(ppp)~~ “water conserving plant species” means a plant species identified as having a low plant factor.

~~(yyy)~~ ~~(qqq)~~ “water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

~~(zzz)~~ ~~(rrr)~~ “watering window” means the time of day irrigation is allowed.

~~(aaaa)~~ ~~(sss)~~ “WUCOLS” means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, and the Department of Water Resources and the Bureau of Reclamation, 2000 2014.

Note: Authority Cited: Section 65595, Government Code. Reference: Sections 65592, 65596, Government Code.

#### **§ 492. Provisions for New Construction or Rehabilitated Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.1 Compliance with Landscape Documentation Package.**

(a) Prior to construction, the local agency shall:

- (1) provide the project applicant with the ordinance and procedures for permits, plan checks, or design reviews;
- (2) review the Landscape Documentation Package submitted by the project applicant;
- (3) approve or deny the Landscape Documentation Package;
- (4) issue a permit or approve the plan check or design review for the project applicant; and
- (5) upon approval of the Landscape Documentation Package, submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

(b) Prior to construction, the project applicant shall:

- (1) submit a Landscape Documentation Package to the local agency.

(c) Upon approval of the Landscape Documentation Package by the local agency, the project applicant shall:

- (1) receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;
- (2) submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and
- (3) submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.2 Penalties.**

(a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.3 Elements of the Landscape Documentation Package.**

(a) The Landscape Documentation Package shall include the following six (6) elements:

- (1) project information;
  - (A) date
  - (B) project applicant
  - (C) project address (if available, parcel and/or lot number(s))
  - (D) total landscape area (square feet)
  - (E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
  - (F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
  - (G) checklist of all documents in Landscape Documentation Package
  - (H) project contacts to include contact information for the project applicant and property owner
  - (I) applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
- (2) Water Efficient Landscape Worksheet;
  - (A) hydrozone information table
  - (B) water budget calculations
    1. Maximum Applied Water Allowance (MAWA)
    2. Estimated Total Water Use (ETWU)
- (3) soil management report;
- (4) landscape design plan;
- (5) irrigation design plan; and
- (6) grading design plan.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.4 Water Efficient Landscape Worksheet.**

(a) A project applicant shall complete the Water Efficient Landscape Worksheet which contains two sections (see sample worksheet in Appendix B):

- (1) a hydrozone information table (see Appendix B, Section A) for the landscape project; and
- (2) a water budget calculation (see Appendix B, Section B) for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project

applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

(b) Water budget calculations shall adhere to the following requirements:

(1) The plant factor used shall be from WUCOLS. Plant factors may also be obtained from horticultural researchers with academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

(2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

(3) All Special Landscape Areas shall be identified and their water use calculated as described below.

(4) ETAF for Special Landscape Areas shall not exceed 1.0.

(c) Maximum Applied Water Allowance

The Maximum Applied Water Allowance shall be calculated using the equation:

Residential Areas:  $MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

Non-Residential:  $MAWA = (ET_o) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project. The ETo values used in these calculations are from the Reference Evapotranspiration Table in Appendix A, for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

(1) Example MAWA calculation for a residential landscape project: a hypothetical landscape project in Fresno, CA with an irrigated landscape area of 50,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of recycled water). To calculate MAWA, the annual reference evapotranspiration value for Fresno is 51.1 inches as listed in the Reference Evapotranspiration Table in Appendix A.

$MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons per year)

0.57 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.53 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

$MAWA = (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 0)]$

$= 1,108,870 \text{ } \underline{792,050} \text{ gallons per year}$

To convert from gallons per year to hundred-cubic-feet per year:

$= 1,108,870 \text{ } \underline{792,050} / 748 = 1,482 \underline{059} \text{ hundred-cubic-feet per year}$

(100 cubic feet = 748 gallons)

(2) In this next hypothetical example, the residential landscape project in Fresno, CA has the same ETo value of 51.1 inches and a total landscape area of 50,000 square feet. Within the 50,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.

$$\begin{aligned}
 \text{MAWA} &= (\text{ET}_o) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \\
 \text{MAWA} &= (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 2,000 \text{ square feet})] \\
 &= 31.68 \times [235,000 + 1,0600] \text{ gallons per year} \\
 &= 31.68 \times 3526,0600 \text{ gallons per year} \\
 &= 1,127,808823,680 \text{ gallons per year or } 1,101,508 \text{ hundred-cubic-feet per year}
 \end{aligned}$$

(d) Estimated Total Water Use.

The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed MAWA.

$$\text{ETWU} = (\text{ET}_o)(0.62) \left( \frac{\text{PF} \times \text{HA}}{\text{IE}} + \text{SLA} \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- ET<sub>o</sub> = Reference Evapotranspiration (inches)
- PF = Plant Factor from WUCOLS (see Section 491)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per year)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas)

(1) Example ETWU calculation: landscape area is 50,000 square feet; plant water use type, plant factor, and hydrozone area are shown in the table below. The ET<sub>o</sub> value is 51.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, and area irrigated with recycled water) in this example.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	17,000	5,6800
2	High	0.7	102,000	147,000
3	Medium	0.5	156,000	78,5000
4	Low	0.3	147,000	42,1200
5	Low	0.2	180,000	23,0600
			Sum	24,70017,500

\*Plant Factor from WUCOLS

$$\begin{aligned}
 \text{ETWU} &= (51.1)(0.62) \left( \frac{17,500}{0.85} + 0 \right) \\
 &= 1,102,116 \text{ } 652,276 \text{ gallons per year}
 \end{aligned}$$

Compare ETWU with MAWA: For this example MAWA = (51.1) (0.62) [(0.57 x 50,000) + (0.53 x 0)] = 1,108,870 792,050 gallons per year. The ETWU (1,102,116 652,276 gallons per year) is less than MAWA (1,108,870 792,050 gallons per year). In this example, the water budget complies with the MAWA.

(2) Example ETWU calculation: total landscape area is 50,000 square feet, 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area

(SLA). The reference evapotranspiration value is 51.1 inches per year. The plant type, plant factor, and hydrozone area are shown in the table below.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	<u>17,000</u>	<u>85,600</u>
2	High	0.7	<u>19,000</u>	<u>6,3700</u>
3	Medium	0.5	<u>145,000</u>	<u>7,0500</u>
4	Low	0.3	<u>147,000</u>	<u>4,2400</u>
5	Low	0.2	<u>180,000</u>	<u>32,600</u>
			Sum	<u>1623,3500</u>
6	SLA	1.0	2,000	2,000

\*Plant Factor from WUCOLS

$$ETWU = (51.1)(0.62) \left( \frac{16,300}{0.85} + 2,000 \right)$$

$$= (31.68) (33,099 \underline{19,176} + 2,000)$$

$$= 1,111,936 \underline{670,898} \text{ gallons per year}$$

Compare ETWU with MAWA. For this example:

$$MAWA = (51.1) (0.62) [(0.57 \times 50,000) + (0.53 \times 2,000)]$$

$$= 31.68 \times [235,000 + \underline{1,0600}]$$

$$= 31.68 \times \underline{35,60026,000}$$

$$= 1,127,808 \underline{823,680} \text{ gallons per year}$$

The ETWU (1,111,936670,898 gallons per year) is less than MAWA (1,127,808823,680 gallons per year). For this example, the water budget complies with the MAWA.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.5 Soil Management Report.**

(a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:

- (1) Submit soil samples to a laboratory for analysis and recommendations.
  - (A) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
  - (B) The soil analysis may include:
    - 1. soil texture;
    - 2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
    - 3. pH;
    - 4. total soluble salts;
    - 5. sodium;
    - 6. percent organic matter; and
    - 7. recommendations.
- (2) The project applicant, or his/her designee, shall comply with one of the following:
  - (A) If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or

- (B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.
- (3) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.
- (4) The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.6 Landscape Design Plan.

(a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) Plant Material

(A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:

1. protection and preservation of native species and natural vegetation;
2. selection of water-conserving plant and turf species, especially local native plants;
3. selection of plants based on local climate suitability, disease and pest resistance;
4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and
5. selection of plants from local and regional landscape program plant lists.

(B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).

(C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:

1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

(D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

(E) Turf is prohibited in street medians.

(F) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

(G) ~~(E)~~ A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per



Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.

(H) ~~(F)~~ The use of invasive and/or noxious plant species is strongly discouraged.

(I) ~~(G)~~ The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

(2) Water Features

(A) Recirculating water systems shall be used for water features.

(B) Where available, recycled water shall be used as a source for decorative water features.

(C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

(D) Pool and spa covers are highly recommended.

(E) Recreational water features (swimming pools, splash pads or similar) must recirculate water.

(3) Soil Preparation, Mulch and Amendments

(A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition.

(B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).

(C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area (unless contra-indicated by soil test) shall be incorporated to a depth of six inches into the soil. Soils with greater than 25% organic matter in the top 6 inches of soil are exempt from adding compost.

(D) ~~(A)~~ A minimum ~~two~~ three inch (23") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(E) ~~(B)~~ Stabilizing mulching products shall be used on slopes.

(F) ~~(C)~~ The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

(G) Organic mulch materials should take precedence over inorganic materials in instances where it is suitable, ecologically possible, and the material does not pose a fire hazard. Composted organic material, in particular that which includes post-consumer material, should be considered over more compacted products such as bark, wood chips, etc.

~~(D) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).~~

(b) The landscape design plan, at a minimum, shall:

- (1) delineate and label each hydrozone by number, letter, or other method;
- (2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;
- (3) identify recreational areas;
- (4) identify areas permanently and solely dedicated to edible plants;
- (5) identify areas irrigated with recycled water;
- (6) identify type of mulch and application depth;
- (7) identify soil amendments, type, and quantity;
- (8) identify type and surface area of water features;
- (9) identify hardscapes (pervious and non-pervious);

(10) identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples include, but are not limited to: are provide in Section 492.16.

(A) ~~infiltration beds, swales, and basins that allow water to collect and soak into the ground;~~

(B) ~~constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and~~

(C) ~~pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.~~

(11) identify any applicable rain harvesting or catchment technologies (e.g., rain gardens, eisterns, etc.) as discussed in Section 492.16 and their 24-hour retention or infiltration capacity;

(12) identify any applicable graywater discharge piping, system components and area(s) of distribution;

(13) ~~(12)~~ contain the following statement: “I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan”; and

(14) ~~(13)~~ bear the signature of a licensed landscape architect, licensed landscape contractor, landscape designer or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code and Section 1351, Civil Code.

### § 492.7 Irrigation Design Plan.

(a) This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers’ recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) System

(A) ~~Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management shall be required for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000sq.ft. (the level at which Water Code 535 applies)-and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:~~

1. a customer service meter dedicated to landscape use provided by the local water purveyor; or

2. a privately owned meter or submeter.

(B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data and non-volatile memory shall be required for irrigation scheduling in all irrigation systems.

(C) The installation of a pressure regulator is required ~~The irrigation systems shall be designed~~ to ensure that the dynamic pressure at each emission device is within the manufacturer’s recommended pressure range for optimal performance.

1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators,

booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

2. Static water pressure, dynamic or operating pressure and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

(D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

(E) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

(F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

(G) ~~High Flow~~ sensors that detect and report high flow conditions created by system damage or malfunction are ~~recommended~~ required.

(H) Master valves are required on all projects.

(I) ~~(H)~~ The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

(J) ~~(I)~~ Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(K) ~~(J)~~ The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(L) ~~(K)~~ The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.

(M) The irrigation system must be designed and installed in such a manner that a precipitation rate of 1.0 inches per hour is not exceeded in any portion of the landscape.

(N) ~~(L)~~ It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

(O) ~~(M)~~ In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(P) ~~(N)~~ Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(Q) ~~(O)~~ Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(R) ~~(P)~~ Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

(S) ~~(Q)~~ Check valves or anti-drain valves are required for all irrigation systems.

(T) ~~(R) Narrow or irregularly shaped Areas of, including turf, less than ten eight (108) feet in width in any direction shall be irrigated with subsurface irrigation or low volume irrigation system other technology that produces no runoff or overspray.~~

(U) ~~(S)~~ Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may

include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(~~I~~H). Prevention of overspray and runoff must be confirmed during the irrigation audit.

(V) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

(A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

(B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

(C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees.

(D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
2. the plant factor of the higher water using plant is used for calculations.

(E) Individual hydrozones that mix high and low water use plants shall not be permitted.

(F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.

(b) The irrigation design plan, at a minimum, shall contain:

- (1) location and size of separate water meters for landscape;
- (2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
- (3) static water pressure at the point of connection to the public water supply;
- (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- (5) recycled water irrigation systems as specified in Section 492.14;
- (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
- (7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.8 Grading Design Plan.

(a) For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.

(1) The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

- (A) height of graded slopes;
- (B) drainage patterns;
- (C) pad elevations;
- (D) finish grade; and
- (E) stormwater retention improvements, if applicable.

(2) To prevent excessive erosion and runoff, it is highly recommended that project applicants:

- (A) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
- (B) avoid disruption of natural drainage patterns and undisturbed soil; and
- (C) avoid soil compaction in landscape areas.

(3) The grading design plan shall contain the following statement: “I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan” and shall bear the signature of a licensed professional as authorized by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.9 Certificate of Completion.

(a) The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:

(1) project information sheet that contains:

- (A) date;
- (B) project name;
- (C) project applicant name, telephone, and mailing address;
- (D) project address and location; and
- (E) property owner name, telephone, and mailing address;

(2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

(A) where there have been significant changes made in the field during construction, these “as-built” or record drawings shall be included with the certification;

(3) irrigation scheduling parameters used to set the controller (see Section 492.10);

(4) landscape and irrigation maintenance schedule (see Section 492.11);

(5) irrigation audit report (see Section 492.12); and

(6) soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 492.5).

(b) The project applicant shall:

(1) submit the signed Certificate of Completion to the local agency for review;

(2) ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

(c) The local agency shall:

(1) receive the signed Certificate of Completion from the project applicant;

(2) approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.10 Irrigation Scheduling.**

(a) For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

- (1) Irrigation scheduling shall be regulated by automatic irrigation controllers.
- (2) Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.
- (3) For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.
- (4) Parameters used to set the automatic controller shall be developed and submitted for each of the following:
  - (A) the plant establishment period;
  - (B) the established landscape; and
  - (C) temporarily irrigated areas.
- (5) Each irrigation schedule shall consider for each station all of the following that apply:
  - (A) irrigation interval (days between irrigation);
  - (B) irrigation run times (hours or minutes per irrigation event to avoid runoff);
  - (C) number of cycle starts required for each irrigation event to avoid runoff;
  - (D) amount of applied water scheduled to be applied on a monthly basis;
  - (E) application rate setting;
  - (F) root depth setting;
  - (G) plant type setting;
  - (H) soil type;
  - (I) slope factor setting;
  - (J) shade factor setting; and
  - (K) irrigation uniformity or efficiency setting.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.11 Landscape and Irrigation Maintenance Schedule.**

- (a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- (b) A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing and obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.

(d) A project applicant is encouraged to implement sustainable Best Practices ~~or environmentally friendly practices~~ for overall all landscape maintenance activities.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.12 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) All landscape irrigation audits shall be conducted by a local agency irrigation auditor or a third party certified landscape irrigation auditor that is not the designer or installer of the landscape.

(b) For new construction and rehabilitated landscape projects installed after January 1, 2010, as described in Section 490.1:

(1) the project applicant shall submit an irrigation audit report with the Certificate of Completion to the local agency that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule;

(2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.13 Irrigation Efficiency.**

(a) For the purpose of determining Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.8571 for residential areas and 0.92 for non-residential areas. Irrigation systems shall be designed, maintained, and managed to meet or exceed a site-wide average landscape irrigation efficiency of 0.8571 for residential areas and 0.92 for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.14 Recycled Water.**

(a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted as described in Section 492.14(b).

(b) Irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.

(c) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

(d) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for Special Landscape Areas shall not exceed 1.0.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.15 Graywater Systems.**

(a) Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards.

### **§ 492.165 Stormwater Management and Rainwater Retention.**

(a) Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.

(b) Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans.

(c) All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to § 492.6(a)(3).

(d) It is recommended that project also incorporate any of the following elements to improve on-site stormwater retention:

- Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
- Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
- Incorporate pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
- Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water retention.
- Incorporate rain gardens, cisterns, and other rain harvesting or catchment.
- Incorporate infiltration beds, swales, basins and drywells to retain stormwater and increase percolation into the soil.
- Consider constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants.

~~(e) Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.~~

(e) It is strongly recommended that retention and infiltration capacity sufficient to prevent runoff from roof surfaces and the landscape area from either the one inch, 24-hour rain event or the 85<sup>th</sup> percentile, 24-hour rain event, and such additional capacity, if any, as may be required by any applicable local or regional regulation, be provided.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### **§ 492.176 Public Education.**

(a) Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.

(1) A local agency or water supplier/purveyor shall provide information to owners of permitted renovations and new single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes based on a water budget.

(b) Model Homes. All model homes ~~shall be landscaped and that are landscaped shall~~ use signs and written information to demonstrate the principles of water efficient landscapes described in this ordinance.

(1) Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.



(2) Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes. Information available shall include detailed specifications on how to hire trained and licensed landscape architects, contractors, designers and maintenance workers and the benefits of using such professionals.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.187 Environmental Review.**

(a) The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

Note: Authority cited: Section 21082, Public Resources Code. Reference: Sections 21080, 21082, Public Resources Code.

**§ 493. Provisions for Existing Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.1 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) This section, 493.1, shall apply to all existing landscapes that were installed before ~~January 1, 2010~~ November 1, 2015 and are over one acre in size.

(1) For all landscapes in 493.1(a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as:  $MAWA = (0.8)(ET_o)(LA)(0.62)$ .

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.2 Water Waste Prevention.**

(a) Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.

(b) Restrictions regarding overspray and runoff may be modified if:

(1) the landscape area is adjacent to permeable surfacing and no runoff occurs; or

(2) the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

Note: Authority cited: Section 65594, Government Code. Reference: Section 65596, Government Code.

**§ 494. Effective Precipitation.**

(a) A local agency may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

$MAWA = (ET_o - Eppt) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$  for residential areas.

$MAWA = (ET_o - Eppt) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$  for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 495. Reporting.**

(a) Local agencies responsible for administering the ordinance shall report on implementation and enforcement by December 31, 2015. Subsequently, reporting will be due by January 31<sup>st</sup> of each year.

Reports should be submitted as follows.

(b) Local agencies are to address the following:

- (1) Define the reporting period. For the initial reporting, local agencies are encouraged to report as far back as records for implementation of their ordinances allow. At a minimum, the reporting period shall commence on November 1, 2015. The end of the reporting period shall be no sooner than December 15, 2015. In subsequent years, reporting will be for the calendar year.
- (2) State if using a locally modified Water Efficient Landscape Ordinance (WELO) or the MWELO. If using a locally modified WELO, how is it different than MWELO, and are there any exemptions specified?
- (3) State the entity responsible for implementing the ordinance.
- (4) State number and types of projects subject to the ordinance during the specified reporting period.
- (5) State the total area (in square feet or acres) subject to the ordinance over the reporting period, if available.
- (6) Provide the number of new housing starts, new commercial projects, and landscape retrofits during the reporting period.
- (7) Describe the procedure for review of projects subject to the ordinance.
- (8) Describe actions taken to verify compliance. Is a plan check performed; if so, by what entity? Is a site inspection performed; if so, by what entity? Is a post-installation audit required; if so, by whom?
- (9) Describe enforcement measures.
- (10) Explain challenges to implementing and enforcing the ordinance.
- (11) Describe educational and other needs to properly apply the ordinance.

## Appendices.

Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>ALAMEDA</b>													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
<b>ALPINE</b>													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
<b>AMADOR</b>													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
<b>BUTTE</b>													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
<b>CALAVERAS</b>													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
<b>COLUSA</b>													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
<b>CONTRA COSTA</b>													
<del>Benicia</del>	<del>1.3</del>	<del>1.4</del>	<del>2.7</del>	<del>3.8</del>	<del>4.9</del>	<del>5.0</del>	<del>6.4</del>	<del>5.5</del>	<del>4.4</del>	<del>2.9</del>	<del>1.2</del>	<del>0.7</del>	<del>40.3</del>
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
<b>DEL NORTE</b>													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
<b>EL DORADO</b>													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
<b>FRESNO</b>													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8
<b>GLENN</b>													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
<b>HUMBOLDT</b>													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
<b>IMPERIAL</b>													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
<b>INYO</b>													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
<b>KERN</b>													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>KINGS</b>													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7
<b>LAKE</b>													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
<b>LASSEN</b>													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
<b>LOS ANGELES</b>													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
<b>MADERA</b>													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
<b>MARIN</b>													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
<b>MARIPOSA</b>													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
<b>MENDOCINO</b>													

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
<b>MERCED</b>													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5
<b>MODOC</b>													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
<b>MONO</b>													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
<b>MONTEREY</b>													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
<b>NAPA</b>													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
<b>NEVADA</b>													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
<b>ORANGE</b>													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
<b>PLACER</b>													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2
<b>PLUMAS</b>													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
<b>RIVERSIDE</b>													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	<b>3.1</b>	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9
<b>RIVERSIDE</b>													
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Desert	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
<b>SACRAMENTO</b>													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
<b>SAN BENITO</b>													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
<b>SAN BERNARDINO</b>													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2

<b>SAN DIEGO</b>													
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0
<b>SAN FRANCISCO</b>													
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1
<b>SAN JOAQUIN</b>													
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0
<b>SAN JOAQUIN</b>													
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5
<b>SAN LUIS OBISPO</b>													
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1
<b>SAN MATEO</b>													
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
<b>SANTA BARBARA</b>													
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6



<b>SANTA CLARA</b>													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
<b>SANTA CRUZ</b>													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
<b>SHASTA</b>													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8
<b>SIERRA</b>													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
<b>SISKIYOU</b>													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
<b>SOLANO</b>													
<u>Benicia</u>	<u>1.3</u>	<u>1.4</u>	<u>2.7</u>	<u>3.8</u>	<u>4.9</u>	<u>5.0</u>	<u>6.4</u>	<u>5.5</u>	<u>4.4</u>	<u>2.9</u>	<u>1.2</u>	<u>0.7</u>	<u>40.3</u>
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
<b>SONOMA</b>													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
<b>STANISLAUS</b>													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7

Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
<b>SUTTER</b>													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
<b>TEHAMA</b>													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
<b>TRINITY</b>													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
<b>TULARE</b>													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
<b>TUOLUMNE</b>													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
<b>VENTURA</b>													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
<b>YOLO</b>													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
<b>YUBA</b>													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

\* The values in this table were derived from:

- 1) California Irrigation Management Information System (CIMIS);
- 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
- 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922,
- 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426

**Appendix B – Sample Water Efficient Landscape Worksheet.**

**WATER EFFICIENT LANDSCAPE WORKSHEET**

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.  
Please complete all sections (A and B) of the worksheet.

**SECTION A. HYDROZONE INFORMATION TABLE**

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
<b>Total</b>				<b>100%</b>

**\* Hydrozone**  
*HW = High Water Use Plants*  
*MW = Moderate Water Use Plants*  
*LW = Low Water Use Plants*

**\*\*Irrigation Method**  
*MS = Micro-spray*  
*S = Spray*  
*R = Rotor*  
*B= Bubbler*  
*D= Drip*  
*O = Other*

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1617 : PARTICIPATION IN METROPOLITAN WATER

**SECTION B. WATER BUDGET CALCULATIONS**

**Section B1. Maximum Applied Water Allowance (MAWA)**

The project's Maximum Applied Water Allowance shall be calculated using these equations:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
- ETo = Reference Evapotranspiration from Appendix A (inches per year)
- 0.5, 0.47 = ET Adjustment Factor (ETAF) for residential and non-residential areas, respectively
- LA = Landscaped Area includes Special Landscape Area (square feet)
- 0.62 = Conversion factor (to gallons per square foot per year)
- SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
- 0.3, 0.5, 0.6 = the additional ET Adjustment Factors for Special Landscape Area in residential and non-residential areas, respectively (1.0-0.5=0.5), (1.0-0.4=0.6) (1.0-0.7=0.3)

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Effective Precipitation (Eppt)**

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Section B2. Estimated Total Water Use (ETWU)**

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ET_o)(0.62) \left( \frac{PF \times HA}{IE} + SLA \right)$$

where:

- ETWU = Estimated total water use per year (gallons per year)
- ET<sub>o</sub> = Reference Evapotranspiration (inches per year)
- PF = Plant Factor from WUCOLS (see Definitions)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per square foot)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas, averaged site-wide)

**Hydrozone Table for Calculating ETWU**

Please complete the hydrozone table(s). Use as many tables as necessary.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)	Area (HA) (square feet)	PF x HA (square feet)
			Sum	
	SLA			

**Estimated Total Water Use = \_\_\_\_\_ gallons**

Show calculations.

## Appendix C – Sample Certificate of Completion.

### CERTIFICATE OF COMPLETION

This certificate is filled out by the project applicant upon completion of the landscape project.

#### PART 1. PROJECT INFORMATION SHEET

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

#### Project Address and Location:

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

#### Property Owner or his/her designee:

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

#### Property Owner

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

\_\_\_\_\_

Property Owner Signature

Date

#### Please answer the questions below:

1. Date the Landscape Documentation Package was submitted to the local agency \_\_\_\_\_
2. Date the Landscape Documentation Package was approved by the local agency \_\_\_\_\_
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor \_\_\_\_\_

**PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE**

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

\*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

**PART 3. IRRIGATION SCHEDULING**

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

**PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE**

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

**PART 5. LANDSCAPE IRRIGATION AUDIT REPORT**

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

**PART 6. SOIL MANAGEMENT REPORT**

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per ordinance Section 492.65.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.65.



## Report to City Council

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**TO:** Mayor and City Council Acting in its Capacity as President and Members of the Board of Directors of the Moreno Valley Community Services District (CSD)

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL REBATE PROGRAM FOR COMMUNITY SERVICES DISTRICT ZONE M

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### **RECOMMENDED ACTION**

#### **Recommendations:**

1. Authorize Participation in Metropolitan Water District's ("MWD") Turf Removal Program for a Rebate of up to \$125,592.00 for the benefit of Community Services District ("CSD") Zone M landscape maintenance district.
2. Approve the First Amendment to the 2015/16 Independent Contractor Agreement for Project No. M/12-13 for Landscape Maintenance Services ("First Amendment") with Landcare (formerly TruGreen Landcare), 1616 Marlborough Avenue, Suite S, Riverside, CA 92507 to: 1) replace turf with drought tolerant landscape and irrigation materials ("Additional Work") in those areas listed on Exhibits A and B of the First Amendment and 2) accept for routine landscape maintenance ("Base Work") the Alessandro Boulevard landscaped median located between Indian Avenue and Perris Boulevard.
3. Approve a budget adjustment to the CSD Zone M budget as set forth in the Financial Impact section of this report.
4. Authorize the City Manager to execute the First Amendment with Landcare, which includes authorizing the City Manager to execute subsequent Amendments or Extensions to the 2015/16 Agreement, including the authority to authorize associated purchase orders in accordance with the terms of the 2015/16 Agreement, subject to the approval of the City Attorney.



5. Authorize the issuance of a change order for fiscal year 2015/16 to Landcare from the current not-to-exceed amount of \$78,949.71 to a new not-to-exceed amount of \$344,443.76, for an increase of \$265,494.05 (\$263,195.00 for Additional Work services and an increase of \$2,299.05 for Base Work services for eight months of service starting November 1, 2015).
6. Authorize the City Manager to execute subsequent change orders up to a not-to-exceed 10% contingency amount of \$26,319.50 should the need arise.

## **SUMMARY**

This report recommends approval of the City's participation in Metropolitan Water District's ("MWD") Turf Removal Rebate program, an amendment to the Independent Contractor Agreement ("First Amendment") with Landcare (formerly known as TruGreen Landcare) ("Contractor") to complete the project, and corresponding budget adjustments.

In response to the drought and the Governor's Executive Order B-29-15, an application was submitted to participate in MWD's Turf Removal Rebate program for Community Services District ("CSD") Zone M's landscape maintenance district. MWD will rebate the City \$2 for every square foot of turf removed and replaced with drought tolerant landscaping. Where necessary, the irrigation system will be modified to drip irrigation to optimize water usage. In addition to turf, many of the medians include plant material which is not eligible for the rebate. To ensure consistency, the project includes replacement of the plant material with drought tolerant landscaping.

When complete, eight Zone M medians and the two Alessandro Boulevard monument parkways (northeast and southeast corner of Alessandro Boulevard and Old 215 Frontage Road) will benefit from the project and 62,796 square feet of turf in the public landscaping will be removed and replaced with California Friendly Landscape. Attachment 2 is a map of the areas proposed for the project. The rebate is expected to cover 48% of the cost of the improvements the remaining 52% will come from available Zone M fund balance.

Completion of the project will demonstrate the City's commitment to conserve water, reduce ongoing water expenses for the landscape maintenance district, and modernize the public landscaping within these areas.

## **DISCUSSION**

### *Drought Restrictions*

On April 1, 2015, the Governor issued Executive Order B-29-15 in response to the drought. The Executive Order "prohibits irrigation with potable water of ornamental turf on public street medians." On April 2, 2015, irrigation to the turf of these medians was turned off.

In response to the drought and in compliance with water restrictions imposed by the State, Eastern Municipal Water District ("EMWD") has been implementing water restrictions. As of May 8, 2015, EMWD was in Stage 4a of its Water Shortage Contingency Plan. Stage 4a reduces outdoor water budgets by 10% of the monthly allocated billing unit. On September 30, 2015, EMWD moved to Stage 4b. Stage 4b reduces outdoor water budgets by an additional 20%, for a 30% total reduction. However, EMWD is requesting agencies reduce outdoor use of potable water by 50%.

### *Rebate Submission*

Because turf is a major consumer of water, an application for the removal of turf in parkways and medians within the CSD's Zone M landscape maintenance district was submitted to MWD for participation in its Turf Removal Rebate program. At the time, the program offered a \$2 rebate for every square foot of turf replaced with drought tolerant landscaping. The application was submitted in April, 2015 to replace 62,796 square feet of turf. On August 8, 2015, the City received notification of its preauthorization of the rebate, pending completion of the program requirements.

The turf must be replaced with drought tolerant landscaping and the project must be completed within 120 days of notification (December 8, 2015) of preauthorization. MWD may allow an extension to February 8, 2015, if necessary, depending upon the circumstances.

### *First Amendment to the Agreement*

After a competitive proposal process in June of 2012, the CSD and Contractor entered into an Independent Contractor Agreement ("Agreement") to provide landscape maintenance services to the public landscaped parkway and median areas within Zone M. Services include routine landscape maintenance ("Base Work") and additional services as needed to include replants, mulch, irrigation and other landscape related services ("Additional Work"). The terms and provisions of the Agreement, including the costs for the Base Work and predetermined unit costs for Additional Work, were extended through the fiscal year ("FY") 2015/16 ("2015/16 Agreement").

A proposal was solicited from the Contractor to replace the turf and plant material in the planters with drought tolerant landscaping and irrigation within certain Zone M medians and parkways. Work includes, but is not limited to removing turf, modifying the irrigation system and installing new landscape material. The landscaping will be drought tolerant and consistent with the California Friendly Landscape guidelines as well as the State's proposed Model Water Efficient Landscape Ordinance. The irrigation will be modified to drip irrigation to optimize water use for the new drought tolerant landscaping and to reduce the ongoing amount of water necessary to support the plant material. The cost proposed for these services is \$263,195.00 and is consistent with the predetermined unit costs in the Agreement.

Attached is the proposed First Amendment which amends the 2015/16 Agreement to

include Additional Work services to remove the turf and plant material and replace it with drought tolerant landscaping. Removal of the turf and modification of the irrigation system will begin after approval of the Amendment. Installation of the drought tolerant landscaping will be based primarily on weather conditions. The ideal planting time is during cooler weather when the plants are best suited for survival and temperatures are cooler to limit water evaporation. However, the project must be completed by December 8, 2015, unless MWD grants an extension.

Additionally, the First Amendment includes acceptance of the Alessandro Boulevard median (between Indian Avenue and Perris Boulevard) for routine landscape maintenance at the standard service level. The standard service schedule provides landscape maintenance 1 time every 4 weeks, with weekly litter removal and irrigation monitoring. This median was constructed as part of a traffic safety grant received by the City's Transportation Division. Although funds to construct the median were provided by the grant, no offsetting revenue was identified to provide for ongoing landscape maintenance. Similar to other medians within the CSD Zone M program, its maintenance is proposed to be funded by the General Fund. Acceptance of the maintenance of the median will occur on November 1, 2015. For the balance of FY 2015/16, routine landscape maintenance will cost \$2,299.05. (Annual costs will be \$3,448.56).

## **ALTERNATIVES**

1. Approve and authorize the recommended actions as presented in this staff report. *By selecting this alternative, the turf and plant material in the public landscape of certain Zone M areas will be replaced with drought tolerant landscaping as part of MWD's Turf Removal Rebate program. Additionally, the public landscaping for the Alessandro Boulevard median (between Indian Avenue and Perris Boulevard) will receive routine landscape maintenance services.*

2. Do not approve or authorize the recommended actions as presented in this staff report. *By selecting this alternative, the public landscape of certain Zone M areas will not be replaced with drought tolerant landscaping and the City will not be able to meet program requirements for MWD's Turf Removal Rebate program. Additionally, the Alessandro Boulevard median (between Indian Avenue and Perris Boulevard) will not receive routine landscape maintenance service.*

## **FISCAL IMPACT**

The CSD Zone M landscape maintenance district is funded through a combination of parcel charges collected on the property tax bills and a general fund contribution. The parcel charge is levied on those properties that receive benefit from the public landscaping. The program funds the landscape maintenance of medians throughout the City.

Participation in MWD's Turf Removal Rebate Program will have no negative impact on the General Fund. MWD will provide reimbursement up to \$125,592.00 (48%) for

eligible costs associated with the project. Additional Work services included within the First Amendment are eligible for reimbursement from MWD's Turf Removal Rebate program. The rebate has been approved for reimbursement contingent upon completion of the program's requirements.

The proposed First Amendment includes a \$263,195.00 increase in compensation for Additional Work services to complete the project and a \$2,299.05 increase in compensation for Base Work for the Alessandro Boulevard median (between Indian Avenue and Perris Boulevard), for the balance of FY 2015/16. Annual Base Work services will be \$3,448.56. Funding for the maintenance of the added Alessandro Boulevard median will come from a general fund contribution.

<b>Summary First Amendment to 2015/16 Agreement</b>		
<b>2015/16 Agreement Amount</b>		\$78,949.71
First Amendment Base Work	\$2,299.05	
First Amendment Additional Work (Project)	\$263,195.00	
First Amendment		\$265,494.05
<b>Total 2015/16 Agreement</b>		<b><u>\$344,443.76</u></b>
<i>Breakdown of Base Work and Additional Work</i>		
2015/16 Base Work	\$66,749.71	
First Amendment Base Work	\$2,299.05	
Total Base Work		\$69,048.76
2015/16 Additional Work	\$12,200.00	
First Amendment Additional Work	\$263,195.00	
Total 2015/16 Additional Work		\$275,395.00
<b>Total 2015/16 Agreement</b>		<b><u>\$344,443.76</u></b>

Due to the age of the facilities within these areas, a 10% contingency has been included within this report to cover unforeseen circumstances which may be discovered while completing the project. The rebate will not cover the full cost of the project and contingency. Therefore, available fund balances are proposed to fund the difference between the First Amendment cost for the Additional Work services and the rebate as described in the table below. It is anticipated that \$163,922.50 is necessary to complete the project.

<b>District</b>	<b>First Amendment Contract Amount</b>	<b>10% Contingency</b>	<b>Square Footage of Turf</b>	<b>Rebate (up to \$2/sq. ft.)</b>	<b>Fund Balance</b>
CSD Zone M	\$263,195.00	\$26,319.50	62,796	\$125,592.00	\$163,922.50

This project was not anticipated as part of the FY 2015/16 budget and requires a budget

adjustment. Funds are available in the CSD Zone M fund balance to cover the upfront cost of the Additional Work project. It is anticipated that reimbursement of funds will be received approximately 120 days after the request is submitted.

An annual General Fund transfer of \$2,299.05 is required for the Base Work cost for the added Alessandro Boulevard median.

### *Apportions/Budget Adjustments*

Description	Fund	GL Account No.	Type (Rev/Exp)	FY 15/16 Budget	Proposed Adjustments	FY 15/16 Amended Budget
Amendment + 10% Contingency	Zone M	5112-70-79-25719-620910	Exp.	\$77,900	\$291,814	\$369,714
Rebate	Zone M	5112-70-79-25719-589900	Rev.	\$0	\$125,592	\$125,592
Transfer	General Fund	1010-99-99-91010-905112	Exp.	\$105,881	\$2,299	\$108,180
Transfer	Zone M	5112-99-99-95112-801010	Rev.	\$105,881	\$2,299	\$108,180

Description	Fund	GL Account No.	Type (Rev/Exp)	FY 16/17 Budget	Proposed Adjustments	FY 16/17 Amended Budget
Transfer	General Fund	10-10-99-99-91010-905112	Exp.	\$106,126	\$2,299	\$108,425
Transfer	Zone M	5112-99-99-95112-801010	Rev.	\$106,126	\$2,299	\$108,425

## **NOTIFICATION**

Drought tolerant landscape renovation signs have been placed in the eight turf medians and two Alessandro monument parkways.

## **PREPARATION OF STAFF REPORT**

Prepared by:  
Sharon Sharp,  
Senior Management Analyst

Department Head Approval:  
Ahmad Ansari, P.E.,  
Public Works Director/City Engineer

Concurred by:  
Candace E. Cassel,  
Special Districts Division Manager

## **CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Community Image, Neighborhood Pride and Cleanliness**. Promote a sense of community pride and foster an excellent image about our City by developing and executing programs which will result in quality development, enhanced neighborhood preservation efforts, including home rehabilitation and neighborhood restoration.

**ATTACHMENTS**

- 1. First Amendment to the 2015/16 Agreement
- 2. Map of Affected Zone M Median Areas
- 3. Governor's Executive Order B-29-15
- 4. EMWD's Water Shortage Contingency Plan
- 5. State of California's Proposed Water Efficient Landscape Ordinance

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/29/15 8:03 AM
City Attorney Approval	<u>✓ Approved</u>	9/29/15 8:34 AM
City Manager Approval	<u>✓ Approved</u>	10/05/15 10:26 AM

**FIRST AMENDMENT TO THE  
2015/16 INDEPENDENT CONTRACTOR AGREEMENT  
RFP NO. M/12-13  
PROJECT NO. M/12-13  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
ZONE M (MEDIANS)  
MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY  
LANDSCAPING AND IRRIGATION**

The First Amendment to the Agreement is by and between the MORENO VALLEY COMMUNITY SERVICES DISTRICT, a municipal corporation, hereinafter referred to as "District" and Landcare, hereinafter referred to as "Contractor". This First Amendment is made and entered into and effective on the date the City Manager signs this Amendment.

RECITALS:

Whereas, the District and Contractor entered into an Agreement entitled "INDEPENDENT CONTRACTOR AGREEMENT RFP NO. M/12-13 PROJECT NO. M/12-13 MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE M (MEDIANS) MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY LANDSCAPING AND IRRIGATION," dated August 13, 2012 for maintenance of the District's medians and irrigation systems in Zone M (Medians) hereinafter referred to as "Original Agreement".

Whereas, a First Amendment to the Original Agreement was approved on October 3, 2012, to add 49,575 sq. ft. of landscaped area (Zone S) to be maintained on a routine basis ("Base Work") and increase compensation for Base Work by \$10,975.92 (an increase from \$59,460.00 to \$70,435.92) for fiscal year (FY) 2012/13.

Whereas, a Second Amendment to the Original Agreement was approved on June 24, 2012 to 1) add 41,250 sq. ft. of landscape area for routine maintenance in Zone M and increase compensation by \$1,522.12 for two months of service (Base Work) in FY 2012/13 (an increase from \$70,435.92 to \$71,958.04) and 2) increase irrigation repair services for unanticipated work ("Additional Work") to include compensation of \$5,800.00 (\$4,600.00 for Zone M and \$1,200.00 for Zone S) for FY 2012/13.

*First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. M/12-13 PROJECT NO. M/12-13  
MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE M (MEDIANS)  
MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY LANDSCAPING AND IRRIGATION*

Whereas, a First Extension Agreement was approved on July 9, 2013 to 1) extend all the terms and provisions of the Original Agreement, as amended for 12 months of Base Work, through June 30, 2016, which increased the compensation for added landscape area (Map Id. 20) by \$9,132.72 (an increase from \$70,435.92 to \$79,568.64) and 2) increase services for reinvestments (Additional Work) for irrigation repairs and increase compensation by \$6,000.00 (an increase from \$5,800.00 to \$11,800.00) for FY 2013/14.

Whereas, a Third Amendment to the Original Agreement was approved on September 17, 2013 to 1) increase the landscaped area to be maintained on a routine basis by an additional 3,457 sq. ft. (Zone M) and increase compensation for Base Work by \$701.58 (an increase from \$68,592.72 to \$69,294.30) for FY 2013/14.

Whereas, landscape maintenance services provided during the First Extension of the Original Agreement, as amended, were sufficiently performed.

Whereas, the Second Extension Agreement was approved on June 16, 2014 to 1) extend the term of the Original Agreement through June 30, 2015, 2) amend the agreement to increase the landscaped area to be maintained on a routine basis by an additional 9,678 sq. ft. (Zone M) and increase compensation for Base Work by \$2,142.80 (an increase from \$69,294.30 to \$71,437.10) and 3) increase the amount of reinvestments (Additional Work) for irrigation repairs and increase compensation by \$1,900.00 (an increase from \$11,800.00 to \$13,700.00) for FY 2014/15.

Whereas, a Fourth Amendment to the Original Agreement was approved on March 19, 2015 to 1) reduce the sq. ft. of the landscaped areas maintained on a routine basis to match actual sq. ft. for 5 months of service and decrease compensation by \$6,461.74 for Base Work (a decrease from \$82,413.01 to \$75,951.27) and 2) increase additional work services to renovate a portion of the Alessandro Boulevard median and increase compensation for Additional Work by \$8,140.00 (an increase from \$13,700.00 to \$21,840.00) for FY 2014/15.



*First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. M/12-13 PROJECT NO. M/12-13  
MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE M (MEDIANS)  
MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY LANDSCAPING AND IRRIGATION*

Whereas, the Original Agreement expired on June 30, 2015 and the District and Contractor entered into an Agreement (“New Agreement”), dated August 13, 2015 to 1) extend all of the terms and provisions of the Original Agreement, as amended for 12 months of Base Work, through June 30, 2016 and decrease the compensation for routine maintenance (Base Work) by \$9,905.43 for the sq. ft. reductions and 2) increase the landscaped area to be maintained on a routine basis by an additional 5,450 sq. ft. (Zone M) (Base Work) for 7 months and increase compensation for Base Work by \$703.87, and 4) decrease reinvestment services (Additional Work) and compensation by \$1,500.00 (a decrease from \$13,700.00 to \$12,200.00) for FY 2015/16.

Whereas, it is desirable to amend the New Agreement to 1) replace turf with drought tolerant plant materials in certain medians as more fully described in Exhibit “B”, attached hereto, and 2) increase the landscaped area to be maintained on a routine basis by an additional 17,470 sq. ft. for the Alessandro Boulevard median from Indian Avenue to Perris Boulevard (Zone M) (Base Work) at the negotiated rate of \$0.01645 per square foot per month and increase compensation for Base Work by \$2,299.05 for eight months of service (an increase from \$66,749.71 to \$69,048.76) for FY 2015/16.

**SECTION 1. FIRST AMENDMENT TO THE AGREEMENT**

The New Agreement is hereby amended as follows:

- 1.1 Increase Additional Work services to replace turf in Zone M with drought tolerant landscape materials as more fully detailed in Exhibit B.
- 1.2 Increase Base Work, to add Alessandro Boulevard median (map no. 23 on Exhibit “A”) for service beginning November 1, 2015.
- 1.3 Increase compensation for Base Work, as listed in Exhibit A, by \$2,299.05.

*First Amendment to the 2015/16 Independent Contractor Agreement*  
*RFP NO. M/12-13 PROJECT NO. M/12-13*  
*MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE M (MEDIANS)*  
*MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY LANDSCAPING AND IRRIGATION*

1.4 Increase compensation for Additional Work, as listed in Exhibit A, by \$263,195.00 (an increase from \$12,200.00 to \$275,395.00).

**SECTION 2. AGREEMENT**

2.1 Except as otherwise specifically provided in this First Amendment, all other terms and conditions of the New Agreement shall remain in full force and effect.

**SIGNATURE PAGE TO FOLLOW**

First Amendment to the 2015/16 Independent Contractor Agreement  
RFP NO. M/12-13 PROJECT NO. M/12-13  
MORENO VALLEY COMMUNITY SERVICES DISTRICT ZONE M (MEDIANS)  
MAINTENANCE OF MEDIAN-MONUMENT-PARKWAY LANDSCAPING AND IRRIGATION

IN WITNESS HEREOF, the parties have each caused their authorized representative to execute this First Amendment to the Agreement.

Moreno Valley Community Services District

Contractor: Landcare.

By: \_\_\_\_\_  
City Manager, Acting in the capacity of  
District Manager to the Moreno  
Valley Community Services District

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(President of Vice President)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

INTERNAL USE ONLY

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

\_\_\_\_\_  
Date

By: \_\_\_\_\_

Title: \_\_\_\_\_  
(Corporate Secretary)

Date: \_\_\_\_\_

RECOMMENDED FOR APPROVAL:

\_\_\_\_\_  
Department Head

\_\_\_\_\_  
Date

Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN METROPOLITAN WATER DISTRICT'S TURF REMOVAL

Zone M Locations						
Map ID	Site	Service Level	Type	Sq. Footage	2015/16 Cost Per Month	2015/16 Cost Per Year
1	Alessandro Blvd. & Old Hwy 215 Monuments	1	Planter	11,793	\$ 217.58	\$ 2,610.97
2	Alessandro Blvd. & Old Hwy 215 to Frederick Street	1	Planter	48,139	888.16	10,657.97
3	Alessandro Blvd. & Frederick Street to Heacock	1	Planter	49,077	905.47	10,865.65
4	Alessandro Blvd. & Heacock Street to Perris Boulevard	1	Planter	4,827	89.06	1,068.70
5	Alessandro Blvd. Flaming Arrow Drive to Kitching Street	1	Planter	10,536	194.39	2,332.67
6	Perris Blvd. South of Alessandro Blvd.	1	Planter	556	10.26	123.10
7	Perris Blvd. South of John F. Kennedy Dr.	1	Planter	5,432	100.22	1,202.64
8	Perris Blvd. North of Iris Ave.	1	Planter	1,780	32.84	394.09
9	Perris Blvd., North of Krameria Ave.	1	Planter	3,048	56.24	674.83
*10	Perris Blvd. at San Michele Road	1	Planter	8,020	147.97	1,775.63
11	Perris Blvd., North of Globe Ave.	1	Planter	2,619	48.32	579.85
12	Perris Blvd., South of Globe Ave.	1	Planter	4,338	80.04	960.43
13	Perris Blvd., North of Eucalyptus Ave.	1	Planter	1,446	26.68	320.14
14	Perris Blvd., South of Iris Ave.	1	Planter	4,562	84.17	1,010.03
15	South side of Elder Ave., from Greenville Ave. to Brewster Dr.	1	Planter	7,533	138.98	1,667.81
16	Cactus Ave. west of Elsworth St.	1	Planter	2,268	41.84	502.14
17	Cactus Ave., between Frederick St. & Heacock St.	1	Planter	28,837	532.04	6,384.51
18	Moreno Beach Dr. North of Cactus Ave.	1	Planter	5,628	103.84	1,246.04
19	Old Hwy 215 South of Alessandro Blvd.	1	Planter	3,905	72.05	864.57
20	Eucalyptus Ave.	1	Planter	36,129	666.58	7,998.96
21	Cactus w/o Frederick Street	1	Planter	8,262	152.43	1,829.21
23	Alessandro Blvd. Indian Ave. to Perris Blvd. <sup>2</sup>	1	Non-Irrigated Planter	17,470	287.38	2,299.05
<b>Zone M Base Work Totals (July 2015 thru November 2015)</b>					<b>4,876.54</b>	<b>\$ 57,368.98</b>
22	Iris Ave. & Indian St. <sup>1</sup>	1	Planter	5,450	100.55	703.87
<b>Zone M Base Work Totals (December 2015 thru June 2016)</b>					<b>\$ 4,977.09</b>	<b>\$ 58,072.85</b>

Zone S Location						
Map ID	Site	Type	Sq. Footage	2015/16 Cost Per Month	2015/16 Cost Per Year	
N/A	Sunnymead Boulevard	1	Planter	49,575	\$ 914.66	\$ 10,975.91
<b>Zone S Base Work Totals</b>					<b>\$ 914.66</b>	<b>\$ 10,975.91</b>
<b>Total Zone M &amp; S Base Work Amount (July 2015 thru November 2015)</b>					<b>\$ 5,791.20</b>	<b>\$ 69,048.76</b>
<b>Total Zone M &amp; S Base Work Amount (December 2015 thru June 2015)</b>					<b>\$ 5,891.75</b>	
<b>Additional Work</b>						<b>2015/16 Cost Per Year</b>
<b>Zone M</b>					<b>\$</b>	<b>10,600.00</b>
<b>Zone S</b>						<b>1,600.00</b>
<b>Zone M &amp; S Unanticipated Additional Work Total</b>					<b>\$</b>	<b>12,200.00</b>
<b>Zone M Turf Refurbishment Additional Work Total</b>					<b>\$</b>	<b>263,195.00</b>
<b>Zone M &amp; S Base and Additional Work Total</b>					<b>\$</b>	<b>344,443.76</b>

Notes: <sup>1</sup>Iris Ave. & Indian St. median - 7 months of service in 2015/16.<sup>2</sup>Alessandro Blvd. from Indian St. to Perris Blvd. - 8 months of service in 2015/16

A large, stylized leaf logo in shades of orange and light orange, positioned in the upper left quadrant of the page.

# LandCare

## City of Moreno Valley

Landscape Enhancement, Turf Conversion and Water  
Conservation Proposal

# LandCare

## PLEASE READ - IMPORTANT NOTES REGARDING CONCEPTUAL IMAGES

1. **Photorealistic images are computer generated designs in concept only.** Every effort is made to depict the plant material as accurately as possible in color and mature form.
2. **Newly installed plant material will be smaller.** Plant material is depicted after a period of growth, generally 2½ - 3 years.
3. **Conceptual images are not to scale.** Planting layout and quantities may differ from what is shown.
4. **Flowering plants are shown in bloom.** Not all plants bloom concurrently and therefore will flower at different times.
5. **Flower colors are often affected by environmental conditions (pH, etc.);** therefore, exact colors may vary.
6. **Low Water Use Plantings:** Although plants used are low water use, during the first year all plants will be watered regularly to ensure establishment.
7. **Substitutions:** In the event that a particular plant is unavailable or is rejected due to poor quality, the designer, account manager and/or site supervisor reserve the right to make substitutions. Every effort will be made to obtain approval from the client prior to making a substitution when schedule allows.
8. **LandCare reserves its common law copyright and other property rights in these documents.**
9. **These documents remain the property of Landcare until final proposal is approved & accepted by client.**
10. **These documents are not to be reproduced, changed or copied in any form, nor assigned to a third party.**
11. **These documents are not for bidding or construction.**

# City of Moreno Valley



Landscape Enhancement  
Zone M - Old 215 Monuments and Alessandro  
Boulevard

# City of Moreno Valley

## Zone M - Old 215 Monuments



**Current**



**Enhancement**

Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN



# City of Moreno Valley

## Zone M - Old 215 Monuments

Replace current plant material with new plant material to match median plantings

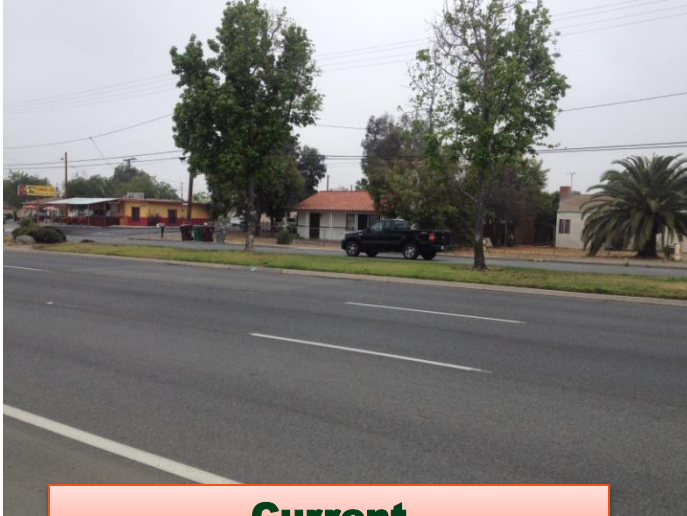


Remove turf and replace with Desert Carpet Acacia

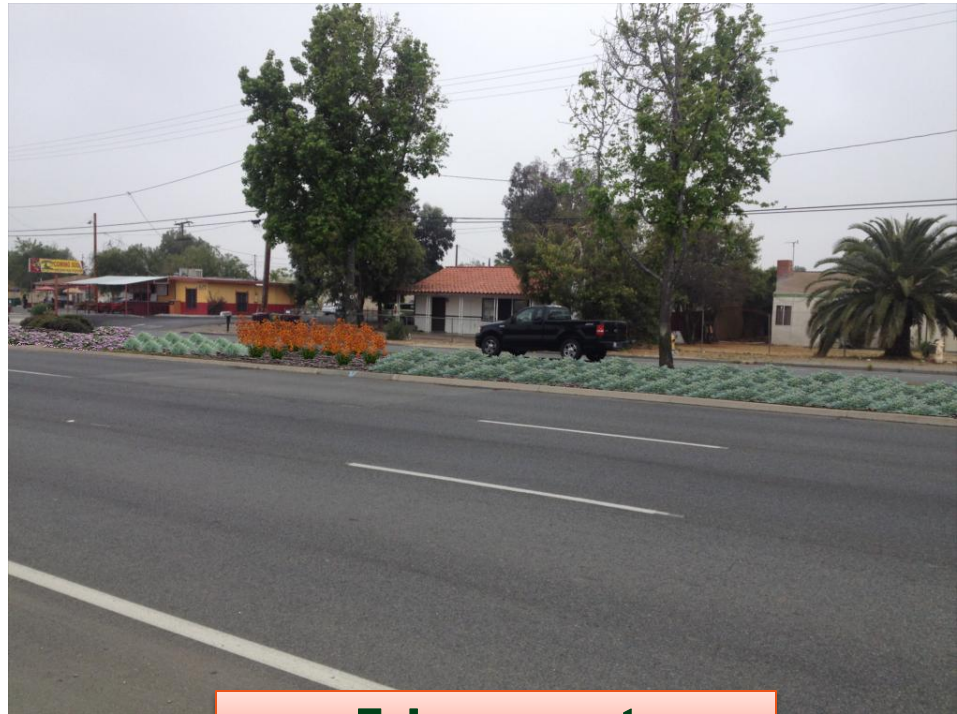
Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN

# City of Moreno Valley

## Zone M - Alessandro Boulevard Medians



**Current**



**Enhancement**

Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN

# City of Moreno Valley

## Zone M - Alessandro Boulevard Medians

Replace current plant material with new plant material to match recently planted median on median plantings

Remove turf and replace with Desert Carpet Acacia



# City of Moreno Valley

## Zone M - Alessandro Boulevard Medians



**Current**



**Enhancement**

Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN

# City of Moreno Valley

## Zone M - Alessandro Boulevard Medians

Add mass plantings of Lomandra, Lantana, and Flax to break up Desert Carpet Acacia

Replace current plant material with new plant material to match recently planted median on median plantings

Remove turf and replace with Desert Carpet Acacia



Attachment: First Amendment to the 2015/16 Agreement (1616 : PARTICIPATION IN

# Proposal

## City of Moreno Valley - Zone M - Old 215 Monuments and Alessandro Boulevard

### Plant Material

<u>Quantity</u>	<u>Common/Scientific Name</u>	<u>Size</u>
5560	T.B.D. - (Lomandra, Kangaroo Paw, Lantana, Flax, Blue Fescue)	1 Gallon
660	Desert Carpet Acacia	1 Gallon
4	Crape Myrtles	24" Box
20	Trees - TBD	24" Box

### Hardscape Materials

<u>Quantity</u>	<u>Material</u>	<u>Square Footage</u>
630	Yards –Landscape Mulch	99,000 SF @3"

### Irrigation

<u>Quantity</u>	<u>Material</u>
1	Retrofit existing irrigation system (49,500 SF high density drip line/49,500 SF low density drip line). All new planting beds and existing turf areas will be irrigated with drip line (netafim or similar) or drip emitters as necessary.

### Demolition

<u>Quantity</u>	<u>Description</u>
1	Removal of turf and existing plant material. Turf will be scalped and sprayed with roundup then removed at 2"- 3" depth and removed off site. Existing plant material not incorporated in new plan will be removed and disposed of off site.

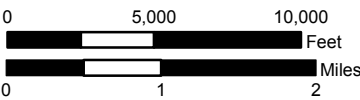
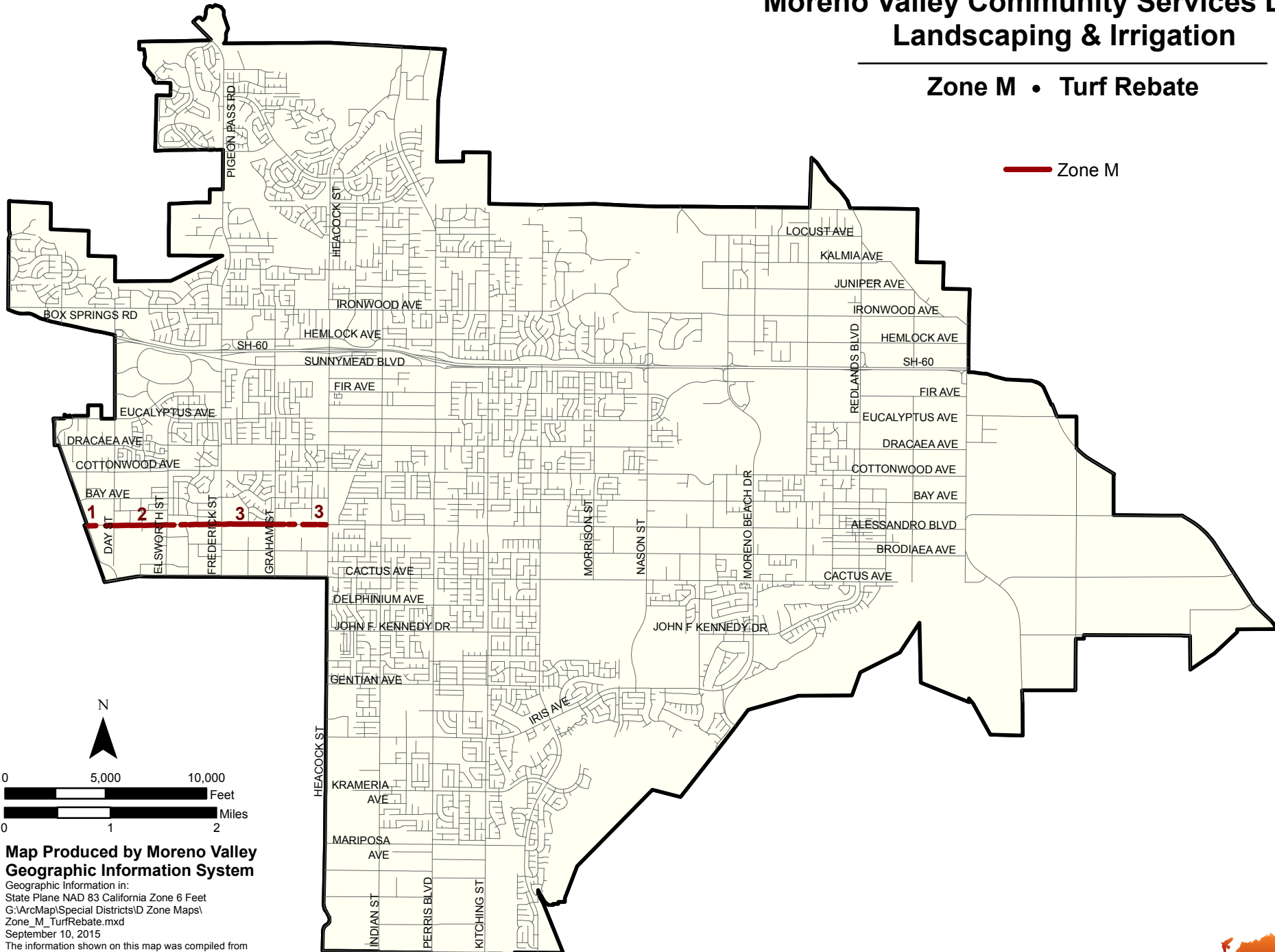
**Project Summary:** LandCare, LLC proposes to provide all labor, equipment and materials necessary for the turf conversion and planter bed enhancement for Zone M for the City of Moreno Valley. Areas are to include the Old 215 monuments and medians on Alessandro Boulevard from Day St. to Heacock St. as specified by the City of Moreno Valley.

We propose to hereby furnish materials and labor – complete in accordance with above specifications, for the sum of : **\$263,195.00**

# Moreno Valley Community Services District Landscaping & Irrigation

## Zone M • Turf Rebate

— Zone M



### Map Produced by Moreno Valley Geographic Information System

Geographic Information in:  
 State Plane NAD 83 California Zone 6 Feet  
 G:\ArcMap\Special Districts\ID Zone Maps\  
 Zone\_M\_TurfRebate.mxd  
 September 10, 2015

The information shown on this map was compiled from the Riverside County GIS and the City of Moreno Valley GIS. The land base and facility information on this map is for display purposes only and should not be relied upon without independent verification as to its accuracy. Riverside County and City of Moreno Valley will not be held responsible for any claims, losses or damages resulting from the use of this map.



Attachment: Map of Affected Zone M Median Areas (1616 : PARTICIPATION IN METROPOLITAN WATER

# Moreno Valley Community Services District Landscaping & Irrigation

## Zone M • Turf Rebate

<u>MAP ID</u>	<u>Address</u>	<u>Area ( Sq. Ft.)</u>
1	Old 215 Monuments	4,292
2	Alessandro Blvd. (East of Day)	4,996
2	Alessandro Blvd. (West of Elsworth)	5,951
2	Alessandro Blvd. (West of Elsworth by Jack)	3,032
2	Alessandro Blvd. (East of Veterans)	8,054
3	Alessandro Blvd. (East of Frederick)	7,779
3	Alessandro Blvd. (West of Heacock)	8,905
3	Alessandro Blvd. (East of Graham)	6,249
3	Alessandro Blvd. (West of Graham)	13,538

**Total Area, Service Area M:**                      **62,796 sq ft**  
**Total Acreage, Service Area M:**                      **1.44 acres**

Attachment: Map of Affected Zone M Median Areas (1616 : PARTICIPATION IN METROPOLITAN WATER



**Executive Department**  
State of California

**EXECUTIVE ORDER B-29-15**

**WHEREAS** on January 17, 2014, I proclaimed a State of Emergency to exist throughout the State of California due to severe drought conditions; and

**WHEREAS** on April 25, 2014, I proclaimed a Continued State of Emergency to exist throughout the State of California due to the ongoing drought; and

**WHEREAS** California's water supplies continue to be severely depleted despite a limited amount of rain and snowfall this winter, with record low snowpack in the Sierra Nevada mountains, decreased water levels in most of California's reservoirs, reduced flows in the state's rivers and shrinking supplies in underground water basins; and

**WHEREAS** the severe drought conditions continue to present urgent challenges including: drinking water shortages in communities across the state, diminished water for agricultural production, degraded habitat for many fish and wildlife species, increased wildfire risk, and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Bay Delta; and

**WHEREAS** a distinct possibility exists that the current drought will stretch into a fifth straight year in 2016 and beyond; and

**WHEREAS** new expedited actions are needed to reduce the harmful impacts from water shortages and other impacts of the drought; and

**WHEREAS** the magnitude of the severe drought conditions continues to present threats beyond the control of the services, personnel, equipment, and facilities of any single local government and require the combined forces of a mutual aid region or regions to combat; and

**WHEREAS** under the provisions of section 8558(b) of the Government Code, I find that conditions of extreme peril to the safety of persons and property continue to exist in California due to water shortage and drought conditions with which local authority is unable to cope; and

**WHEREAS** under the provisions of section 8571 of the California Government Code, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay the mitigation of the effects of the drought.

**NOW, THEREFORE, I, EDMUND G. BROWN JR.**, Governor of the State of California, in accordance with the authority vested in me by the Constitution and statutes of the State of California, in particular Government Code sections 8567 and 8571 of the California Government Code, do hereby issue this Executive Order, effective immediately.



**IT IS HEREBY ORDERED THAT:**

1. The orders and provisions contained in my January 17, 2014 Proclamation, my April 25, 2014 Proclamation, and Executive Orders B-26-14 and B-28-14 remain in full force and effect except as modified herein.

**SAVE WATER**

2. The State Water Resources Control Board (Water Board) shall impose restrictions to achieve a statewide 25% reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. These restrictions should consider the relative per capita water usage of each water suppliers' service area, and require that those areas with high per capita use achieve proportionally greater reductions than those with low use. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.
3. The Department of Water Resources (the Department) shall lead a statewide initiative, in partnership with local agencies, to collectively replace 50 million square feet of lawns and ornamental turf with drought tolerant landscapes. The Department shall provide funding to allow for lawn replacement programs in underserved communities, which will complement local programs already underway across the state.
4. The California Energy Commission, jointly with the Department and the Water Board, shall implement a time-limited statewide appliance rebate program to provide monetary incentives for the replacement of inefficient household devices.
5. The Water Board shall impose restrictions to require that commercial, industrial, and institutional properties, such as campuses, golf courses, and cemeteries, immediately implement water efficiency measures to reduce potable water usage in an amount consistent with the reduction targets mandated by Directive 2 of this Executive Order.
6. The Water Board shall prohibit irrigation with potable water of ornamental turf on public street medians.
7. The Water Board shall prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

8. The Water Board shall direct urban water suppliers to develop rate structures and other pricing mechanisms, including but not limited to surcharges, fees, and penalties, to maximize water conservation consistent with statewide water restrictions. The Water Board is directed to adopt emergency regulations, as it deems necessary, pursuant to Water Code section 1058.5 to implement this directive. The Water Board is further directed to work with state agencies and water suppliers to identify mechanisms that would encourage and facilitate the adoption of rate structures and other pricing mechanisms that promote water conservation. The California Public Utilities Commission is requested to take similar action with respect to investor-owned utilities providing water services.

#### **INCREASE ENFORCEMENT AGAINST WATER WASTE**

9. The Water Board shall require urban water suppliers to provide monthly information on water usage, conservation, and enforcement on a permanent basis.
10. The Water Board shall require frequent reporting of water diversion and use by water right holders, conduct inspections to determine whether illegal diversions or wasteful and unreasonable use of water are occurring, and bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water. Pursuant to Government Code sections 8570 and 8627, the Water Board is granted authority to inspect property or diversion facilities to ascertain compliance with water rights laws and regulations where there is cause to believe such laws and regulations have been violated. When access is not granted by a property owner, the Water Board may obtain an inspection warrant pursuant to the procedures set forth in Title 13 (commencing with section 1822.50) of Part 3 of the Code of Civil Procedure for the purposes of conducting an inspection pursuant to this directive.
11. The Department shall update the State Model Water Efficient Landscape Ordinance through expedited regulation. This updated Ordinance shall increase water efficiency standards for new and existing landscapes through more efficient irrigation systems, greywater usage, onsite storm water capture, and by limiting the portion of landscapes that can be covered in turf. It will also require reporting on the implementation and enforcement of local ordinances, with required reports due by December 31, 2015. The Department shall provide information on local compliance to the Water Board, which shall consider adopting regulations or taking appropriate enforcement actions to promote compliance. The Department shall provide technical assistance and give priority in grant funding to public agencies for actions necessary to comply with local ordinances.
12. Agricultural water suppliers that supply water to more than 25,000 acres shall include in their required 2015 Agricultural Water Management Plans a detailed drought management plan that describes the actions and measures the supplier will take to manage water demand during drought. The Department shall require those plans to include quantification of water supplies and demands for 2013, 2014, and 2015 to the extent data is available. The Department will provide technical assistance to water suppliers in preparing the plans.

13. Agricultural water suppliers that supply water to 10,000 to 25,000 acres of irrigated lands shall develop Agricultural Water Management Plans and submit the plans to the Department by July 1, 2016. These plans shall include a detailed drought management plan and quantification of water supplies and demands in 2013, 2014, and 2015, to the extent that data is available. The Department shall give priority in grant funding to agricultural water suppliers that supply water to 10,000 to 25,000 acres of land for development and implementation of Agricultural Water Management Plans.
14. The Department shall report to Water Board on the status of the Agricultural Water Management Plan submittals within one month of receipt of those reports.
15. Local water agencies in high and medium priority groundwater basins shall immediately implement all requirements of the California Statewide Groundwater Elevation Monitoring Program pursuant to Water Code section 10933. The Department shall refer noncompliant local water agencies within high and medium priority groundwater basins to the Water Board by December 31, 2015, which shall consider adopting regulations or taking appropriate enforcement to promote compliance.
16. The California Energy Commission shall adopt emergency regulations establishing standards that improve the efficiency of water appliances, including toilets, urinals, and faucets available for sale and installation in new and existing buildings.

#### **INVEST IN NEW TECHNOLOGIES**

17. The California Energy Commission, jointly with the Department and the Water Board, shall implement a Water Energy Technology (WET) program to deploy innovative water management technologies for businesses, residents, industries, and agriculture. This program will achieve water and energy savings and greenhouse gas reductions by accelerating use of cutting-edge technologies such as renewable energy-powered desalination, integrated on-site reuse systems, water-use monitoring software, irrigation system timing and precision technology, and on-farm precision technology.

#### **STREAMLINE GOVERNMENT RESPONSE**

18. The Office of Emergency Services and the Department of Housing and Community Development shall work jointly with counties to provide temporary assistance for persons moving from housing units due to a lack of potable water who are served by a private well or water utility with less than 15 connections, and where all reasonable attempts to find a potable water source have been exhausted.
19. State permitting agencies shall prioritize review and approval of water infrastructure projects and programs that increase local water supplies, including water recycling facilities, reservoir improvement projects, surface water treatment plants, desalination plants, stormwater capture, and greywater systems. Agencies shall report to the Governor's Office on applications that have been pending for longer than 90 days.

20. The Department shall take actions required to plan and, if necessary, implement Emergency Drought Salinity Barriers in coordination and consultation with the Water Board and the Department of Fish and Wildlife at locations within the Sacramento - San Joaquin delta estuary. These barriers will be designed to conserve water for use later in the year to meet state and federal Endangered Species Act requirements, preserve to the extent possible water quality in the Delta, and retain water supply for essential human health and safety uses in 2015 and in the future.
21. The Water Board and the Department of Fish and Wildlife shall immediately consider any necessary regulatory approvals for the purpose of installation of the Emergency Drought Salinity Barriers.
22. The Department shall immediately consider voluntary crop idling water transfer and water exchange proposals of one year or less in duration that are initiated by local public agencies and approved in 2015 by the Department subject to the criteria set forth in Water Code section 1810.
23. The Water Board will prioritize new and amended safe drinking water permits that enhance water supply and reliability for community water systems facing water shortages or that expand service connections to include existing residences facing water shortages. As the Department of Public Health's drinking water program was transferred to the Water Board, any reference to the Department of Public Health in any prior Proclamation or Executive Order listed in Paragraph 1 is deemed to refer to the Water Board.
24. The California Department of Forestry and Fire Protection shall launch a public information campaign to educate the public on actions they can take to help to prevent wildfires including the proper treatment of dead and dying trees. Pursuant to Government Code section 8645, \$1.2 million from the State Responsibility Area Fire Prevention Fund (Fund 3063) shall be allocated to the California Department of Forestry and Fire Protection to carry out this directive.
25. The Energy Commission shall expedite the processing of all applications or petitions for amendments to power plant certifications issued by the Energy Commission for the purpose of securing alternate water supply necessary for continued power plant operation. Title 20, section 1769 of the California Code of Regulations is hereby waived for any such petition, and the Energy Commission is authorized to create and implement an alternative process to consider such petitions. This process may delegate amendment approval authority, as appropriate, to the Energy Commission Executive Director. The Energy Commission shall give timely notice to all relevant local, regional, and state agencies of any petition subject to this directive, and shall post on its website any such petition.

26. For purposes of carrying out directives 2–9, 11, 16–17, 20–23, and 25, Division 13 (commencing with section 21000) of the Public Resources Code and regulations adopted pursuant to that Division are hereby suspended. This suspension applies to any actions taken by state agencies, and for actions taken by local agencies where the state agency with primary responsibility for implementing the directive concurs that local action is required, as well as for any necessary permits or approvals required to complete these actions. This suspension, and those specified in paragraph 9 of the January 17, 2014 Proclamation, paragraph 19 of the April 25, 2014 proclamation, and paragraph 4 of Executive Order B-26-14, shall remain in effect until May 31, 2016. Drought relief actions taken pursuant to these paragraphs that are started prior to May 31, 2016, but not completed, shall not be subject to Division 13 (commencing with section 21000) of the Public Resources Code for the time required to complete them.
27. For purposes of carrying out directives 20 and 21, section 13247 and Chapter 3 of Part 3 (commencing with section 85225) of the Water Code are suspended.
28. For actions called for in this proclamation in directive 20, the Department shall exercise any authority vested in the Central Valley Flood Protection Board, as codified in Water Code section 8521, et seq., that is necessary to enable these urgent actions to be taken more quickly than otherwise possible. The Director of the Department of Water Resources is specifically authorized, on behalf of the State of California, to request that the Secretary of the Army, on the recommendation of the Chief of Engineers of the Army Corps of Engineers, grant any permission required pursuant to section 14 of the Rivers and Harbors Act of 1899 and codified in section 48 of title 33 of the United States Code.
29. The Department is directed to enter into agreements with landowners for the purposes of planning and installation of the Emergency Drought Barriers in 2015 to the extent necessary to accommodate access to barrier locations, land-side and water-side construction, and materials staging in proximity to barrier locations. Where the Department is unable to reach an agreement with landowners, the Department may exercise the full authority of Government Code section 8572.
30. For purposes of this Executive Order, chapter 3.5 (commencing with section 11340) of part 1 of division 3 of the Government Code and chapter 5 (commencing with section 25400) of division 15 of the Public Resources Code are suspended for the development and adoption of regulations or guidelines needed to carry out the provisions in this Order. Any entity issuing regulations or guidelines pursuant to this directive shall conduct a public meeting on the regulations and guidelines prior to adopting them.

31. In order to ensure that equipment and services necessary for drought response can be procured quickly, the provisions of the Government Code and the Public Contract Code applicable to state contracts, including, but not limited to, advertising and competitive bidding requirements, are hereby suspended for directives 17, 20, and 24. Approval by the Department of Finance is required prior to the execution of any contract entered into pursuant to these directives.

This Executive Order is not intended to, and does not, create any rights or benefits, substantive or procedural, enforceable at law or in equity, against the State of California, its agencies, departments, entities, officers, employees, or any other person.

**I FURTHER DIRECT** that as soon as hereafter possible, this Order be filed in the Office of the Secretary of State and that widespread publicity and notice be given to this Order.

**IN WITNESS WHEREOF** I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 1<sup>st</sup> day of April 2015.

\_\_\_\_\_  
EDMUND G. BROWN JR.  
Governor of California

**ATTEST:**

\_\_\_\_\_  
ALEX PADILLA  
Secretary of State





CITY OF MORENO VALLEY  
PUBLIC WRKS/SPECIAL DSTRCT  
OR CURRENT RESIDENT  
23822 MARCH MEMORIAL DR  
MORENO VALLEY, CA 92553



## Important Notice Regarding Potential Further Reductions In Your Water Budget!

August 14, 2015

Dear Valued Customer:

Eastern Municipal Water District (EMWD) is currently in Stage 4a of its Water Shortage Contingency Plan in response to the exceptional drought conditions that continue to affect the State of California. A Stage 4 drought status reduces customers' outdoor water budgets according to the following levels:

- Stage 4a - Outdoor water budgets reduced 10 percent (EMWD current status)
- Stage 4b - Outdoor water budgets reduced up to 50 percent
- Stage 4c - Outdoor water budgets reduced up to 100 percent

Stage 4 also eliminates the Tier 3 (Excessive) water use category. That means all water used above your indoor and outdoor water budgets will be charged at the Tier 4 (Wasteful) water use rate.

### Where are we at now with our water savings?

In May, the State Water Resources Control Board (the State Water Board) ordered customers of cities and water agencies in the state to reduce water consumption between eight and 36 percent, with the intent of achieving Governor Brown's drought directive for a 25 percent total reduction in statewide water consumption. Under the State Water Board's order, EMWD customers are required after June 1, 2015 to reduce overall water use by 28 percent (compared to 2013 data).

In June, EMWD customers reduced overall water use by 15 percent – far short of the State mandated reductions. While approximately 70 percent of our customers are now consistently using less than 50 percent of their outdoor water budgets, many customers are still falling short of the target. As a result, we received a notice of violation from the State Water Board with direction to take additional steps necessary to further reduce our customers' water usage.

### What could happen next?

In order to avoid penalties being imposed on our customers by the State Water Board, EMWD will consider moving to a Stage 4b drought status in September. This action will depend on additional water use reduction through the end of August. **Moving to Stage 4b drought status would reduce customers' outdoor water budgets up to 50 percent.**



What do we need you to do?

If you are already using 50 percent or less of your outdoor water budget, please keep up the good work! We really appreciate your efforts. You can see if you are meeting this reduction on your bill:

**EMWD**  
 P.O. Box 8300  
 Perris, CA 92572-8300  
 WITHIN SOUTHERN CALIFORNIA 800-428-3803  
 OUTSIDE SOUTHERN CALIFORNIA 951-928-3777  
 WEBSITE www.emwd.org

**CUSTOMER NAME:** EMWD CUSTOMER  
**ACCOUNT:** 123456-01  
**SERVICE ADDRESS:** 3278 TRAMBLE RD  
**SERVICE PERIOD:** 01/13/15 to 02/12/15  
**BILL DATE:** 02/13/15 **NO. OF DAYS:** 30  
**DUE DATE:** 02/29/15 **NEXT READ DATE:** 03/13/15

Summary of Charges		Previous Charges	
Balance Forward	0.00	Amount of Last Bill	62.67
Water Charges	206.38	Payment Received - Thank You	0.00
Sewer Charges	21.11	Balance Forward	6.89
<b>TOTAL AMOUNT DUE</b>	<b>228.49</b>		

Water Charges		Period/Quantity	Rate	Amount
Water Service		30 Day(s)	367/day	11.01
Supply and Reliability Capital Projects		30 Day(s)	05753/day	1.73
Indoor Use		7 billing units	1.79300/unit	12.55
Outdoor Use		9 billing units	3.28000/unit	29.52
Excesses		0 billing units	5.07900/unit	0.00
Wasteful		14 billing units	10.75500/unit	150.57
<b>Total Water Charges</b>		<b>30 billing units</b>		<b>205.38</b>

Water Budget/Sewer Block Data	
Indoor Allocation	7 BU
Based on Household Size	3 people
Outdoor Allocation	9 BU
Landscape Area	1,920 sq ft
Sewer Block 2	

**Water Usage History**  
 Current Year  

Month	# Days	Billing Units	Usage In Gal.	Average GPD*
Feb 12	30	30	22446	748
Jan 15	31	8	5994	176
Dec 12	29	8	5994	214

 Previous Year  

Month	# Days	Billing Units	Usage In Gal.	Average GPD*
Feb 13	32	10	7480	234
Jan 12	30	8	5994	199
Dec 12	29	8	5994	208

 \* 1 Billing Unit = 748 Gallons  
 \* GPD = Gallons per Day

**Water Budget/Sewer Block Data**  
 Indoor Allocation: 7 BU  
 Based on Household Size: 3 people  
 Outdoor Allocation: 9 BU  
 Landscape Area: 1,920 sq ft  
 Sewer Block: 2

**Water Budget/Sewer Block Data**  
 Billing Units by Month  
 Legend: Actual (dark grey), Budget (light grey), Forecast (white)

IMPORTANT CUSTOMER MESSAGES ARE LOCATED IN THIS AREA.

Water Charges		Period/Quantity	Rate	Amount
Water Service		30 Day(s)	367/day	11.01
Supply and Reliability Capital Projects		30 Day(s)	05753/day	1.73
Indoor Use		7 billing units	1.79300/unit	12.55
Outdoor Use		9 billing units	3.28000/unit	29.52
Excesses		0 billing units	5.07900/unit	0.00
Wasteful		14 billing units	10.75500/unit	150.57
<b>Total Water Charges</b>		<b>30 billing units</b>		<b>205.38</b>

**Water Budget/Sewer Block Data**  
 Indoor Allocation: 7 BU  
 Based on Household Size: 3 people  
 Outdoor Allocation: 9 BU  
 Landscape Area: 1,920 sq ft  
 Sewer Block 2

Actual: FEB 10, MAR 10, APR 10, MAY 10, JUN 10, JUL 10, AUG 10, SEP 10, OCT 10, NOV 10, DEC 10, JAN 11, FEB 11, MAR 11, APR 11, MAY 11  
 Budget: FEB 10, MAR 10, APR 10, MAY 10, JUN 10, JUL 10, AUG 10, SEP 10, OCT 10, NOV 10, DEC 10, JAN 11, FEB 11, MAR 11, APR 11, MAY 11  
 Forecast: FEB 10, MAR 10, APR 10, MAY 10, JUN 10, JUL 10, AUG 10, SEP 10, OCT 10, NOV 10, DEC 10, JAN 11, FEB 11, MAR 11, APR 11, MAY 11

Make sure your Outdoor Use is 50 percent or less of your Outdoor Allocation

If you are using more than 50 percent of your outdoor water budget, please reduce your outdoor watering immediately.

What can you do to cut your outdoor watering in half?

- **Cut the number of days you water in half!** Watering only 1-2 days per week is an excellent way to use 50 percent or less of your outdoor water budget!
- **Cut the time you water in half.** For example, if you're currently watering for 6 minutes at a time, reduce it to 3 minutes.
- **Use your outdoor water budget as your guide.** If your outdoor water budget is 22 billing units, cut down your water use to only use 11 of those billing units. Keep in mind that outdoor budgets change every month due to weather conditions. Your billing statement provides a 3-month forecast of upcoming budgets. For more information on reading your billing statement, please visit our website at [www.emwd.org](http://www.emwd.org). For more water saving tips, please visit [www.emwd.org/WaterWiseTips](http://www.emwd.org/WaterWiseTips).

What else can you do to save water?

You can let us know if you see water waste! Water waste reports may be submitted via the following methods:

- Online: [www.emwd.org/reportwaterwaste](http://www.emwd.org/reportwaterwaste)
- Email: [conservation@emwd.org](mailto:conservation@emwd.org)
- Phone: 951-928-3777, ext. 3306
- Mail: EMWD, Attn.: Water Waste, PO Box 8300, Perris, CA 92572-8300
- Mobile App: Available on Android and iPhone platforms  
Search for "EMWD Water Waste Reporter"

Thank you for your efforts to comply with the State Water Board's order and to save water during this historic drought!

For up-to-date drought status information, please visit [www.emwd.org/drought](http://www.emwd.org/drought) or call our Drought Status Hotline at 951-928-3777 ext. 4540. You can also go to [www.emwd.org/billestimator](http://www.emwd.org/billestimator) to see how your bill could be impacted if you exceed your water budget.

Sincerely,  
EMWD Customer Service Department

**Model Water Efficient Landscape Ordinance**  
**September 10, 2009**  
**June 12, 2015 (Public Draft)**

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1616 : PARTICIPATION IN METROPOLITAN WATER

California Code of Regulations  
 Title 23. Waters  
 Division 2. Department of Water Resources  
 Chapter 2.7. Model Water Efficient Landscape Ordinance

**§ 490. Purpose.**

(a) The State Legislature has found:

- (1) that the waters of the state are of limited supply and are subject to ever increasing demands;
- (2) that the continuation of California's economic prosperity is dependent on the availability of adequate supplies of water for future uses;
- (3) that it is the policy of the State to promote the conservation and efficient use of water and to prevent the waste of this valuable resource;
- (4) that landscapes are essential to the quality of life in California by providing areas for active and passive recreation and as an enhancement to the environment by cleaning air and water, preventing erosion, offering fire protection, and replacing ecosystems lost to development; ~~and~~
- (5) that landscape design, installation, maintenance and management can and should be water efficient; and
- (6) that Section 2 of Article X of the California Constitution specifies that the right to use water is limited to the amount reasonably required for the beneficial use to be served and the right does not and shall not extend to waste or unreasonable method of use.

(b) Consistent with these legislative findings, the purpose of this model ordinance is to:

- (1) promote the values and benefits of landscaping practices that integrate and transcend the conservation and efficient use of water; landscapes while recognizing the need to invest water and other resources as efficiently as possible;
- (2) establish a structure for planning, designing, installing, maintaining and managing water efficient landscapes in new construction and rehabilitated projects by using a whole system watershed approach in landscapes of any size and scale that requires cross-sector collaboration to achieve the many benefits possible;
- (3) establish provisions for water management practices and water waste prevention for existing landscapes;
- (4) use water efficiently without waste by setting a Maximum Applied Water Allowance as an upper limit for water use and reduce water use to the lowest practical amount;
- (5) promote the benefits of consistent landscape ordinances with neighboring local and regional agencies;
- (6) encourage local agencies and water purveyors to use economic incentives that promote the efficient use of water, such as implementing a tiered-rate structure; and
- (7) encourage local agencies to designate the necessary authority that implements and enforces the provisions of the Model Water Efficient Landscape Ordinance or its local landscape ordinance.

(c) Regenerative landscape systems that are planned, designed, installed, managed and maintained with the watershed based approach can improve California's environmental conditions and achieve sustainability goals. Consistent with the legislative findings and purpose of the Ordinance, achievable goals include:

- (1) Increasing carbon storage, water retention and productive plant growth by improving soils through reducing compaction, incorporating organic matter and minimizing cut and fill grading.
- (2) Minimizing energy use by reducing irrigation water requirements, reducing reliance on petroleum based fertilizers and pesticides, and planting long lived climate appropriate shade trees in urban areas.

- (3) Conserving water by capturing and reusing rainwater and graywater wherever possible and selecting climate appropriate plants that need minimal supplemental water.
- (4) Protecting air and water quality by reducing power equipment use and landfill trips, selecting locally sourced materials, and using mulch and efficient irrigation equipment to prevent erosion.
- (5) Protecting existing habitat and creating new habitat by choosing local native plants wherever possible and including climate appropriate non-native plants when necessary, and avoiding pesticides and invasive plants.

Note: Authority cited: Section 65593, Government Code. Reference: Sections 65591, 65593, 65596, Government Code.

### § 490.1 Applicability

(a) After ~~January 1, 2010~~ November 1, 2015, this ordinance shall apply to all of the following landscape projects:

- (1) new construction projects with a landscape area greater than 500 square feet requiring a building or landscape permit, plan check or design review;
- (2) rehabilitated landscape projects with an aggregated landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;
- ~~(1) new construction and rehabilitated landscapes for public agency projects and private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review;~~
- ~~(2) new construction and rehabilitated landscapes which are developer installed in single family and multi family projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check, or design review;~~
- ~~(3) new construction landscapes which are homeowner provided and/or homeowner hired in single family and multi family residential projects with a total project landscape area equal to or greater than 5,000 square feet requiring a building or landscape permit, plan check or design review;~~
- (3) ~~(4)~~ existing landscapes limited to Sections 493, 493.1 and 493.2; and
- (4) ~~(5)~~ cemeteries. Recognizing the special landscape management needs of cemeteries, new and rehabilitated cemeteries are limited to Sections 492.4, 492.11 and 492.12; and existing cemeteries are limited to Sections 493, 493.1 and 493.2.

(b) This ordinance does not apply to:

- (1) registered local, state or federal historical sites;
- (2) ecological restoration projects that do not require a permanent irrigation system;
- (3) mined-land reclamation projects that do not require a permanent irrigation system; or
- (4) existing plant collections, as part of botanical gardens and arboretums open to the public.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 491. Definitions.

The terms used in this ordinance have the meaning set forth below:

- (a) “applied water” means the portion of water supplied by the irrigation system to the landscape.
- (b) “automatic irrigation controller” means an automatic timing device used to remotely control valves that operate an irrigation system. Automatic irrigation controllers schedule irrigation events using either evapotranspiration (weather-based) or soil moisture data.
- (c) “backflow prevention device” means a safety device used to prevent pollution or contamination of the water supply due to the reverse flow of water from the irrigation system.
- (d) “Certificate of Completion” means the document required under Section 492.9.

- (e) “certified irrigation designer” means a person certified to design irrigation systems by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation designer certification program and Irrigation Association’s Certified Irrigation Designer program.
- (f) “certified landscape irrigation auditor” means a person certified to perform landscape irrigation audits by an accredited academic institution, a professional trade organization or other program such as the US Environmental Protection Agency’s WaterSense irrigation auditor certification program and Irrigation Association’s Certified Landscape Irrigation Auditor program.
- (g) “check valve” or “anti-drain valve” means a valve located under a sprinkler head, or other location in the irrigation system, to hold water in the system to prevent drainage from sprinkler heads when the sprinkler is off.
- (h) “common interest developments” means community apartment projects, condominium projects, planned developments, and stock cooperatives per Civil Code Section 1351.
- (i) “conversion factor (0.62)” means the number that converts acre-inches per acre per year to gallons per square foot per year.
- (j) “drip irrigation” means any non-spray low volume irrigation system utilizing emission devices with a flow rate measured in gallons per hour. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.
- (k) “ecological restoration project” means a project where the site is intentionally altered to establish a defined, indigenous, historic ecosystem.
- (l) “effective precipitation” or “usable rainfall” (Eppt) means the portion of total precipitation which becomes available for plant growth.
- (m) “emitter” means a drip irrigation emission device that delivers water slowly from the system to the soil.
- (n) “established landscape” means the point at which plants in the landscape have developed significant root growth into the soil. Typically, most plants are established after one or two years of growth.
- (o) “establishment period of the plants” means the first year after installing the plant in the landscape or the first two years if irrigation will be terminated after establishment. Typically, most plants are established after one or two years of growth.
- (p) “Estimated Total Water Use” (ETWU) means the total water used for the landscape as described in Section 492.4.
- (q) “ET adjustment factor” (ETAF) means a factor of 0.75 for residential areas and 0.4 for non-residential areas, that, when applied to reference evapotranspiration, adjusts for plant factors and irrigation efficiency, two major influences upon the amount of water that needs to be applied to the landscape. A combined plant mix with a site-wide average of 0.5 0.425 for residential areas and 0.37 for other areas is the basis of the plant factor portion of this calculation. For purposes of the ETAF, the average irrigation efficiency is 0.7485 for residential and 0.92 for non-residential areas. Therefore, the ETAF Adjustment Factor for residential and non-residential is  $(0.75) \div (0.425 / 0.8574)$  and  $(0.4) \div (0.37 / 0.92)$ , respectively. The ETAF for a new and existing Special Landscape Areas shall not exceed 1.0. The ETAF for existing non-rehabilitated landscapes is 0.8.
- (r) “evapotranspiration rate” means the quantity of water evaporated from adjacent soil and other surfaces and transpired by plants during a specified time.
- (s) “flow rate” means the rate at which water flows through pipes, valves and emission devices, measured in gallons per minute, gallons per hour, or cubic feet per second.
- (t) “friable” means a soil condition that is easily crumbled or loosely compacted down to a minimum depth per planting material requirements, whereby the root structure of newly planted material will be allowed to spread unimpeded.
- (u) “graywater” means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. “Graywater”

includes, but is not limited to, wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines, and laundry tubs, but does not include wastewater from kitchen sinks or dishwashers. Pursuant to Health and Safety Code Section 17922.12.

(v) ~~(t)~~ “hardscapes” means any durable material (pervious and non-pervious).

(w) ~~(u)~~ “homeowner-provided landscaping” means any landscaping either installed by a private individual for a single family residence or installed by a licensed contractor hired by a homeowner. A homeowner, for purposes of this ordinance, is a person who occupies the dwelling he or she owns. This excludes speculative homes, which are not owner-occupied dwellings.

(x) ~~(v)~~ “hydrozone” means a portion of the landscaped area having plants with similar water needs. A hydrozone may be irrigated or non-irrigated.

(y) ~~(w)~~ “infiltration rate” means the rate of water entry into the soil expressed as a depth of water per unit of time (e.g., inches per hour).

(z) ~~(x)~~ “invasive plant species” means species of plants not historically found in California that spread outside cultivated areas and can damage environmental or economic resources. Invasive species may be regulated by county agricultural agencies as noxious species. “Noxious weeds” means any weed designated by the Weed Control Regulations in the Weed Control Act and identified on a Regional District noxious weed control list. Lists of invasive plants are maintained at the California Invasive Plant Inventory and USDA invasive and noxious weeds database.

(aa) ~~(y)~~ “irrigation audit” means an in-depth evaluation of the performance of an irrigation system conducted by a Certified Landscape Irrigation Auditor. An irrigation audit includes, but is not limited to: inspection, system tune-up, system test with distribution uniformity or emission uniformity, reporting overspray or runoff that causes overland flow, and preparation of an irrigation schedule. The audit must be conducted in a manner consistent with the Irrigation Association’s Landscape Irrigation Auditor Certification program.

(bb) ~~(z)~~ “irrigation efficiency” (IE) means the measurement of the amount of water beneficially used divided by the amount of water applied. Irrigation efficiency is derived from measurements and estimates of irrigation system characteristics and management practices. The minimum average irrigation efficiency for purposes of this ordinance is 0.8574 for residential areas and 0.92 for non-residential areas, averaged on a site-wide basis. Greater irrigation efficiency can be expected from well designed and maintained systems.

(cc) ~~(aa)~~ “irrigation survey” means an evaluation of an irrigation system that is less detailed than an irrigation audit. An irrigation survey includes, but is not limited to: inspection, system test, and written recommendations to improve performance of the irrigation system.

(dd) ~~(bb)~~ “irrigation water use analysis” means a review of water use data based on meter readings and billing data.

(ee) ~~(cc)~~ “landscape architect” means a person who holds a license to practice landscape architecture in the state of California Business and Professions Code, Section 5615.

(ff) ~~(dd)~~ “landscape area” means all the planting areas, turf areas, and water features in a landscape design plan subject to the Maximum Applied Water Allowance calculation. The landscape area does not include footprints of buildings or structures, sidewalks, driveways, parking lots, decks, patios, gravel or stone walks, other pervious or non-pervious hardscapes, and other non-irrigated areas designated for non-development (e.g., open spaces and existing native vegetation).

(gg) ~~(ee)~~ “landscape contractor” means a person licensed by the state of California to construct, maintain, repair, install, or subcontract the development of landscape systems.

(hh) “landscape designer” means a person permitted by the Business and Profession Code to prepare plans, drawings, and specifications for the selection, placement, or use of plants for single family dwellings. They may prepare drawings for the conceptual design and placement of tangible objects and landscape features. A landscape designer may not prepare construction documents, details, or specifications for tangible landscape objects or landscape features or prepare grading and drainage plans for the alteration of sites.

(ii) ~~(ff)~~ “Landscape Documentation Package” means the documents required under Section 492.3.

(jj) ~~(gg)~~ “landscape project” means total area of landscape in a project as defined in “landscape area” for the purposes of this ordinance, meeting requirements under Section 490.1.

(kk) ~~(hh)~~ “lateral line” means the water delivery pipeline that supplies water to the emitters or sprinklers from the valve.

(ll) ~~(ii)~~ “local agency” means a city or county, including a charter city or charter county, that is responsible for adopting and implementing the ordinance. The local agency is also responsible for the enforcement of this ordinance, including but not limited to, approval of a permit and plan check or design review of a project.

(mm) ~~(jj)~~ “local water purveyor” means any entity, including a public agency, city, county, or private water company that provides retail water service.

(nn) ~~(kk)~~ “low volume irrigation” means the application of irrigation water at low pressure through a system of tubing or lateral lines and low-volume emitters such as drip, drip lines, and bubblers. Low volume irrigation systems are specifically designed to apply small volumes of water slowly at or near the root zone of plants.

(oo) ~~(H)~~ “main line” means the pressurized pipeline that delivers water from the water source to the valve or outlet.

(pp) “master valve” is an electric valve installed at the supply point which controls water flow into the main piping system. When this valve is closed water will not be supplied to the irrigation system. A master valve will greatly reduce any water loss due to a leaky station valve.

(qq) ~~(mm)~~ “Maximum Applied Water Allowance” (MAWA) means the upper limit of annual applied water for the established landscaped area as specified in Section 492.4. It is based upon the area’s reference evapotranspiration, the ET Adjustment Factor, and the size of the landscape area. The Estimated Total Water Use shall not exceed the Maximum Applied Water Allowance. Special Landscape Areas, including recreation areas, areas permanently and solely dedicated to edible plants such as orchards and vegetable gardens, and areas irrigated with recycled water are subject to the MAWA with an ETAF not to exceed 1.0.

(rr) “median” is an area between opposing lanes of traffic that may be unplanted or planted with trees, shrubs, perennials, and ornamental grasses.

(ss) ~~(nn)~~ “microclimate” means the climate of a small, specific area that may contrast with the climate of the overall landscape area due to factors such as wind, sun exposure, plant density, or proximity to reflective surfaces.

(tt) “microspray” means a microirrigation emission device with one or more orifices to convert irrigation water pressure to water discharge with a flow rate not to exceed 30 gallons per hour (113.5 litres per hour) at the largest area of coverage available for the nozzle series when operated at 30 psi (206.8kPa). Microsprays are inclusive of “microbubblers”, “microspinners” and “microspray jets.” (From ASABE/ICC 802-2014 Landscape Irrigation and Emitter Standard.)

(uu) ~~(oo)~~ “mined-land reclamation projects” means any surface mining operation with a reclamation plan approved in accordance with the Surface Mining and Reclamation Act of 1975.

(vv) ~~(pp)~~ “mulch” means any organic material such as leaves, bark, straw, compost, or inorganic mineral materials such as rocks, gravel, and decomposed granite left loose and applied to the soil surface for the beneficial purposes of reducing evaporation, suppressing weeds, moderating soil temperature, and preventing soil erosion.

(ww) ~~(qq)~~ “new construction” means, for the purposes of this ordinance, a new building with a landscape or other new landscape, such as a park, playground, or greenbelt without an associated building.

(xx) ~~(rr)~~ “operating pressure” means the pressure at which the parts of an irrigation system are designed by the manufacturer to operate.

(yy) ~~(ss)~~ “overhead sprinkler irrigation systems” means systems that deliver water through the air (e.g., spray heads and rotors).

(zz) (~~tt~~) “overspray” means the irrigation water which is delivered beyond the target area.

(aaa) “parkway” means the area between a sidewalk and the curb or traffic lane. It may be planted or unplanted, and with or without pedestrian egress.

(bbb) (~~uu~~) “permit” means an authorizing document issued by local agencies for new construction or rehabilitated landscapes.

(ccc) (~~vv~~) “pervious” means any surface or material that allows the passage of water through the material and into the underlying soil.

(ddd) (~~ww~~) “plant factor” or “plant water use factor” is a factor, when multiplied by ETo, estimates the amount of water needed by plants. For purposes of this ordinance, the plant factor range for low water use plants is 0 to 0.3, the plant factor range for moderate water use plants is 0.4 to 0.6, and the plant factor range for high water use plants is 0.7 to 1.0. Plant factors cited in this ordinance are derived from the Department of Water Resources 2000 publication “Water Use Classification of Landscape Species”. Plant factors may also be obtained from horticultural researchers from academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR).

(eee) (~~xx~~) “precipitation rate” means the rate of application of water measured in inches per hour.

(fff) (~~yy~~) “project applicant” means the individual or entity submitting a Landscape Documentation Package required under Section 492.3 to request a permit, plan check, or design review from the local agency. A project applicant may be the property owner or his or her designee.

(ggg) (~~zz~~) “rain sensor” or “rain sensing shutoff device” means a component which automatically suspends an irrigation event when it rains.

(hhh) (~~aaa~~) “record drawing” or “as-builts” means a set of reproducible drawings which show significant changes in the work made during construction and which are usually based on drawings marked up in the field and other data furnished by the contractor.

(iii) (~~bbb~~) “recreational area” means areas, excluding private single family residential areas, dedicated to active play recreation or public assembly such as parks, sports fields, picnic grounds, amphitheaters and or golf courses tees, fairways and greens.

(jii) (~~eee~~) “recycled water”, “reclaimed water”, or “treated sewage effluent water” means treated or recycled waste water of a quality suitable for non-potable uses such as landscape irrigation and water features. This water is not intended for human consumption.

(kkk) (~~ddd~~) “reference evapotranspiration” or “ETo” means a standard measurement of environmental parameters which affect the water use of plants. ETo is expressed in inches per day, month, or year as represented in Appendix A Section 495.1, and is an estimate of the evapotranspiration of a large field of four- to seven-inch tall, cool-season grass that is well watered. Reference evapotranspiration is used as the basis of determining the Maximum Applied Water Allowance so that regional differences in climate can be accommodated.

(lll) (~~eee~~) “rehabilitated landscape” means any re-landscaping project that requires a permit, plan check, or design review, meets the requirements of Section 490.1, and the modified landscape area is equal to or greater than 2,500 square feet, is 50% of the total landscape area, and the modifications are completed within one year.

(mmm) (~~fff~~) “runoff” means water which is not absorbed by the soil or landscape to which it is applied and flows from the landscape area. For example, runoff may result from water that is applied at too great a rate (application rate exceeds infiltration rate) or when there is a slope.

(nnn) (~~ggg~~) “soil moisture sensing device” or “soil moisture sensor” means a device that measures the amount of water in the soil. The device may also suspend or initiate an irrigation event.

(ooo) (~~hhh~~) “soil texture” means the classification of soil based on its percentage of sand, silt, and clay.

(ppp) (~~iii~~) “Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants, recreational areas, areas irrigated with recycled water, and water features using recycled water and areas dedicated to active play such as parks, sports fields, golf courses, and where turf provides a playing surface.



~~(qqq)~~ ~~(jjj)~~ “sprinkler head” means a device which delivers water through a nozzle.

~~(rrr)~~ ~~(kkk)~~ “static water pressure” means the pipeline or municipal water supply pressure when water is not flowing.

~~(sss)~~ ~~(lll)~~ “station” means an area served by one valve or by a set of valves that operate simultaneously.

~~(ttt)~~ ~~(mmm)~~ “swing joint” means an irrigation component that provides a flexible, leak-free connection between the emission device and lateral pipeline to allow movement in any direction and to prevent equipment damage.

~~(uuu)~~ ~~(nnn)~~ “turf” means a ground cover surface of mowed grass. Annual bluegrass, Kentucky bluegrass, Perennial ryegrass, Red fescue, and Tall fescue are cool-season grasses. Bermudagrass, Kikuyugrass, Seashore Paspalum, St. Augustinegrass, Zoysiagrass, and Buffalo grass are warm-season grasses.

~~(vvv)~~ ~~(ooo)~~ “valve” means a device used to control the flow of water in the irrigation system.

~~(www)~~ “water budget” is a reasonable estimate of the amount of irrigation water required for a specific landscape. Basic water budget calculations require measured areas of each irrigated hydrozone and reference evapotranspiration for the area to be landscaped.

~~(xxx)~~ ~~(ppp)~~ “water conserving plant species” means a plant species identified as having a low plant factor.

~~(yyy)~~ ~~(qqq)~~ “water feature” means a design element where open water performs an aesthetic or recreational function. Water features include ponds, lakes, waterfalls, fountains, artificial streams, spas, and swimming pools (where water is artificially supplied). The surface area of water features is included in the high water use hydrozone of the landscape area. Constructed wetlands used for on-site wastewater treatment or stormwater best management practices that are not irrigated and used solely for water treatment or stormwater retention are not water features and, therefore, are not subject to the water budget calculation.

~~(zzz)~~ ~~(rrr)~~ “watering window” means the time of day irrigation is allowed.

~~(aaaa)~~ ~~(sss)~~ “WUCOLS” means the Water Use Classification of Landscape Species published by the University of California Cooperative Extension, and the Department of Water Resources and the Bureau of Reclamation, 2000 2014.

Note: Authority Cited: Section 65595, Government Code. Reference: Sections 65592, 65596, Government Code.

#### **§ 492. Provisions for New Construction or Rehabilitated Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity’s specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.1 Compliance with Landscape Documentation Package.**

(a) Prior to construction, the local agency shall:

- (1) provide the project applicant with the ordinance and procedures for permits, plan checks, or design reviews;
- (2) review the Landscape Documentation Package submitted by the project applicant;
- (3) approve or deny the Landscape Documentation Package;
- (4) issue a permit or approve the plan check or design review for the project applicant; and
- (5) upon approval of the Landscape Documentation Package, submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

(b) Prior to construction, the project applicant shall:

- (1) submit a Landscape Documentation Package to the local agency.

(c) Upon approval of the Landscape Documentation Package by the local agency, the project applicant shall:

- (1) receive a permit or approval of the plan check or design review and record the date of the permit in the Certificate of Completion;
- (2) submit a copy of the approved Landscape Documentation Package along with the record drawings, and any other information to the property owner or his/her designee; and
- (3) submit a copy of the Water Efficient Landscape Worksheet to the local water purveyor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### § 492.2 Penalties.

(a) A local agency may establish and administer penalties to the project applicant for non-compliance with the ordinance to the extent permitted by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### § 492.3 Elements of the Landscape Documentation Package.

(a) The Landscape Documentation Package shall include the following six (6) elements:

- (1) project information;
  - (A) date
  - (B) project applicant
  - (C) project address (if available, parcel and/or lot number(s))
  - (D) total landscape area (square feet)
  - (E) project type (e.g., new, rehabilitated, public, private, cemetery, homeowner-installed)
  - (F) water supply type (e.g., potable, recycled, well) and identify the local retail water purveyor if the applicant is not served by a private well
  - (G) checklist of all documents in Landscape Documentation Package
  - (H) project contacts to include contact information for the project applicant and property owner
  - (I) applicant signature and date with statement, "I agree to comply with the requirements of the water efficient landscape ordinance and submit a complete Landscape Documentation Package".
- (2) Water Efficient Landscape Worksheet;
  - (A) hydrozone information table
  - (B) water budget calculations
    1. Maximum Applied Water Allowance (MAWA)
    2. Estimated Total Water Use (ETWU)
- (3) soil management report;
- (4) landscape design plan;
- (5) irrigation design plan; and
- (6) grading design plan.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### § 492.4 Water Efficient Landscape Worksheet.

(a) A project applicant shall complete the Water Efficient Landscape Worksheet which contains two sections (see sample worksheet in Appendix B):

- (1) a hydrozone information table (see Appendix B, Section A) for the landscape project; and
- (2) a water budget calculation (see Appendix B, Section B) for the landscape project. For the calculation of the Maximum Applied Water Allowance and Estimated Total Water Use, a project

applicant shall use the ETo values from the Reference Evapotranspiration Table in Appendix A. For geographic areas not covered in Appendix A, use data from other cities located nearby in the same reference evapotranspiration zone, as found in the CIMIS Reference Evapotranspiration Zones Map, Department of Water Resources, 1999.

(b) Water budget calculations shall adhere to the following requirements:

(1) The plant factor used shall be from WUCOLS. Plant factors may also be obtained from horticultural researchers with academic institutions or nursery industry professional associations as approved by the California Department of Water Resources (DWR). The plant factor ranges from 0 to 0.3 for low water use plants, from 0.4 to 0.6 for moderate water use plants, and from 0.7 to 1.0 for high water use plants.

(2) All water features shall be included in the high water use hydrozone and temporarily irrigated areas shall be included in the low water use hydrozone.

(3) All Special Landscape Areas shall be identified and their water use calculated as described below.

(4) ETAF for Special Landscape Areas shall not exceed 1.0.

(c) Maximum Applied Water Allowance

The Maximum Applied Water Allowance shall be calculated using the equation:

Residential Areas:  $MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

Non-Residential:  $MAWA = (ET_o) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$

The example calculations below are hypothetical to demonstrate proper use of the equations and do not represent an existing and/or planned landscape project. The ETo values used in these calculations are from the Reference Evapotranspiration Table in Appendix A, for planning purposes only. For actual irrigation scheduling, automatic irrigation controllers are required and shall use current reference evapotranspiration data, such as from the California Irrigation Management Information System (CIMIS), other equivalent data, or soil moisture sensor data.

(1) Example MAWA calculation for a residential landscape project: a hypothetical landscape project in Fresno, CA with an irrigated landscape area of 50,000 square feet without any Special Landscape Area (SLA= 0, no edible plants, recreational areas, or use of recycled water). To calculate MAWA, the annual reference evapotranspiration value for Fresno is 51.1 inches as listed in the Reference Evapotranspiration Table in Appendix A.

$MAWA = (ET_o) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$

MAWA = Maximum Applied Water Allowance (gallons per year)

ETo = Reference Evapotranspiration (inches per year)

0.62 = Conversion Factor (to gallons per year)

0.57 = ET Adjustment Factor (ETAF)

LA = Landscape Area including SLA (square feet)

0.53 = Additional Water Allowance for SLA

SLA = Special Landscape Area (square feet)

$MAWA = (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 0)]$

$= 1,108,870 \text{ } 792,050 \text{ gallons per year}$

To convert from gallons per year to hundred-cubic-feet per year:

$= 1,108,870 \text{ } 792,050 / 748 = 1,482,059 \text{ hundred-cubic-feet per year}$

(100 cubic feet = 748 gallons)

(2) In this next hypothetical example, the residential landscape project in Fresno, CA has the same ETo value of 51.1 inches and a total landscape area of 50,000 square feet. Within the 50,000 square foot project, there is now a 2,000 square foot area planted with edible plants. This 2,000 square foot area is considered to be a Special Landscape Area.

$$\begin{aligned}
 \text{MAWA} &= (\text{ET}_o) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \\
 \text{MAWA} &= (51.1 \text{ inches}) (0.62) [(0.57 \times 50,000 \text{ square feet}) + (0.53 \times 2,000 \text{ square feet})] \\
 &= 31.68 \times [235,000 + 1,0600] \text{ gallons per year} \\
 &= 31.68 \times 3526,0600 \text{ gallons per year} \\
 &= 1,127,808823,680 \text{ gallons per year or } 1,101508 \text{ hundred-cubic-feet per year}
 \end{aligned}$$

(d) Estimated Total Water Use.

The Estimated Total Water Use shall be calculated using the equation below. The sum of the Estimated Total Water Use calculated for all hydrozones shall not exceed MAWA.

$$\text{ETWU} = (\text{ET}_o)(0.62) \left( \frac{\text{PF} \times \text{HA}}{\text{IE}} + \text{SLA} \right)$$

Where:

- ETWU = Estimated Total Water Use per year (gallons)
- ET<sub>o</sub> = Reference Evapotranspiration (inches)
- PF = Plant Factor from WUCOLS (see Section 491)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per year)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas)

(1) Example ETWU calculation: landscape area is 50,000 square feet; plant water use type, plant factor, and hydrozone area are shown in the table below. The ET<sub>o</sub> value is 51.1 inches per year. There are no Special Landscape Areas (recreational area, area permanently and solely dedicated to edible plants, and area irrigated with recycled water) in this example.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	17,000	5,6800
2	High	0.7	102,000	147,000
3	Medium	0.5	156,000	78,5000
4	Low	0.3	147,000	42,1200
5	Low	0.2	180,000	23,0600
			Sum	24,70017,500

\*Plant Factor from WUCOLS

$$\begin{aligned}
 \text{ETWU} &= (51.1)(0.62) \left( \frac{17,500}{0.85} + 0 \right) \\
 &= 1,102,116 652,276 \text{ gallons per year}
 \end{aligned}$$

Compare ETWU with MAWA: For this example MAWA = (51.1) (0.62) [(0.57 x 50,000) + (0.53 x 0)] = 1,108,870 792,050 gallons per year. The ETWU (1,102,116 652,276 gallons per year) is less than MAWA (1,108,870 792,050 gallons per year). In this example, the water budget complies with the MAWA.

(2) Example ETWU calculation: total landscape area is 50,000 square feet, 2,000 square feet of which is planted with edible plants. The edible plant area is considered a Special Landscape Area

(SLA). The reference evapotranspiration value is 51.1 inches per year. The plant type, plant factor, and hydrozone area are shown in the table below.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)*	Hydrozone Area (HA) (square feet)	PF x HA (square feet)
1	High	0.8	<u>17,000</u>	<u>85,600</u>
2	High	0.7	<u>19,000</u>	<u>6,3700</u>
3	Medium	0.5	<u>145,000</u>	<u>7,0500</u>
4	Low	0.3	<u>147,000</u>	<u>4,2400</u>
5	Low	0.2	<u>180,000</u>	<u>32,600</u>
			Sum	<u>1623,3500</u>
6	SLA	1.0	2,000	2,000

\*Plant Factor from WUCOLS

$$ETWU = (51.1)(0.62) \left( \frac{16,300}{0.85} + 2,000 \right)$$

$$= (31.68) (33,099 \underline{19,176} + 2,000)$$

$$= 1,111,936 \underline{670,898} \text{ gallons per year}$$

Compare ETWU with MAWA. For this example:

$$MAWA = (51.1) (0.62) [(0.57 \times 50,000) + (0.53 \times 2,000)]$$

$$= 31.68 \times [235,000 + \underline{1,0600}]$$

$$= 31.68 \times 35,600 \underline{26,000}$$

$$= 1,127,808 \underline{823,680} \text{ gallons per year}$$

The ETWU (1,111,936670,898 gallons per year) is less than MAWA (1,127,808823,680 gallons per year). For this example, the water budget complies with the MAWA.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.5 Soil Management Report.**

(a) In order to reduce runoff and encourage healthy plant growth, a soil management report shall be completed by the project applicant, or his/her designee, as follows:

- (1) Submit soil samples to a laboratory for analysis and recommendations.
  - (A) Soil sampling shall be conducted in accordance with laboratory protocol, including protocols regarding adequate sampling depth for the intended plants.
  - (B) The soil analysis may include:
    - 1. soil texture;
    - 2. infiltration rate determined by laboratory test or soil texture infiltration rate table;
    - 3. pH;
    - 4. total soluble salts;
    - 5. sodium;
    - 6. percent organic matter; and
    - 7. recommendations.
- (2) The project applicant, or his/her designee, shall comply with one of the following:
  - (A) If significant mass grading is not planned, the soil analysis report shall be submitted to the local agency as part of the Landscape Documentation Package; or

- (B) If significant mass grading is planned, the soil analysis report shall be submitted to the local agency as part of the Certificate of Completion.
- (3) The soil analysis report shall be made available, in a timely manner, to the professionals preparing the landscape design plans and irrigation design plans to make any necessary adjustments to the design plans.
- (4) The project applicant, or his/her designee, shall submit documentation verifying implementation of soil analysis report recommendations to the local agency with Certificate of Completion.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.6 Landscape Design Plan.

(a) For the efficient use of water, a landscape shall be carefully designed and planned for the intended function of the project. A landscape design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) Plant Material

(A) Any plant may be selected for the landscape, providing the Estimated Total Water Use in the landscape area does not exceed the Maximum Applied Water Allowance. To encourage the efficient use of water, the following is highly recommended:

1. protection and preservation of native species and natural vegetation;
2. selection of water-conserving plant and turf species, especially local native plants;
3. selection of plants based on local climate suitability, disease and pest resistance;
4. selection of trees based on applicable local tree ordinances or tree shading guidelines, and size at maturity as appropriate for the planting area; and
5. selection of plants from local and regional landscape program plant lists.

(B) Each hydrozone shall have plant materials with similar water use, with the exception of hydrozones with plants of mixed water use, as specified in Section 492.7(a)(2)(D).

(C) Plants shall be selected and planted appropriately based upon their adaptability to the climatic, geologic, and topographical conditions of the project site. To encourage the efficient use of water, the following is highly recommended:

1. use the Sunset Western Climate Zone System which takes into account temperature, humidity, elevation, terrain, latitude, and varying degrees of continental and marine influence on local climate;
2. recognize the horticultural attributes of plants (i.e., mature plant size, invasive surface roots) to minimize damage to property or infrastructure [e.g., buildings, sidewalks, power lines]; and
3. consider the solar orientation for plant placement to maximize summer shade and winter solar gain.

(D) Turf is not allowed on slopes greater than 25% where the toe of the slope is adjacent to an impermeable hardscape and where 25% means 1 foot of vertical elevation change for every 4 feet of horizontal length (rise divided by run x 100 = slope percent).

(E) Turf is prohibited in street medians.

(F) Turf is prohibited in parkways less than 10 feet wide, unless the parkway is adjacent to a parking strip and used to enter and exit vehicles. Any turf in parkways must be irrigated by sub-surface irrigation or by other technology that creates no overspray or runoff.

(G) ~~(E)~~ A landscape design plan for projects in fire-prone areas shall address fire safety and prevention. A defensible space or zone around a building or structure is required per

Public Resources Code Section 4291(a) and (b). Avoid fire-prone plant materials and highly flammable mulches.

(H) ~~(F)~~ The use of invasive and/or noxious plant species is strongly discouraged.

(I) ~~(G)~~ The architectural guidelines of a common interest development, which include community apartment projects, condominiums, planned developments, and stock cooperatives, shall not prohibit or include conditions that have the effect of prohibiting the use of low-water use plants as a group.

(2) Water Features

(A) Recirculating water systems shall be used for water features.

(B) Where available, recycled water shall be used as a source for decorative water features.

(C) Surface area of a water feature shall be included in the high water use hydrozone area of the water budget calculation.

(D) Pool and spa covers are highly recommended.

(E) Recreational water features (swimming pools, splash pads or similar) must recirculate water.

(3) Soil Preparation, Mulch and Amendments

(A) Prior to the planting of any materials, compacted soils shall be transformed to a friable condition.

(B) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).

(C) For landscape installations, compost at a rate of a minimum of four cubic yards per 1,000 square feet of permeable area (unless contra-indicated by soil test) shall be incorporated to a depth of six inches into the soil. Soils with greater than 25% organic matter in the top 6 inches of soil are exempt from adding compost.

(D) ~~(A)~~ A minimum ~~two~~ three inch (23") layer of mulch shall be applied on all exposed soil surfaces of planting areas except in turf areas, creeping or rooting groundcovers, or direct seeding applications where mulch is contraindicated.

(E) ~~(B)~~ Stabilizing mulching products shall be used on slopes.

(F) ~~(C)~~ The mulching portion of the seed/mulch slurry in hydro-seeded applications shall meet the mulching requirement.

(G) Organic mulch materials should take precedence over inorganic materials in instances where it is suitable, ecologically possible, and the material does not pose a fire hazard. Composted organic material, in particular that which includes post-consumer material, should be considered over more compacted products such as bark, wood chips, etc.

~~(D) Soil amendments shall be incorporated according to recommendations of the soil report and what is appropriate for the plants selected (see Section 492.5).~~

(b) The landscape design plan, at a minimum, shall:

(1) delineate and label each hydrozone by number, letter, or other method;

(2) identify each hydrozone as low, moderate, high water, or mixed water use. Temporarily irrigated areas of the landscape shall be included in the low water use hydrozone for the water budget calculation;

(3) identify recreational areas;

(4) identify areas permanently and solely dedicated to edible plants;

(5) identify areas irrigated with recycled water;

(6) identify type of mulch and application depth;

(7) identify soil amendments, type, and quantity;

(8) identify type and surface area of water features;

(9) identify hardscapes (pervious and non-pervious);

(10) identify location, installation details, and 24-hour retention or infiltration capacity of any applicable stormwater best management practices that encourage on-site retention and infiltration of stormwater. Stormwater best management practices are encouraged in the landscape design plan and examples ~~include, but are not limited to:~~ are provide in Section 492.16.

~~(A) infiltration beds, swales, and basins that allow water to collect and soak into the ground;~~

~~(B) constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants; and~~

~~(C) pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.~~

(11) identify any applicable rain harvesting or catchment technologies ~~(e.g., rain gardens, eisterns, etc.)~~ as discussed in Section 492.16 and their 24-hour retention or infiltration capacity;

(12) identify any applicable graywater discharge piping, system components and area(s) of distribution;

(13) ~~(12)~~ contain the following statement: “I have complied with the criteria of the ordinance and applied them for the efficient use of water in the landscape design plan”; and

(14) ~~(13)~~ bear the signature of a licensed landscape architect, licensed landscape contractor, landscape designer or any other person authorized to design a landscape. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agriculture Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code and Section 1351, Civil Code.

### § 492.7 Irrigation Design Plan.

(a) This section applies to landscaped areas requiring permanent irrigation, not areas that require temporary irrigation solely for the plant establishment period. For the efficient use of water, an irrigation system shall meet all the requirements listed in this section and the manufacturers’ recommendations. The irrigation system and its related components shall be planned and designed to allow for proper installation, management, and maintenance. An irrigation design plan meeting the following design criteria shall be submitted as part of the Landscape Documentation Package.

#### (1) System

(A) ~~Dedicated landscape water meters are highly recommended on landscape areas smaller than 5,000 square feet to facilitate water management shall be required for all non-residential irrigated landscapes of 1,000 sq. ft. but not more than 5,000sq.ft. (the level at which Water Code 535 applies)-and residential irrigated landscapes of 5,000 sq. ft. or greater. A landscape water meter may be either:~~

1. a customer service meter dedicated to landscape use provided by the local water purveyor; or

2. a privately owned meter or submeter.

(B) Automatic irrigation controllers utilizing either evapotranspiration or soil moisture sensor data and non-volatile memory shall be required for irrigation scheduling in all irrigation systems.

(C) The installation of a pressure regulator is required ~~The irrigation systems shall be designed~~ to ensure that the dynamic pressure at each emission device is within the manufacturer’s recommended pressure range for optimal performance.

1. If the static pressure is above or below the required dynamic pressure of the irrigation system, pressure-regulating devices such as inline pressure regulators,



booster pumps, or other devices shall be installed to meet the required dynamic pressure of the irrigation system.

2. Static water pressure, dynamic or operating pressure and flow reading of the water supply shall be measured at the point of connection. These pressure and flow measurements shall be conducted at the design stage. If the measurements are not available at the design stage, the measurements shall be conducted at installation.

(D) Sensors (rain, freeze, wind, etc.), either integral or auxiliary, that suspend or alter irrigation operation during unfavorable weather conditions shall be required on all irrigation systems, as appropriate for local climatic conditions. Irrigation should be avoided during windy or freezing weather or during rain.

(E) Manual shut-off valves (such as a gate valve, ball valve, or butterfly valve) shall be required, as close as possible to the point of connection of the water supply, to minimize water loss in case of an emergency (such as a main line break) or routine repair.

(F) Backflow prevention devices shall be required to protect the water supply from contamination by the irrigation system. A project applicant shall refer to the applicable local agency code (i.e., public health) for additional backflow prevention requirements.

(G) ~~High Flow~~ sensors that detect ~~and report~~ high flow conditions created by system damage or malfunction are ~~recommended~~ required.

(H) Master valves are required on all projects.

(I) ~~(H)~~ The irrigation system shall be designed to prevent runoff, low head drainage, overspray, or other similar conditions where irrigation water flows onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

(J) ~~(I)~~ Relevant information from the soil management plan, such as soil type and infiltration rate, shall be utilized when designing irrigation systems.

(K) ~~(J)~~ The design of the irrigation system shall conform to the hydrozones of the landscape design plan.

(L) ~~(K)~~ The irrigation system must be designed and installed to meet, at a minimum, the irrigation efficiency criteria as described in Section 492.4 regarding the Maximum Applied Water Allowance.

(M) The irrigation system must be designed and installed in such a manner that a precipitation rate of 1.0 inches per hour is not exceeded in any portion of the landscape.

(N) ~~(L)~~ It is highly recommended that the project applicant or local agency inquire with the local water purveyor about peak water operating demands (on the water supply system) or water restrictions that may impact the effectiveness of the irrigation system.

(O) ~~(M)~~ In mulched planting areas, the use of low volume irrigation is required to maximize water infiltration into the root zone.

(P) ~~(N)~~ Sprinkler heads and other emission devices shall have matched precipitation rates, unless otherwise directed by the manufacturer's recommendations.

(Q) ~~(O)~~ Head to head coverage is recommended. However, sprinkler spacing shall be designed to achieve the highest possible distribution uniformity using the manufacturer's recommendations.

(R) ~~(P)~~ Swing joints or other riser-protection components are required on all risers subject to damage that are adjacent to hardscapes or in high traffic areas of turfgrass.

(S) ~~(Q)~~ Check valves or anti-drain valves are required for all irrigation systems.

(T) ~~(R) Narrow or irregularly shaped~~ Areas of, including turf, less than ~~teneight~~ (108) feet in width in any direction shall be irrigated with subsurface irrigation or ~~low volume irrigation system other technology that produces no runoff or overspray.~~

(U) ~~(S)~~ Overhead irrigation shall not be permitted within 24 inches of any non-permeable surface. Allowable irrigation within the setback from non-permeable surfaces may

include drip, drip line, or other low flow non-spray technology. The setback area may be planted or unplanted. The surfacing of the setback may be mulch, gravel, or other porous material. These restrictions may be modified if:

1. the landscape area is adjacent to permeable surfacing and no runoff occurs; or
2. the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping; or
3. the irrigation designer specifies an alternative design or technology, as part of the Landscape Documentation Package and clearly demonstrates strict adherence to irrigation system design criteria in Section 492.7 (a)(1)(~~I~~H). Prevention of overspray and runoff must be confirmed during the irrigation audit.

(V) Slopes greater than 25% shall not be irrigated with an irrigation system with a precipitation rate exceeding 0.75 inches per hour. This restriction may be modified if the landscape designer specifies an alternative design or technology, as part of the Landscape Documentation Package, and clearly demonstrates no runoff or erosion will occur. Prevention of runoff and erosion must be confirmed during the irrigation audit.

(2) Hydrozone

(A) Each valve shall irrigate a hydrozone with similar site, slope, sun exposure, soil conditions, and plant materials with similar water use.

(B) Sprinkler heads and other emission devices shall be selected based on what is appropriate for the plant type within that hydrozone.

(C) Where feasible, trees shall be placed on separate valves from shrubs, groundcovers, and turf to facilitate the appropriate irrigation of trees.

(D) Individual hydrozones that mix plants of moderate and low water use, or moderate and high water use, may be allowed if:

1. plant factor calculation is based on the proportions of the respective plant water uses and their plant factor; or
2. the plant factor of the higher water using plant is used for calculations.

(E) Individual hydrozones that mix high and low water use plants shall not be permitted.

(F) On the landscape design plan and irrigation design plan, hydrozone areas shall be designated by number, letter, or other designation. On the irrigation design plan, designate the areas irrigated by each valve, and assign a number to each valve. Use this valve number in the Hydrozone Information Table (see Appendix B Section A). This table can also assist with the irrigation audit and programming the controller.

(b) The irrigation design plan, at a minimum, shall contain:

- (1) location and size of separate water meters for landscape;
- (2) location, type and size of all components of the irrigation system, including controllers, main and lateral lines, valves, sprinkler heads, moisture sensing devices, rain switches, quick couplers, pressure regulators, and backflow prevention devices;
- (3) static water pressure at the point of connection to the public water supply;
- (4) flow rate (gallons per minute), application rate (inches per hour), and design operating pressure (pressure per square inch) for each station;
- (5) recycled water irrigation systems as specified in Section 492.14;
- (6) the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the irrigation design plan"; and
- (7) the signature of a licensed landscape architect, certified irrigation designer, licensed landscape contractor, or any other person authorized to design an irrigation system. (See Sections 5500.1, 5615, 5641, 5641.1, 5641.2, 5641.3, 5641.4, 5641.5, 5641.6, 6701, 7027.5 of the Business and Professions Code, Section 832.27 of Title 16 of the California Code of Regulations, and Section 6721 of the Food and Agricultural Code.)

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.8 Grading Design Plan.

(a) For the efficient use of water, grading of a project site shall be designed to minimize soil erosion, runoff, and water waste. A grading plan shall be submitted as part of the Landscape Documentation Package. A comprehensive grading plan prepared by a civil engineer for other local agency permits satisfies this requirement.

(1) The project applicant shall submit a landscape grading plan that indicates finished configurations and elevations of the landscape area including:

- (A) height of graded slopes;
- (B) drainage patterns;
- (C) pad elevations;
- (D) finish grade; and
- (E) stormwater retention improvements, if applicable.

(2) To prevent excessive erosion and runoff, it is highly recommended that project applicants:

- (A) grade so that all irrigation and normal rainfall remains within property lines and does not drain on to non-permeable hardscapes;
- (B) avoid disruption of natural drainage patterns and undisturbed soil; and
- (C) avoid soil compaction in landscape areas.

(3) The grading design plan shall contain the following statement: "I have complied with the criteria of the ordinance and applied them accordingly for the efficient use of water in the grading design plan" and shall bear the signature of a licensed professional as authorized by law.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### § 492.9 Certificate of Completion.

(a) The Certificate of Completion (see Appendix C for a sample certificate) shall include the following six (6) elements:

(1) project information sheet that contains:

- (A) date;
- (B) project name;
- (C) project applicant name, telephone, and mailing address;
- (D) project address and location; and
- (E) property owner name, telephone, and mailing address;

(2) certification by either the signer of the landscape design plan, the signer of the irrigation design plan, or the licensed landscape contractor that the landscape project has been installed per the approved Landscape Documentation Package;

(A) where there have been significant changes made in the field during construction, these "as-built" or record drawings shall be included with the certification;

(3) irrigation scheduling parameters used to set the controller (see Section 492.10);

(4) landscape and irrigation maintenance schedule (see Section 492.11);

(5) irrigation audit report (see Section 492.12); and

(6) soil analysis report, if not submitted with Landscape Documentation Package, and documentation verifying implementation of soil report recommendations (see Section 492.5).

(b) The project applicant shall:

(1) submit the signed Certificate of Completion to the local agency for review;

(2) ensure that copies of the approved Certificate of Completion are submitted to the local water purveyor and property owner or his or her designee.

(c) The local agency shall:

(1) receive the signed Certificate of Completion from the project applicant;

(2) approve or deny the Certificate of Completion. If the Certificate of Completion is denied, the local agency shall provide information to the project applicant regarding reapplication, appeal, or other assistance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.10 Irrigation Scheduling.**

(a) For the efficient use of water, all irrigation schedules shall be developed, managed, and evaluated to utilize the minimum amount of water required to maintain plant health. Irrigation schedules shall meet the following criteria:

- (1) Irrigation scheduling shall be regulated by automatic irrigation controllers.
- (2) Overhead irrigation shall be scheduled between 8:00 p.m. and 10:00 a.m. unless weather conditions prevent it. If allowable hours of irrigation differ from the local water purveyor, the stricter of the two shall apply. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.
- (3) For implementation of the irrigation schedule, particular attention must be paid to irrigation run times, emission device, flow rate, and current reference evapotranspiration, so that applied water meets the Estimated Total Water Use. Total annual applied water shall be less than or equal to Maximum Applied Water Allowance (MAWA). Actual irrigation schedules shall be regulated by automatic irrigation controllers using current reference evapotranspiration data (e.g., CIMIS) or soil moisture sensor data.
- (4) Parameters used to set the automatic controller shall be developed and submitted for each of the following:
  - (A) the plant establishment period;
  - (B) the established landscape; and
  - (C) temporarily irrigated areas.
- (5) Each irrigation schedule shall consider for each station all of the following that apply:
  - (A) irrigation interval (days between irrigation);
  - (B) irrigation run times (hours or minutes per irrigation event to avoid runoff);
  - (C) number of cycle starts required for each irrigation event to avoid runoff;
  - (D) amount of applied water scheduled to be applied on a monthly basis;
  - (E) application rate setting;
  - (F) root depth setting;
  - (G) plant type setting;
  - (H) soil type;
  - (I) slope factor setting;
  - (J) shade factor setting; and
  - (K) irrigation uniformity or efficiency setting.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.11 Landscape and Irrigation Maintenance Schedule.**

- (a) Landscapes shall be maintained to ensure water use efficiency. A regular maintenance schedule shall be submitted with the Certificate of Completion.
- (b) A regular maintenance schedule shall include, but not be limited to, routine inspection; adjustment and repair of the irrigation system and its components; aerating and dethatching turf areas; replenishing mulch; fertilizing; pruning; weeding in all landscape areas, and removing and obstruction to emission devices. Operation of the irrigation system outside the normal watering window is allowed for auditing and system maintenance.

(c) Repair of all irrigation equipment shall be done with the originally installed components or their equivalents.

(d) A project applicant is encouraged to implement sustainable Best Practices ~~or environmentally-friendly practices~~ for overall all landscape maintenance activities.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.12 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) All landscape irrigation audits shall be conducted by a local agency irrigation auditor or a third party certified landscape irrigation auditor that is not the designer or installer of the landscape.

(b) For new construction and rehabilitated landscape projects installed after January 1, 2010, as described in Section 490.1:

(1) the project applicant shall submit an irrigation audit report with the Certificate of Completion to the local agency that may include, but is not limited to: inspection, system tune-up, system test with distribution uniformity, reporting overspray or run off that causes overland flow, and preparation of an irrigation schedule;

(2) the local agency shall administer programs that may include, but not be limited to, irrigation water use analysis, irrigation audits, and irrigation surveys for compliance with the Maximum Applied Water Allowance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.13 Irrigation Efficiency.**

(a) For the purpose of determining Maximum Applied Water Allowance, average irrigation efficiency is assumed to be 0.8571 for residential areas and 0.92 for non-residential areas. Irrigation systems shall be designed, maintained, and managed to meet or exceed a site-wide average landscape irrigation efficiency of 0.8571 for residential areas and 0.92 for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.14 Recycled Water.**

(a) The installation of recycled water irrigation systems shall allow for the current and future use of recycled water, unless a written exemption has been granted as described in Section 492.14(b).

(b) Irrigation systems and decorative water features shall use recycled water unless a written exemption has been granted by the local water purveyor stating that recycled water meeting all public health codes and standards is not available and will not be available for the foreseeable future.

(c) All recycled water irrigation systems shall be designed and operated in accordance with all applicable local and State laws.

(d) Landscapes using recycled water are considered Special Landscape Areas. The ET Adjustment Factor for Special Landscape Areas shall not exceed 1.0.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 492.15 Graywater Systems.**

(a) Graywater systems promote the efficient use of water and are encouraged to assist in on-site landscape irrigation. All graywater systems shall conform to the California Plumbing Code (Title 24, Part 5, Chapter 16) and any applicable local ordinance standards.

### **§ 492.165 Stormwater Management and Rainwater Retention.**

(a) Stormwater management practices minimize runoff and increase infiltration which recharges groundwater and improves water quality. Implementing stormwater best management practices into the landscape and grading design plans to minimize runoff and to increase on-site rainwater retention and infiltration are encouraged.

(b) Project applicants shall refer to the local agency or Regional Water Quality Control Board for information on any applicable stormwater ordinances and stormwater management plans.

(c) All planted landscape areas are required to have friable soil to maximize water retention and infiltration. Refer to § 492.6(a)(3).

(d) It is recommended that project also incorporate any of the following elements to improve on-site stormwater retention:

- Grade impervious surfaces, such as driveways, during construction to drain to vegetated areas.
- Minimize the area of impervious surfaces such as paved areas, roof and concrete driveways.
- Incorporate pervious or porous surfaces (e.g., permeable pavers or blocks, pervious or porous concrete, etc.) that minimize runoff.
- Direct runoff from paved surfaces and roof areas into planting beds or landscaped areas to maximize site water retention.
- Incorporate rain gardens, cisterns, and other rain harvesting or catchment.
- Incorporate infiltration beds, swales, basins and drywells to retain stormwater and increase percolation into the soil.
- Consider constructed wetlands and retention ponds that retain water, handle excess flow, and filter pollutants.

~~(e) Rain gardens, cisterns, and other landscapes features and practices that increase rainwater capture and create opportunities for infiltration and/or onsite storage are recommended.~~

(e) It is strongly recommended that retention and infiltration capacity sufficient to prevent runoff from roof surfaces and the landscape area from either the one inch, 24-hour rain event or the 85<sup>th</sup> percentile, 24-hour rain event, and such additional capacity, if any, as may be required by any applicable local or regional regulation, be provided.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

### **§ 492.176 Public Education.**

(a) Publications. Education is a critical component to promote the efficient use of water in landscapes. The use of appropriate principles of design, installation, management and maintenance that save water is encouraged in the community.

(1) A local agency or water supplier/purveyor shall provide information to owners of permitted renovations and new single-family residential homes regarding the design, installation, management, and maintenance of water efficient landscapes based on a water budget.

(b) Model Homes. All model homes ~~shall be landscaped and that are landscaped shall~~ use signs and written information to demonstrate the principles of water efficient landscapes described in this ordinance.

(1) Signs shall be used to identify the model as an example of a water efficient landscape featuring elements such as hydrozones, irrigation equipment, and others that contribute to the overall water efficient theme. Signage shall include information about the site water use as designed per the local ordinance; specify who designed and installed the water efficient landscape; and demonstrate low water use approaches to landscaping such as using native plants, graywater systems, and rainwater catchment systems.

(2) Information shall be provided about designing, installing, managing, and maintaining water efficient landscapes. Information available shall include detailed specifications on how to hire trained and licensed landscape architects, contractors, designers and maintenance workers and the benefits of using such professionals.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 492.187 Environmental Review.**

(a) The local agency must comply with the California Environmental Quality Act (CEQA), as appropriate.

Note: Authority cited: Section 21082, Public Resources Code. Reference: Sections 21080, 21082, Public Resources Code.

**§ 493. Provisions for Existing Landscapes.**

(a) A local agency may designate another agency, such as a water purveyor, to implement some or all of the requirements contained in this ordinance. Local agencies may collaborate with water purveyors to define each entity's specific responsibilities relating to this ordinance.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.1 Irrigation Audit, Irrigation Survey, and Irrigation Water Use Analysis.**

(a) This section, 493.1, shall apply to all existing landscapes that were installed before ~~January 1, 2010~~ November 1, 2015 and are over one acre in size.

(1) For all landscapes in 493.1(a) that have a water meter, the local agency shall administer programs that may include, but not be limited to, irrigation water use analyses, irrigation surveys, and irrigation audits to evaluate water use and provide recommendations as necessary to reduce landscape water use to a level that does not exceed the Maximum Applied Water Allowance for existing landscapes. The Maximum Applied Water Allowance for existing landscapes shall be calculated as:  $MWA = (0.8)(ET_o)(LA)(0.62)$ .

(2) For all landscapes in 493.1(a), that do not have a meter, the local agency shall administer programs that may include, but not be limited to, irrigation surveys and irrigation audits to evaluate water use and provide recommendations as necessary in order to prevent water waste.

(b) All landscape irrigation audits shall be conducted by a certified landscape irrigation auditor.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

**§ 493.2 Water Waste Prevention.**

(a) Local agencies shall prevent water waste resulting from inefficient landscape irrigation by prohibiting runoff from leaving the target landscape due to low head drainage, overspray, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways, parking lots, or structures. Penalties for violation of these prohibitions shall be established locally.

(b) Restrictions regarding overspray and runoff may be modified if:

(1) the landscape area is adjacent to permeable surfacing and no runoff occurs; or

(2) the adjacent non-permeable surfaces are designed and constructed to drain entirely to landscaping.

Note: Authority cited: Section 65594, Government Code. Reference: Section 65596, Government Code.

**§ 494. Effective Precipitation.**

(a) A local agency may consider Effective Precipitation (25% of annual precipitation) in tracking water use and may use the following equation to calculate Maximum Applied Water Allowance:

$MAWA = (ET_o - Eppt) (0.62) [(0.57 \times LA) + (0.53 \times SLA)]$  for residential areas.

$MAWA = (ET_o - Eppt) (0.62) [(0.4 \times LA) + (0.6 \times SLA)]$  for non-residential areas.

Note: Authority Cited: Section 65595, Government Code. Reference: Section 65596, Government Code.

#### **§ 495. Reporting.**

(a) Local agencies responsible for administering the ordinance shall report on implementation and enforcement by December 31, 2015. Subsequently, reporting will be due by January 31<sup>st</sup> of each year.

Reports should be submitted as follows.

(b) Local agencies are to address the following:

- (1) Define the reporting period. For the initial reporting, local agencies are encouraged to report as far back as records for implementation of their ordinances allow. At a minimum, the reporting period shall commence on November 1, 2015. The end of the reporting period shall be no sooner than December 15, 2015. In subsequent years, reporting will be for the calendar year.
- (2) State if using a locally modified Water Efficient Landscape Ordinance (WELO) or the MWELO. If using a locally modified WELO, how is it different than MWELO, and are there any exemptions specified?
- (3) State the entity responsible for implementing the ordinance.
- (4) State number and types of projects subject to the ordinance during the specified reporting period.
- (5) State the total area (in square feet or acres) subject to the ordinance over the reporting period, if available.
- (6) Provide the number of new housing starts, new commercial projects, and landscape retrofits during the reporting period.
- (7) Describe the procedure for review of projects subject to the ordinance.
- (8) Describe actions taken to verify compliance. Is a plan check performed; if so, by what entity? Is a site inspection performed; if so, by what entity? Is a post-installation audit required; if so, by whom?
- (9) Describe enforcement measures.
- (10) Explain challenges to implementing and enforcing the ordinance.
- (11) Describe educational and other needs to properly apply the ordinance.



## Appendices.

Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>ALAMEDA</b>													
Fremont	1.5	1.9	3.4	4.7	5.4	6.3	6.7	6.0	4.5	3.4	1.8	1.5	47.0
Livermore	1.2	1.5	2.9	4.4	5.9	6.6	7.4	6.4	5.3	3.2	1.5	0.9	47.2
Oakland	1.5	1.5	2.8	3.9	5.1	5.3	6.0	5.5	4.8	3.1	1.4	0.9	41.8
Oakland Foothills	1.1	1.4	2.7	3.7	5.1	6.4	5.8	4.9	3.6	2.6	1.4	1.0	39.6
Pleasanton	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
Union City	1.4	1.8	3.1	4.2	5.4	5.9	6.4	5.7	4.4	3.1	1.5	1.2	44.2
<b>ALPINE</b>													
Markleeville	0.7	0.9	2.0	3.5	5.0	6.1	7.3	6.4	4.4	2.6	1.2	0.5	40.6
<b>AMADOR</b>													
Jackson	1.2	1.5	2.8	4.4	6.0	7.2	7.9	7.2	5.3	3.2	1.4	0.9	48.9
Shanandoah Valley	1.0	1.7	2.9	4.4	5.6	6.8	7.9	7.1	5.2	3.6	1.7	1.0	48.8
<b>BUTTE</b>													
Chico	1.2	1.8	2.9	4.7	6.1	7.4	8.5	7.3	5.4	3.7	1.7	1.0	51.7
Durham	1.1	1.8	3.2	5.0	6.5	7.4	7.8	6.9	5.3	3.6	1.7	1.0	51.1
Gridley	1.2	1.8	3.0	4.7	6.1	7.7	8.5	7.1	5.4	3.7	1.7	1.0	51.9
Oroville	1.2	1.7	2.8	4.7	6.1	7.6	8.5	7.3	5.3	3.7	1.7	1.0	51.5
<b>CALAVERAS</b>													
San Andreas	1.2	1.5	2.8	4.4	6.0	7.3	7.9	7.0	5.3	3.2	1.4	0.7	48.8
<b>COLUSA</b>													
Colusa	1.0	1.7	3.4	5.0	6.4	7.6	8.3	7.2	5.4	3.8	1.8	1.1	52.8
Williams	1.2	1.7	2.9	4.5	6.1	7.2	8.5	7.3	5.3	3.4	1.6	1.0	50.8
<b>CONTRA COSTA</b>													
<del>Benicia</del>	<del>1.3</del>	<del>1.4</del>	<del>2.7</del>	<del>3.8</del>	<del>4.9</del>	<del>5.0</del>	<del>6.4</del>	<del>5.5</del>	<del>4.4</del>	<del>2.9</del>	<del>1.2</del>	<del>0.7</del>	<del>40.3</del>
Brentwood	1.0	1.5	2.9	4.5	6.1	7.1	7.9	6.7	5.2	3.2	1.4	0.7	48.3
Concord	1.1	1.4	2.4	4.0	5.5	5.9	7.0	6.0	4.8	3.2	1.3	0.7	43.4
Courtland	0.9	1.5	2.9	4.4	6.1	6.9	7.9	6.7	5.3	3.2	1.4	0.7	48.0
Martinez	1.2	1.4	2.4	3.9	5.3	5.6	6.7	5.6	4.7	3.1	1.2	0.7	41.8
Moraga	1.2	1.5	3.4	4.2	5.5	6.1	6.7	5.9	4.6	3.2	1.6	1.0	44.9
Pittsburg	1.0	1.5	2.8	4.1	5.6	6.4	7.4	6.4	5.0	3.2	1.3	0.7	45.4
Walnut Creek	0.8	1.5	2.9	4.4	5.6	6.7	7.4	6.4	4.7	3.3	1.5	1.0	46.2
<b>DEL NORTE</b>													
Crescent City	0.5	0.9	2.0	3.0	3.7	3.5	4.3	3.7	3.0	2.0	0.9	0.5	27.7
<b>EL DORADO</b>													
Camino	0.9	1.7	2.5	3.9	5.9	7.2	7.8	6.8	5.1	3.1	1.5	0.9	47.3
<b>FRESNO</b>													
Clovis	1.0	1.5	3.2	4.8	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Coalinga	1.2	1.7	3.1	4.6	6.2	7.2	8.5	7.3	5.3	3.4	1.6	0.7	50.9
Firebaugh	1.0	1.8	3.7	5.7	7.3	8.1	8.2	7.2	5.5	3.9	2.0	1.1	55.4
FivePoints	1.3	2.0	4.0	6.1	7.7	8.5	8.7	8.0	6.2	4.5	2.4	1.2	60.4
Fresno	0.9	1.7	3.3	4.8	6.7	7.8	8.4	7.1	5.2	3.2	1.4	0.6	51.1
Fresno State	0.9	1.6	3.2	5.2	7.0	8.0	8.7	7.6	5.4	3.6	1.7	0.9	53.7
Friant	1.2	1.5	3.1	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Kerman	0.9	1.5	3.2	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.2
Kingsburg	1.0	1.5	3.4	4.8	6.6	7.7	8.4	7.2	5.3	3.4	1.4	0.7	51.6
Mendota	1.5	2.5	4.6	6.2	7.9	8.6	8.8	7.5	5.9	4.5	2.4	1.5	61.7
Orange Cove	1.2	1.9	3.5	4.7	7.4	8.5	8.9	7.9	5.9	3.7	1.8	1.2	56.7

**Appendix A. Reference Evapotranspiration (ETo) Table.**

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ETo
Panoche	1.1	2.0	4.0	5.6	7.8	8.5	8.3	7.3	5.6	3.9	1.8	1.2	57.2
Parlier	1.0	1.9	3.6	5.2	6.8	7.6	8.1	7.0	5.1	3.4	1.7	0.9	52.0
Reedley	1.1	1.5	3.2	4.7	6.4	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.3
Westlands	0.9	1.7	3.8	6.3	8.0	8.6	8.6	7.8	5.9	4.3	2.1	1.1	58.8
<b>GLENN</b>													
Orland	1.1	1.8	3.4	5.0	6.4	7.5	7.9	6.7	5.3	3.9	1.8	1.4	52.1
Willows	1.2	1.7	2.9	4.7	6.1	7.2	8.5	7.3	5.3	3.6	1.7	1.0	51.3
<b>HUMBOLDT</b>													
Eureka	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Ferndale	0.5	1.1	2.0	3.0	3.7	3.7	3.7	3.7	3.0	2.0	0.9	0.5	27.5
Garberville	0.6	1.2	2.2	3.1	4.5	5.0	5.5	4.9	3.8	2.4	1.0	0.7	34.9
Hoopa	0.5	1.1	2.1	3.0	4.4	5.4	6.1	5.1	3.8	2.4	0.9	0.7	35.6
<b>IMPERIAL</b>													
Brawley	2.8	3.8	5.9	8.0	10.4	11.5	11.7	10.0	8.4	6.2	3.5	2.1	84.2
Calipatria/Mulberry	2.4	3.2	5.1	6.8	8.6	9.2	9.2	8.6	7.0	5.2	3.1	2.3	70.7
El Centro	2.7	3.5	5.6	7.9	10.1	11.1	11.6	9.5	8.3	6.1	3.3	2.0	81.7
Holtville	2.8	3.8	5.9	7.9	10.4	11.6	12.0	10.0	8.6	6.2	3.5	2.1	84.7
Meloland	2.5	3.2	5.5	7.5	8.9	9.2	9.0	8.5	6.8	5.3	3.1	2.2	71.6
Palo Verde II	2.5	3.3	5.7	6.9	8.5	8.9	8.6	7.9	6.2	4.5	2.9	2.3	68.2
Seeley	2.7	3.5	5.9	7.7	9.7	10.1	9.3	8.3	6.9	5.5	3.4	2.2	75.4
Westmoreland	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Yuma	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
<b>INYO</b>													
Bishop	1.7	2.7	4.8	6.7	8.2	10.9	7.4	9.6	7.4	4.8	2.5	1.6	68.3
Death Valley Jct	2.2	3.3	5.4	7.7	9.8	11.1	11.4	10.1	8.3	5.4	2.9	1.7	79.1
Independence	1.7	2.7	3.4	6.6	8.5	9.5	9.8	8.5	7.1	3.9	2.0	1.5	65.2
Lower Haiwee Res.	1.8	2.7	4.4	7.1	8.5	9.5	9.8	8.5	7.1	4.2	2.6	1.5	67.6
Oasis	2.7	2.8	5.9	8.0	10.4	11.7	11.6	10.0	8.4	6.2	3.4	2.1	83.1
<b>KERN</b>													
Arvin	1.2	1.8	3.5	4.7	6.6	7.4	8.1	7.3	5.3	3.4	1.7	1.0	51.9
Bakersfield	1.0	1.8	3.5	4.7	6.6	7.7	8.5	7.3	5.3	3.5	1.6	0.9	52.4
Bakersfield/Bonanza	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Bakersfield/Greenlee	1.2	2.2	3.7	5.7	7.4	8.2	8.7	7.8	5.7	4.0	2.1	1.2	57.9
Belridge	1.4	2.2	4.1	5.5	7.7	8.5	8.6	7.8	6.0	3.8	2.0	1.5	59.2
Blackwells Corner	1.4	2.1	3.8	5.4	7.0	7.8	8.5	7.7	5.8	3.9	1.9	1.2	56.6
Buttonwillow	1.0	1.8	3.2	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.5	0.9	52.0
China Lake	2.1	3.2	5.3	7.7	9.2	10.0	11.0	9.8	7.3	4.9	2.7	1.7	74.8
Delano	0.9	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.4	3.4	1.4	0.7	52.0
Famoso	1.3	1.9	3.5	4.8	6.7	7.6	8.0	7.3	5.5	3.5	1.7	1.3	53.1
Grapevine	1.3	1.8	3.1	4.4	5.6	6.8	7.6	6.8	5.9	3.4	1.9	1.0	49.5
Inyokern	2.0	3.1	4.9	7.3	8.5	9.7	11.0	9.4	7.1	5.1	2.6	1.7	72.4
Isabella Dam	1.2	1.4	2.8	4.4	5.8	7.3	7.9	7.0	5.0	3.2	1.7	0.9	48.4
Lamont	1.3	2.4	4.4	4.6	6.5	7.0	8.8	7.6	5.7	3.7	1.6	0.8	54.4
Lost Hills	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
McFarland/Kern	1.2	2.1	3.7	5.6	7.3	8.0	8.3	7.4	5.6	4.1	2.0	1.2	56.5
Shafter	1.0	1.7	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.5	0.9	52.1
Taft	1.3	1.8	3.1	4.3	6.2	7.3	8.5	7.3	5.4	3.4	1.7	1.0	51.2
Tehachapi	1.4	1.8	3.2	5.0	6.1	7.7	7.9	7.3	5.9	3.4	2.1	1.2	52.9

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1616 : PARTICIPATION IN METROPOLITAN WATER

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
<b>KINGS</b>													
Caruthers	1.6	2.5	4.0	5.7	7.8	8.7	9.3	8.4	6.3	4.4	2.4	1.6	62.7
Corcoran	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Hanford	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.2	5.4	3.4	1.4	0.7	51.5
Kettleman	1.1	2.0	4.0	6.0	7.5	8.5	9.1	8.2	6.1	4.5	2.2	1.1	60.2
Lemoore	0.9	1.5	3.4	5.0	6.6	7.7	8.3	7.3	5.4	3.4	1.4	0.7	51.7
Stratford	0.9	1.9	3.9	6.1	7.8	8.6	8.8	7.7	5.9	4.1	2.1	1.0	58.7
<b>LAKE</b>													
Lakeport	1.1	1.3	2.6	3.5	5.1	6.0	7.3	6.1	4.7	2.9	1.2	0.9	42.8
Lower Lake	1.2	1.4	2.7	4.5	5.3	6.3	7.4	6.4	5.0	3.1	1.3	0.9	45.4
<b>LASSEN</b>													
Buntingville	1.0	1.7	3.5	4.9	6.2	7.3	8.4	7.5	5.4	3.4	1.5	0.9	51.8
Ravendale	0.6	1.1	2.3	4.1	5.6	6.7	7.9	7.3	4.7	2.8	1.2	0.5	44.9
Susanville	0.7	1.0	2.2	4.1	5.6	6.5	7.8	7.0	4.6	2.8	1.2	0.5	44.0
<b>LOS ANGELES</b>													
Burbank	2.1	2.8	3.7	4.7	5.1	6.0	6.6	6.7	5.4	4.0	2.6	2.0	51.7
Claremont	2.0	2.3	3.4	4.6	5.0	6.0	7.0	7.0	5.3	4.0	2.7	2.1	51.3
El Dorado	1.7	2.2	3.6	4.8	5.1	5.7	5.9	5.9	4.4	3.2	2.2	1.7	46.3
Glendale	2.0	2.2	3.3	3.8	4.7	4.8	5.7	5.6	4.3	3.3	2.2	1.8	43.7
Glendora	2.0	2.5	3.6	4.9	5.4	6.1	7.3	6.8	5.7	4.2	2.6	2.0	53.1
Gorman	1.6	2.2	3.4	4.6	5.5	7.4	7.7	7.1	5.9	3.6	2.4	1.1	52.4
Hollywood Hills	2.1	2.2	3.8	5.4	6.0	6.5	6.7	6.4	5.2	3.7	2.8	2.1	52.8
Lancaster	2.1	3.0	4.6	5.9	8.5	9.7	11.0	9.8	7.3	4.6	2.8	1.7	71.1
Long Beach	1.8	2.1	3.3	3.9	4.5	4.3	5.3	4.7	3.7	2.8	1.8	1.5	39.7
Los Angeles	2.2	2.7	3.7	4.7	5.5	5.8	6.2	5.9	5.0	3.9	2.6	1.9	50.1
Monrovia	2.2	2.3	3.8	4.3	5.5	5.9	6.9	6.4	5.1	3.2	2.5	2.0	50.2
Palmdale	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2
Pasadena	2.1	2.7	3.7	4.7	5.1	6.0	7.1	6.7	5.6	4.2	2.6	2.0	52.3
Pearblossom	1.7	2.4	3.7	4.7	7.3	7.7	9.9	7.9	6.4	4.0	2.6	1.6	59.9
Pomona	1.7	2.0	3.4	4.5	5.0	5.8	6.5	6.4	4.7	3.5	2.3	1.7	47.5
Redondo Beach	2.2	2.4	3.3	3.8	4.5	4.7	5.4	4.8	4.4	2.8	2.4	2.0	42.6
San Fernando	2.0	2.7	3.5	4.6	5.5	5.9	7.3	6.7	5.3	3.9	2.6	2.0	52.0
Santa Clarita	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Santa Monica	1.8	2.1	3.3	4.5	4.7	5.0	5.4	5.4	3.9	3.4	2.4	2.2	44.2
<b>MADERA</b>													
Chowchilla	1.0	1.4	3.2	4.7	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.4
Madera	0.9	1.4	3.2	4.8	6.6	7.8	8.5	7.3	5.3	3.4	1.4	0.7	51.5
Raymond	1.2	1.5	3.0	4.6	6.1	7.6	8.4	7.3	5.2	3.4	1.4	0.7	50.5
<b>MARIN</b>													
Black Point	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
Novato	1.3	1.5	2.4	3.5	4.4	6.0	5.9	5.4	4.4	2.8	1.4	0.7	39.8
Point San Pedro	1.1	1.7	3.0	4.2	5.2	6.2	6.6	5.8	4.3	2.8	1.3	0.9	43.0
San Rafael	1.2	1.3	2.4	3.3	4.0	4.8	4.8	4.9	4.3	2.7	1.3	0.7	35.8
<b>MARIPOSA</b>													
Coulterville	1.1	1.5	2.8	4.4	5.9	7.3	8.1	7.0	5.3	3.4	1.4	0.7	48.8
Mariposa	1.1	1.5	2.8	4.4	5.9	7.4	8.2	7.1	5.0	3.4	1.4	0.7	49.0
Yosemite Village	0.7	1.0	2.3	3.7	5.1	6.5	7.1	6.1	4.4	2.9	1.1	0.6	41.4
<b>MENDOCINO</b>													

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Fort Bragg	0.9	1.3	2.2	3.0	3.7	3.5	3.7	3.7	3.0	2.3	1.2	0.7	29.0
Hopland	1.1	1.3	2.6	3.4	5.0	5.9	6.5	5.7	4.5	2.8	1.3	0.7	40.9
Point Arena	1.0	1.3	2.3	3.0	3.7	3.9	3.7	3.7	3.0	2.3	1.2	0.7	29.6
Sanel Valley	1.0	1.6	3.0	4.6	6.0	7.0	8.0	7.0	5.2	3.4	1.4	0.9	49.1
Ukiah	1.0	1.3	2.6	3.3	5.0	5.8	6.7	5.9	4.5	2.8	1.3	0.7	40.9
<b>MERCED</b>													
Kesterson	0.9	1.7	3.4	5.5	7.3	8.2	8.6	7.4	5.5	3.8	1.8	0.9	55.1
Los Banos	1.0	1.5	3.2	4.7	6.1	7.4	8.2	7.0	5.3	3.4	1.4	0.7	50.0
Merced	1.0	1.5	3.2	4.7	6.6	7.9	8.5	7.2	5.3	3.4	1.4	0.7	51.5
<b>MODOC</b>													
Modoc/Alturas	0.9	1.4	2.8	3.7	5.1	6.2	7.5	6.6	4.6	2.8	1.2	0.7	43.2
<b>MONO</b>													
Bridgeport	0.7	0.9	2.2	3.8	5.5	6.6	7.4	6.7	4.7	2.7	1.2	0.5	43.0
<b>MONTEREY</b>													
Arroyo Seco	1.5	2.0	3.7	5.4	6.3	7.3	7.2	6.7	5.0	3.9	2.0	1.6	52.6
Castroville	1.4	1.7	3.0	4.2	4.6	4.8	4.0	3.8	3.0	2.6	1.6	1.4	36.2
Gonzales	1.3	1.7	3.4	4.7	5.4	6.3	6.3	5.9	4.4	3.4	1.9	1.3	45.7
Greenfield	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
King City	1.7	2.0	3.4	4.4	4.4	5.6	6.1	6.7	6.5	5.2	2.2	1.3	49.6
King City-Oasis Rd.	1.4	1.9	3.6	5.3	6.5	7.3	7.4	6.8	5.1	4.0	2.0	1.5	52.7
Long Valley	1.5	1.9	3.2	4.1	5.8	6.5	7.3	6.7	5.3	3.6	2.0	1.2	49.1
Monterey	1.7	1.8	2.7	3.5	4.0	4.1	4.3	4.2	3.5	2.8	1.9	1.5	36.0
Pajaro	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.1
Salinas	1.6	1.9	2.7	3.8	4.8	4.7	5.0	4.5	4.0	2.9	1.9	1.3	39.1
Salinas North	1.2	1.5	2.9	4.1	4.6	5.2	4.5	4.3	3.2	2.8	1.5	1.2	36.9
San Ardo	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
San Juan	1.8	2.1	3.4	4.6	5.3	5.7	5.5	4.9	3.8	3.2	2.2	1.9	44.2
Soledad	1.7	2.0	3.4	4.4	5.5	5.4	6.5	6.2	5.2	3.7	2.2	1.5	47.7
<b>NAPA</b>													
Angwin	1.8	1.9	3.2	4.7	5.8	7.3	8.1	7.1	5.5	4.5	2.9	2.1	54.9
Carneros	0.8	1.5	3.1	4.6	5.5	6.6	6.9	6.2	4.7	3.5	1.4	1.0	45.8
Oakville	1.0	1.5	2.9	4.7	5.8	6.9	7.2	6.4	4.9	3.5	1.6	1.2	47.7
St Helena	1.2	1.5	2.8	3.9	5.1	6.1	7.0	6.2	4.8	3.1	1.4	0.9	44.1
Yountville	1.3	1.7	2.8	3.9	5.1	6.0	7.1	6.1	4.8	3.1	1.5	0.9	44.3
<b>NEVADA</b>													
Grass Valley	1.1	1.5	2.6	4.0	5.7	7.1	7.9	7.1	5.3	3.2	1.5	0.9	48.0
Nevada City	1.1	1.5	2.6	3.9	5.8	6.9	7.9	7.0	5.3	3.2	1.4	0.9	47.4
<b>ORANGE</b>													
Irvine	2.2	2.5	3.7	4.7	5.2	5.9	6.3	6.2	4.6	3.7	2.6	2.3	49.6
Laguna Beach	2.2	2.7	3.4	3.8	4.6	4.6	4.9	4.9	4.4	3.4	2.4	2.0	43.2
Santa Ana	2.2	2.7	3.7	4.5	4.6	5.4	6.2	6.1	4.7	3.7	2.5	2.0	48.2
<b>PLACER</b>													
Auburn	1.2	1.7	2.8	4.4	6.1	7.4	8.3	7.3	5.4	3.4	1.6	1.0	50.6
Blue Canyon	0.7	1.1	2.1	3.4	4.8	6.0	7.2	6.1	4.6	2.9	0.9	0.6	40.5
Colfax	1.1	1.5	2.6	4.0	5.8	7.1	7.9	7.0	5.3	3.2	1.4	0.9	47.9
Roseville	1.1	1.7	3.1	4.7	6.2	7.7	8.5	7.3	5.6	3.7	1.7	1.0	52.2
Soda Springs	0.7	0.7	1.8	3.0	4.3	5.3	6.2	5.5	4.1	2.5	0.7	0.7	35.4
Tahoe City	0.7	0.7	1.7	3.0	4.3	5.4	6.1	5.6	4.1	2.4	0.8	0.6	35.5

### Appendix A. Reference Evapotranspiration (ET<sub>o</sub>) Table.

County and City	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual ET <sub>o</sub>
Truckee	0.7	0.7	1.7	3.2	4.4	5.4	6.4	5.7	4.1	2.4	0.8	0.6	36.2
<b>PLUMAS</b>													
Portola	0.7	0.9	1.9	3.5	4.9	5.9	7.3	5.9	4.3	2.7	0.9	0.5	39.4
Quincy	0.7	0.9	2.2	3.5	4.9	5.9	7.3	5.9	4.4	2.8	1.2	0.5	40.2
<b>RIVERSIDE</b>													
Beaumont	2.0	2.3	3.4	4.4	6.1	7.1	7.6	7.9	6.0	3.9	2.6	1.7	55.0
Blythe	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Cathedral City	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Coachella	2.9	4.4	6.2	8.4	10.5	11.9	12.3	10.1	8.9	6.2	3.8	2.4	88.1
Desert Center	2.9	4.1	6.4	8.5	11.0	12.1	12.2	11.1	9.0	6.4	3.9	2.6	90.0
Elsinore	2.1	2.8	3.9	4.4	5.9	7.1	7.6	7.0	5.8	3.9	2.6	1.9	55.0
Indio	<b>3.1</b>	3.6	6.5	8.3	10.5	11.0	10.8	9.7	8.3	5.9	3.7	2.7	83.9
<b>RIVERSIDE</b>													
La Quinta	2.4	2.8	5.2	6.5	8.3	8.7	8.5	7.9	6.5	4.5	2.7	2.2	66.2
Mecca	2.6	3.3	5.7	7.2	8.6	9.0	8.8	8.2	6.8	5.0	3.2	2.4	70.8
Oasis	2.9	3.3	5.3	6.1	8.5	8.9	8.7	7.9	6.9	4.8	2.9	2.3	68.4
Palm Desert	2.5	3.4	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.6
Palm Springs	2.0	2.9	4.9	7.2	8.3	8.5	11.6	8.3	7.2	5.9	2.7	1.7	71.1
Rancho California	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5
Rancho Mirage	2.4	3.3	5.3	6.9	8.7	9.6	9.6	8.7	6.9	5.0	3.0	2.2	71.4
Ripley	2.7	3.3	5.6	7.2	8.7	8.7	8.4	7.6	6.2	4.6	2.8	2.2	67.8
Salton Sea North	2.5	3.3	5.5	7.2	8.8	9.3	9.2	8.5	6.8	5.2	3.1	2.3	71.7
Temecula East II	2.3	2.4	4.1	4.9	6.4	7.0	7.8	7.4	5.7	4.1	2.6	2.2	56.7
Thermal	2.4	3.3	5.5	7.6	9.1	9.6	9.3	8.6	7.1	5.2	3.1	2.1	72.8
Riverside UC	2.5	2.9	4.2	5.3	5.9	6.6	7.2	6.9	5.4	4.1	2.9	2.6	56.4
Winchester	2.3	2.4	4.1	4.9	6.4	6.9	7.7	7.5	6.0	3.9	2.6	2.1	56.8
<b>SACRAMENTO</b>													
Fair Oaks	1.0	1.6	3.4	4.1	6.5	7.5	8.1	7.1	5.2	3.4	1.5	1.0	50.5
Sacramento	1.0	1.8	3.2	4.7	6.4	7.7	8.4	7.2	5.4	3.7	1.7	0.9	51.9
Twitchell Island	1.2	1.8	3.9	5.3	7.4	8.8	9.1	7.8	5.9	3.8	1.7	1.2	57.9
<b>SAN BENITO</b>													
Hollister	1.5	1.8	3.1	4.3	5.5	5.7	6.4	5.9	5.0	3.5	1.7	1.1	45.1
San Benito	1.2	1.6	3.1	4.6	5.6	6.4	6.9	6.5	4.8	3.7	1.7	1.2	47.2
San Juan Valley	1.4	1.8	3.4	4.5	6.0	6.7	7.1	6.4	5.0	3.5	1.8	1.4	49.1
<b>SAN BERNARDINO</b>													
Baker	2.7	3.9	6.1	8.3	10.4	11.8	12.2	11.0	8.9	6.1	3.3	2.1	86.6
Barstow NE	2.2	2.9	5.3	6.9	9.0	10.1	9.9	8.9	6.8	4.8	2.7	2.1	71.7
Big Bear Lake	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Chino	2.1	2.9	3.9	4.5	5.7	6.5	7.3	7.1	5.9	4.2	2.6	2.0	54.6
Crestline	1.5	1.9	3.3	4.4	5.5	6.6	7.8	7.1	5.4	3.5	2.2	1.6	50.8
Lake Arrowhead	1.8	2.6	4.6	6.0	7.0	7.6	8.1	7.4	5.4	4.1	2.4	1.8	58.6
Lucerne Valley	2.2	2.9	5.1	6.5	9.1	11.0	11.4	9.9	7.4	5.0	3.0	1.8	75.3
Needles	3.2	4.2	6.6	8.9	11.0	12.4	12.8	11.0	8.9	6.6	4.0	2.7	92.1
Newberry Springs	2.1	2.9	5.3	8.4	9.8	10.9	11.1	9.9	7.6	5.2	3.1	2.0	78.2
San Bernardino	2.0	2.7	3.8	4.6	5.7	6.9	7.9	7.4	5.9	4.2	2.6	2.0	55.6
Twentynine Palms	2.6	3.6	5.9	7.9	10.1	11.2	11.2	10.3	8.6	5.9	3.4	2.2	82.9
Victorville	2.0	2.6	4.6	6.2	7.3	8.9	9.8	9.0	6.5	4.7	2.7	2.1	66.2

<b>SAN DIEGO</b>														
Chula Vista	2.2	2.7	3.4	3.8	4.9	4.7	5.5	4.9	4.5	3.4	2.4	2.0	44.2	
Escondido SPV	2.4	2.6	3.9	4.7	5.9	6.5	7.1	6.7	5.3	3.9	2.8	2.3	54.2	
Miramar	2.3	2.5	3.7	4.1	5.1	5.4	6.1	5.8	4.5	3.3	2.4	2.1	47.1	
Oceanside	2.2	2.7	3.4	3.7	4.9	4.6	4.6	5.1	4.1	3.3	2.4	2.0	42.9	
Otay Lake	2.3	2.7	3.9	4.6	5.6	5.9	6.2	6.1	4.8	3.7	2.6	2.2	50.4	
Pine Valley	1.5	2.4	3.8	5.1	6.0	7.0	7.8	7.3	6.0	4.0	2.2	1.7	54.8	
Ramona	2.1	2.1	3.4	4.6	5.2	6.3	6.7	6.8	5.3	4.1	2.8	2.1	51.6	
San Diego	2.1	2.4	3.4	4.6	5.1	5.3	5.7	5.6	4.3	3.6	2.4	2.0	46.5	
Santee	2.1	2.7	3.7	4.5	5.5	6.1	6.6	6.2	5.4	3.8	2.6	2.0	51.1	
Torrey Pines	2.2	2.3	3.4	3.9	4.0	4.1	4.6	4.7	3.8	2.8	2.0	2.0	39.8	
Warner Springs	1.6	2.7	3.7	4.7	5.7	7.6	8.3	7.7	6.3	4.0	2.5	1.3	56.0	
<b>SAN FRANCISCO</b>														
San Francisco	1.5	1.3	2.4	3.0	3.7	4.6	4.9	4.8	4.1	2.8	1.3	0.7	35.1	
<b>SAN JOAQUIN</b>														
Farmington	1.5	1.5	2.9	4.7	6.2	7.6	8.1	6.8	5.3	3.3	1.4	0.7	50.0	
<b>SAN JOAQUIN</b>														
Lodi West	1.0	1.6	3.3	4.3	6.3	6.9	7.3	6.4	4.5	3.0	1.4	0.8	46.7	
Manteca	0.9	1.7	3.4	5.0	6.5	7.5	8.0	7.1	5.2	3.3	1.6	0.9	51.2	
Stockton	0.8	1.5	2.9	4.7	6.2	7.4	8.1	6.8	5.3	3.2	1.4	0.6	49.1	
Tracy	1.0	1.5	2.9	4.5	6.1	7.3	7.9	6.7	5.3	3.2	1.3	0.7	48.5	
<b>SAN LUIS OBISPO</b>														
Arroyo Grande	2.0	2.2	3.2	3.8	4.3	4.7	4.3	4.6	3.8	3.2	2.4	1.7	40.0	
Atascadero	1.2	1.5	2.8	3.9	4.5	6.0	6.7	6.2	5.0	3.2	1.7	1.0	43.7	
Morro Bay	2.0	2.2	3.1	3.5	4.3	4.5	4.6	4.6	3.8	3.5	2.1	1.7	39.9	
Nipomo	2.2	2.5	3.8	5.1	5.7	6.2	6.4	6.1	4.9	4.1	2.9	2.3	52.1	
Paso Robles	1.6	2.0	3.2	4.3	5.5	6.3	7.3	6.7	5.1	3.7	2.1	1.4	49.0	
San Luis Obispo	2.0	2.2	3.2	4.1	4.9	5.3	4.6	5.5	4.4	3.5	2.4	1.7	43.8	
San Miguel	1.6	2.0	3.2	4.3	5.0	6.4	7.4	6.8	5.1	3.7	2.1	1.4	49.0	
San Simeon	2.0	2.0	2.9	3.5	4.2	4.4	4.6	4.3	3.5	3.1	2.0	1.7	38.1	
<b>SAN MATEO</b>														
Hal Moon Bay	1.5	1.7	2.4	3.0	3.9	4.3	4.3	4.2	3.5	2.8	1.3	1.0	33.7	
Redwood City	1.5	1.8	2.9	3.8	5.2	5.3	6.2	5.6	4.8	3.1	1.7	1.0	42.8	
Woodside	1.8	2.2	3.4	4.8	5.6	6.3	6.5	6.2	4.8	3.7	2.4	1.8	49.5	
<b>SANTA BARBARA</b>														
Betteravia	2.1	2.6	4.0	5.2	6.0	5.9	5.8	5.4	4.1	3.3	2.7	2.1	49.1	
Carpenteria	2.0	2.4	3.2	3.9	4.8	5.2	5.5	5.7	4.5	3.4	2.4	2.0	44.9	
Cuyama	2.1	2.4	3.8	5.4	6.9	7.9	8.5	7.7	5.9	4.5	2.6	2.0	59.7	
Goleta	2.1	2.5	3.9	5.1	5.7	5.7	5.4	5.4	4.2	3.2	2.8	2.2	48.1	
Goleta Foothills	2.3	2.6	3.7	5.4	5.3	5.6	5.5	5.7	4.5	3.9	2.8	2.3	49.6	
Guadalupe	2.0	2.2	3.2	3.7	4.9	4.6	4.5	4.6	4.1	3.3	2.4	1.7	41.1	
Lompoc	2.0	2.2	3.2	3.7	4.8	4.6	4.9	4.8	3.9	3.2	2.4	1.7	41.1	
Los Alamos	1.8	2.0	3.2	4.1	4.9	5.3	5.7	5.5	4.4	3.7	2.4	1.6	44.6	
Santa Barbara	2.0	2.5	3.2	3.8	4.6	5.1	5.5	4.5	3.4	2.4	1.8	1.8	40.6	
Santa Maria	1.8	2.3	3.7	5.1	5.7	5.8	5.6	5.3	4.2	3.5	2.4	1.9	47.4	
Santa Ynez	1.7	2.2	3.5	5.0	5.8	6.2	6.4	6.0	4.5	3.6	2.2	1.7	48.7	
Sisquoc	2.1	2.5	3.8	4.1	6.1	6.3	6.4	5.8	4.7	3.4	2.3	1.8	49.2	
Solvang	2.0	2.0	3.3	4.3	5.0	5.6	6.1	5.6	4.4	3.7	2.2	1.6	45.6	

<b>SANTA CLARA</b>													
Gilroy	1.3	1.8	3.1	4.1	5.3	5.6	6.1	5.5	4.7	3.4	1.7	1.1	43.6
Los Gatos	1.5	1.8	2.8	3.9	5.0	5.6	6.2	5.5	4.7	3.2	1.7	1.1	42.9
Morgan Hill	1.5	1.8	3.4	4.2	6.3	7.0	7.1	6.0	5.1	3.7	1.9	1.4	49.5
Palo Alto	1.5	1.8	2.8	3.8	5.2	5.3	6.2	5.6	5.0	3.2	1.7	1.0	43.0
San Jose	1.5	1.8	3.1	4.1	5.5	5.8	6.5	5.9	5.2	3.3	1.8	1.0	45.3
<b>SANTA CRUZ</b>													
De Laveaga	1.4	1.9	3.3	4.7	4.9	5.3	5.0	4.8	3.6	3.0	1.6	1.3	40.8
Green Valley Rd	1.2	1.8	3.2	4.5	4.6	5.4	5.2	5.0	3.7	3.1	1.6	1.3	40.6
Santa Cruz	1.5	1.8	2.6	3.5	4.3	4.4	4.8	4.4	3.8	2.8	1.7	1.2	36.6
Watsonville	1.5	1.8	2.7	3.7	4.6	4.5	4.9	4.2	4.0	2.9	1.8	1.2	37.7
Webb	1.8	2.2	3.7	4.8	5.3	5.7	5.6	5.3	4.3	3.4	2.4	1.8	46.2
<b>SHASTA</b>													
Burney	0.7	1.0	2.1	3.5	4.9	5.9	7.4	6.4	4.4	2.9	0.9	0.6	40.9
Fall River Mills	0.6	1.0	2.1	3.7	5.0	6.1	7.8	6.7	4.6	2.8	0.9	0.5	41.8
Glenburn	0.6	1.0	2.1	3.7	5.0	6.3	7.8	6.7	4.7	2.8	0.9	0.6	42.1
McArthur	0.7	1.4	2.9	4.2	5.6	6.9	8.2	7.2	5.0	3.0	1.1	0.6	46.8
Redding	1.2	1.4	2.6	4.1	5.6	7.1	8.5	7.3	5.3	3.2	1.4	0.9	48.8
<b>SIERRA</b>													
Downieville	0.7	1.0	2.3	3.5	5.0	6.0	7.4	6.2	4.7	2.8	0.9	0.6	41.3
Sierraville	0.7	1.1	2.2	3.2	4.5	5.9	7.3	6.4	4.3	2.6	0.9	0.5	39.6
<b>SISKIYOU</b>													
Happy Camp	0.5	0.9	2.0	3.0	4.3	5.2	6.1	5.3	4.1	2.4	0.9	0.5	35.1
MacDoel	1.0	1.7	3.1	4.5	5.9	7.2	8.1	7.1	5.1	3.1	1.5	1.0	49.0
Mt Shasta	0.5	0.9	2.0	3.0	4.5	5.3	6.7	5.7	4.0	2.2	0.7	0.5	36.0
Tule lake FS	0.7	1.3	2.7	4.0	5.4	6.3	7.1	6.4	4.7	2.8	1.0	0.6	42.9
Weed	0.5	0.9	2.0	2.5	4.5	5.3	6.7	5.5	3.7	2.0	0.9	0.5	34.9
Yreka	0.6	0.9	2.1	3.0	4.9	5.8	7.3	6.5	4.3	2.5	0.9	0.5	39.2
<b>SOLANO</b>													
<u>Benicia</u>	<u>1.3</u>	<u>1.4</u>	<u>2.7</u>	<u>3.8</u>	<u>4.9</u>	<u>5.0</u>	<u>6.4</u>	<u>5.5</u>	<u>4.4</u>	<u>2.9</u>	<u>1.2</u>	<u>0.7</u>	<u>40.3</u>
Dixon	0.7	1.4	3.2	5.2	6.3	7.6	8.2	7.2	5.5	4.3	1.6	1.1	52.1
Fairfield	1.1	1.7	2.8	4.0	5.5	6.1	7.8	6.0	4.8	3.1	1.4	0.9	45.2
Hastings Tract	1.6	2.2	3.7	5.1	6.8	7.8	8.7	7.8	5.7	4.0	2.1	1.6	57.1
Putah Creek	1.0	1.6	3.2	4.9	6.1	7.3	7.9	7.0	5.3	3.8	1.8	1.2	51.0
Rio Vista	0.9	1.7	2.8	4.4	5.9	6.7	7.9	6.5	5.1	3.2	1.3	0.7	47.0
Suisun Valley	0.6	1.3	3.0	4.7	5.8	7.0	7.7	6.8	5.3	3.8	1.4	0.9	48.3
Winters	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
<b>SONOMA</b>													
Bennett Valley	1.1	1.7	3.2	4.1	5.5	6.5	6.6	5.7	4.5	3.1	1.5	0.9	44.4
Cloverdale	1.1	1.4	2.6	3.4	5.0	5.9	6.2	5.6	4.5	2.8	1.4	0.7	40.7
Fort Ross	1.2	1.4	2.2	3.0	3.7	4.5	4.2	4.3	3.4	2.4	1.2	0.5	31.9
Healdsburg	1.2	1.5	2.4	3.5	5.0	5.9	6.1	5.6	4.5	2.8	1.4	0.7	40.8
Lincoln	1.2	1.7	2.8	4.7	6.1	7.4	8.4	7.3	5.4	3.7	1.9	1.2	51.9
Petaluma	1.2	1.5	2.8	3.7	4.6	5.6	4.6	5.7	4.5	2.9	1.4	0.9	39.6
Santa Rosa	1.2	1.7	2.8	3.7	5.0	6.0	6.1	5.9	4.5	2.9	1.5	0.7	42.0
Valley of the Moon	1.0	1.6	3.0	4.5	5.6	6.6	7.1	6.3	4.7	3.3	1.5	1.0	46.1
Windsor	0.9	1.6	3.0	4.5	5.5	6.5	6.5	5.9	4.4	3.2	1.4	1.0	44.2
<b>STANISLAUS</b>													
Denair	1.0	1.9	3.6	4.7	7.0	7.9	8.0	6.1	5.3	3.4	1.5	1.0	51.4
La Grange	1.2	1.5	3.1	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Modesto	0.9	1.4	3.2	4.7	6.4	7.7	8.1	6.8	5.0	3.4	1.4	0.7	49.7

Newman	1.0	1.5	3.2	4.6	6.2	7.4	8.1	6.7	5.0	3.4	1.4	0.7	49.3
Oakdale	1.2	1.5	3.2	4.7	6.2	7.7	8.1	7.1	5.1	3.4	1.4	0.7	50.3
Patterson	1.3	2.1	4.2	5.4	7.9	8.6	8.2	6.6	5.8	4.0	1.9	1.3	57.3
Turlock	0.9	1.5	3.2	4.7	6.5	7.7	8.2	7.0	5.1	3.4	1.4	0.7	50.2
<b>SUTTER</b>													
Nicolaus	0.9	1.6	3.2	4.9	6.3	7.5	8.0	6.9	5.2	3.4	1.5	0.9	50.2
Yuba City	1.3	2.1	2.8	4.4	5.7	7.2	7.1	6.1	4.7	3.2	1.2	0.9	46.7
<b>TEHAMA</b>													
Corning	1.2	1.8	2.9	4.5	6.1	7.3	8.1	7.2	5.3	3.7	1.7	1.1	50.7
Gerber	1.0	1.8	3.5	5.0	6.6	7.9	8.7	7.4	5.8	4.1	1.8	1.1	54.7
Gerber Dryland	0.9	1.6	3.2	4.7	6.7	8.4	9.0	7.9	6.0	4.2	2.0	1.0	55.5
Red Bluff	1.2	1.8	2.9	4.4	5.9	7.4	8.5	7.3	5.4	3.5	1.7	1.0	51.1
<b>TRINITY</b>													
Hay Fork	0.5	1.1	2.3	3.5	4.9	5.9	7.0	6.0	4.5	2.8	0.9	0.7	40.1
Weaverville	0.6	1.1	2.2	3.3	4.9	5.9	7.3	6.0	4.4	2.7	0.9	0.7	40.0
<b>TULARE</b>													
Alpaugh	0.9	1.7	3.4	4.8	6.6	7.7	8.2	7.3	5.4	3.4	1.4	0.7	51.6
Badger	1.0	1.3	2.7	4.1	6.0	7.3	7.7	7.0	4.8	3.3	1.4	0.7	47.3
Delano	1.1	1.9	4.0	4.9	7.2	7.9	8.1	7.3	5.4	3.2	1.5	1.2	53.6
Dinuba	1.1	1.5	3.2	4.7	6.2	7.7	8.5	7.3	5.3	3.4	1.4	0.7	51.2
Lindcove	0.9	1.6	3.0	4.8	6.5	7.6	8.1	7.2	5.2	3.4	1.6	0.9	50.6
Porterville	1.2	1.8	3.4	4.7	6.6	7.7	8.5	7.3	5.3	3.4	1.4	0.7	52.1
Visalia	0.9	1.7	3.3	5.1	6.8	7.7	7.9	6.9	4.9	3.2	1.5	0.8	50.7
<b>TUOLUMNE</b>													
Groveland	1.1	1.5	2.8	4.1	5.7	7.2	7.9	6.6	5.1	3.3	1.4	0.7	47.5
Sonora	1.1	1.5	2.8	4.1	5.8	7.2	7.9	6.7	5.1	3.2	1.4	0.7	47.6
<b>VENTURA</b>													
Camarillo	2.2	2.5	3.7	4.3	5.0	5.2	5.9	5.4	4.2	3.0	2.5	2.1	46.1
Oxnard	2.2	2.5	3.2	3.7	4.4	4.6	5.4	4.8	4.0	3.3	2.4	2.0	42.3
Piru	2.8	2.8	4.1	5.6	6.0	6.8	7.6	7.8	5.8	5.2	3.7	3.2	61.5
Port Hueneme	2.0	2.3	3.3	4.6	4.9	4.9	4.9	5.0	3.7	3.2	2.5	2.2	43.5
Thousand Oaks	2.2	2.6	3.4	4.5	5.4	5.9	6.7	6.4	5.4	3.9	2.6	2.0	51.0
Ventura	2.2	2.6	3.2	3.8	4.6	4.7	5.5	4.9	4.1	3.4	2.5	2.0	43.5
<b>YOLO</b>													
Bryte	0.9	1.7	3.3	5.0	6.4	7.5	7.9	7.0	5.2	3.5	1.6	1.0	51.0
Davis	1.0	1.9	3.3	5.0	6.4	7.6	8.2	7.1	5.4	4.0	1.8	1.0	52.5
Esparto	1.0	1.7	3.4	5.5	6.9	8.1	8.5	7.5	5.8	4.2	2.0	1.2	55.8
Winters	1.7	1.7	2.9	4.4	5.8	7.1	7.9	6.7	5.3	3.3	1.6	1.0	49.4
Woodland	1.0	1.8	3.2	4.7	6.1	7.7	8.2	7.2	5.4	3.7	1.7	1.0	51.6
Zamora	1.1	1.9	3.5	5.2	6.4	7.4	7.8	7.0	5.5	4.0	1.9	1.2	52.8
<b>YUBA</b>													
Browns Valley	1.0	1.7	3.1	4.7	6.1	7.5	8.5	7.6	5.7	4.1	2.0	1.1	52.9
Brownsville	1.1	1.4	2.6	4.0	5.7	6.8	7.9	6.8	5.3	3.4	1.5	0.9	47.4

\* The values in this table were derived from:

- 1) California Irrigation Management Information System (CIMIS);
- 2) Reference EvapoTranspiration Zones Map, UC Dept. of Land, Air & Water Resources and California Dept of Water Resources 1999; and
- 3) Reference Evapotranspiration for California, University of California, Department of Agriculture and Natural Resources (1987) Bulletin 1922,
- 4) Determining Daily Reference Evapotranspiration, Cooperative Extension UC Division of Agriculture and Natural Resources (1987), Publication Leaflet 21426



**Appendix B – Sample Water Efficient Landscape Worksheet.**

**WATER EFFICIENT LANDSCAPE WORKSHEET**

This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.  
Please complete all sections (A and B) of the worksheet.

**SECTION A. HYDROZONE INFORMATION TABLE**

Please complete the hydrozone table(s) for each hydrozone. Use as many tables as necessary to provide the square footage of landscape area per hydrozone.

Hydrozone*	Zone or Valve	Irrigation Method**	Area (Sq. Ft.)	% of Landscape Area
<b>Total</b>				<b>100%</b>

**\* Hydrozone**  
*HW = High Water Use Plants*  
*MW = Moderate Water Use Plants*  
*LW = Low Water Use Plants*

**\*\*Irrigation Method**  
*MS = Micro-spray*  
*S = Spray*  
*R = Rotor*  
*B= Bubbler*  
*D= Drip*  
*O = Other*

Attachment: State of California's Proposed Water Efficient Landscape Ordinance (1616 : PARTICIPATION IN METROPOLITAN WATER

**SECTION B. WATER BUDGET CALCULATIONS**

**Section B1. Maximum Applied Water Allowance (MAWA)**

The project's Maximum Applied Water Allowance shall be calculated using these equations:

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

where:

- MAWA = Maximum Applied Water Allowance (gallons per year)
- ETo = Reference Evapotranspiration from Appendix A (inches per year)
- 0.5, 0.47 = ET Adjustment Factor (ETAF) for residential and non-residential areas, respectively
- LA = Landscaped Area includes Special Landscape Area (square feet)
- 0.62 = Conversion factor (to gallons per square foot per year)
- SLA = Portion of the landscape area identified as Special Landscape Area (square feet)
- 0.3, 0.5, 0.6 = the additional ET Adjustment Factors for Special Landscape Area in residential and non-residential areas, respectively (1.0-0.5=0.5), (1.0-0.4=0.6) (1.0-0.7=0.3)

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Effective Precipitation (Eppt)**

If considering Effective Precipitation, use 25% of annual precipitation. Use the following equation to calculate Maximum Applied Water Allowance:

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.57 \times \text{LA}) + (0.53 \times \text{SLA})] \text{ for residential areas}$$

$$\text{MAWA} = (\text{ETo} - \text{Eppt}) (0.62) [(0.4 \times \text{LA}) + (0.6 \times \text{SLA})] \text{ for non-residential areas}$$

**Maximum Applied Water Allowance = \_\_\_\_\_ gallons per year**

Show calculations.

**Section B2. Estimated Total Water Use (ETWU)**

The project's Estimated Total Water Use is calculated using the following formula:

$$ETWU = (ET_o)(0.62) \left( \frac{PF \times HA}{IE} + SLA \right)$$

where:

- ETWU = Estimated total water use per year (gallons per year)
- ET<sub>o</sub> = Reference Evapotranspiration (inches per year)
- PF = Plant Factor from WUCOLS (see Definitions)
- HA = Hydrozone Area [high, medium, and low water use areas] (square feet)
- SLA = Special Landscape Area (square feet)
- 0.62 = Conversion Factor (to gallons per square foot)
- IE = Irrigation Efficiency (minimum 0.8574 for residential areas and 0.92 for non-residential areas, averaged site-wide)

**Hydrozone Table for Calculating ETWU**

Please complete the hydrozone table(s). Use as many tables as necessary.

Hydrozone	Plant Water Use Type(s)	Plant Factor (PF)	Area (HA) (square feet)	PF x HA (square feet)
			Sum	
	SLA			

**Estimated Total Water Use = \_\_\_\_\_ gallons**

Show calculations.

**Appendix C – Sample Certificate of Completion.**

**CERTIFICATE OF COMPLETION**

This certificate is filled out by the project applicant upon completion of the landscape project.

**PART 1. PROJECT INFORMATION SHEET**

Date		
Project Name		
Name of Project Applicant	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

**Project Address and Location:**

Street Address		Parcel, tract or lot number, if available.
City		Latitude/Longitude (optional)
State	Zip Code	

**Property Owner or his/her designee:**

Name	Telephone No.	
	Fax No.	
Title	Email Address	
Company	Street Address	
City	State	Zip Code

**Property Owner**

"I/we certify that I/we have received copies of all the documents within the Landscape Documentation Package and the Certificate of Completion and that it is our responsibility to see that the project is maintained in accordance with the Landscape and Irrigation Maintenance Schedule."

\_\_\_\_\_

Property Owner Signature Date

**Please answer the questions below:**

1. Date the Landscape Documentation Package was submitted to the local agency \_\_\_\_\_
2. Date the Landscape Documentation Package was approved by the local agency \_\_\_\_\_
3. Date that a copy of the Water Efficient Landscape Worksheet (including the Water Budget Calculation) was submitted to the local water purveyor \_\_\_\_\_

**PART 2. CERTIFICATION OF INSTALLATION ACCORDING TO THE LANDSCAPE DOCUMENTATION PACKAGE**

"I/we certify that based upon periodic site observations, the work has been substantially completed in accordance with the ordinance and that the landscape planting and irrigation installation conform with the criteria and specifications of the approved Landscape Documentation Package."

Signature*	Date	
Name (print)	Telephone No.	
	Fax No.	
Title	Email Address	
License No. or Certification No.		
Company	Street Address	
City	State	Zip Code

\*Signer of the landscape design plan, signer of the irrigation plan, or a licensed landscape contractor.

**PART 3. IRRIGATION SCHEDULING**

Attach parameters for setting the irrigation schedule on controller per ordinance Section 492.10.

**PART 4. SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE**

Attach schedule of Landscape and Irrigation Maintenance per ordinance Section 492.11.

**PART 5. LANDSCAPE IRRIGATION AUDIT REPORT**

Attach Landscape Irrigation Audit Report per ordinance Section 492.12.

**PART 6. SOIL MANAGEMENT REPORT**

Attach soil analysis report, if not previously submitted with the Landscape Documentation Package per ordinance Section 492.65.

Attach documentation verifying implementation of recommendations from soil analysis report per ordinance Section 492.65.



## Report to City Council

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**TO:** Mayor and City Council Acting in its Capacity as President and Members of the Board of Directors of the Moreno Valley Community Services District (CSD)

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** CERTIFICATION OF SPECIAL ELECTION RESULTS FOR ANNEXATION NO. 2015-35 AND 2015-36 TO COMMUNITY FACILITIES DISTRICT NO. 1 (PARK MAINTENANCE)

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### **RECOMMENDED ACTION**

#### **Recommendation:**

1. That the Community Services District (CSD) of the City of Moreno Valley acting as the legislative body of Community Facilities District No. 1 (Park Maintenance) approve and adopt Resolution No. CSD 2015-30, a Resolution of the Community Services District of the City of Moreno Valley, Certifying the Results of two Elections and Adding Property to Community Facilities District No. 1 (Park Maintenance) for Annexation No. 2015-35 and 2015-36.

### **SUMMARY**

This action certifies the results of the special election to annex 3 parcels into Community Facilities District No. 1 ("CFD No. 1"). This action only affects 2 property owners, and not the general citizens or taxpayers of the City.

The City requires new development to mitigate the cost of certain impacts as a condition of approval of such development. New residential development is required to provide an ongoing funding source for the cost of maintaining parks. CFD No. 1 was created to allow property owners to elect and authorize the City to levy a special tax onto the property tax bills of their development to satisfy the condition. The property owners must elect to annex into CFD No. 1 through a special election process prior to the special tax being applied on the property tax bill. Attachment 3 outlines the steps

necessary to annex properties into CFD No. 1.

Revenue received from CFD No. 1 special taxes support the ongoing maintenance and/or repair of parks, trails, park improvements, and all efforts by Park Rangers in CFD No. 1. It preserves CSD Zone A funds to be used for recreation programs and the maintenance of parks constructed prior to July 8, 2003, the date of CFD No. 1's formation. The fiscal year ("FY") 2015/16 maximum special tax rate is \$158.44 per dwelling unit; however, the special tax applied to the property tax bill is \$124.84 per dwelling unit. The maximum special tax is subject to an annual Consumer Price Index ("CPI") adjustment, which must be approved by the CSD Board each year. The annual increase cannot exceed the terms of the rate and method of apportionment of special taxes ("RMA") without approval of the registered voters within CFD No. 1.

Property owners of two residential developments have returned the CFD No. 1 special election ballot and authorized the City to levy the special tax onto the properties of their developments. The two projects are: 1) Villa Camille, LP (112-unit apartment complex proposed for the southeast corner of Edgemont St. and Eucalyptus Ave.) and 2) M. Williams (custom home proposed north of Highland Blvd., east of Redlands Blvd.) (the "Property Owners").

## **DISCUSSION**

### *History*

The CSD established zones to fund and account for the costs of specific public services provided by the City to properties receiving benefit from those services. Revenue from the CSD Zone A program funds the maintenance of parks, park facilities, and multi-use trails constructed prior to July 3, 2003, as well as recreation program services, which serve the residents of Moreno Valley. CSD Zone A's parcel tax has remained fixed at \$87.50 per parcel, per year (or per dwelling unit for multifamily parcels) since FY 1992/93. Zone A's parcel tax alone is insufficient to fund expenses for the operation and maintenance of both existing and future parks and community services.

On July 8, 2003, the CSD formed CFD No. 1. CFD No. 1 was established to fund the maintenance and/or repair of parks, trails, park improvements, and all efforts by Park Rangers within CFD No. 1, for those park facilities constructed after the date of its formation. New residential development projects are required to provide an ongoing funding source to support CFD No. 1 as a condition of approval for the project. At the time CFD No. 1 was formed, the CSD Board authorized a future annexation area boundary to provide subsequent developments a simplified process to annex into CFD No. 1, if they elected to do so.

Residential housing Tracts 30924, 30998, and 31050 formed the original boundaries of CFD No. 1. Since formation of CFD No. 1, the CSD Board has certified and approved an additional 67 property owner requests to annex their residential developments into CFD No. 1.

Annexation to CFD No. 1

The Property Owners have been conditioned to provide an ongoing funding source to support maintenance services of park facilities in CFD No. 1. Detailed parcel information for the parcels subject to the conditions of approval is shown in the table below.

Property Owner/Project	Assessor's Parcel Numbers	Location	FY 2015/16 CFD No. 1 Maximum Special Tax
Villa Camille, LP 112-unit apt complex PA14-0042	263-120-020 263-120-025	southeast corner of Edgemont St. and Eucalyptus Ave	\$158.44/dwelling unit
M. Williams PA13-0059	473-200-004	north of Highland Blvd., east of Redlands Blvd.	\$158.44/dwelling unit

The Property Owners have two options to satisfy their conditions of approval: 1) annex into CFD No. 1 and authorize the special tax to be levied on the annual Riverside County property tax bill or 2) fund an endowment that will be used to satisfy the annual requirement. The Property Owners have elected to satisfy their conditions of approval by annexing into CFD No. 1 and authorizing the annual special tax to be levied on the Riverside County property tax bill.

The Mello-Roos Community Facilities Act of 1982 states that if there are fewer than 12 registered voters living within the proposed annexation area, an election of the landowners may be held. On August 13, 2015, the Office of the Riverside County Registrar of Voters confirmed there were no registered voters residing at Assessor's Parcel Numbers 263-120-020, 263-120-025, and 473-200-004 (the "Parcels"), allowing for a special election of the landowners to be conducted.

Annexation materials were provided to the Property Owners on August 10, 2015. The annexation materials included a cover letter, Consent and Waiver form, Rate and Method of Apportionment of Special Tax, official ballot, and a ballot envelope to return the ballot.

On September 10, 2015, the Secretary of the CSD confirmed the Consent and Waiver form was properly executed and counted and verified the returned ballots. The Property Owners unanimously approved the annexation into CFD No. 1 and authorized the levy of the special tax onto their annual property tax bills. Certification of the election results is included in the attached resolution (Attachment 1).

**ALTERNATIVES**

1. **Adopt the proposed CSD resolution** to certify the results of the special election to add property into CFD No. 1 as Annexation No. 2015-35 and 2015-36. *Certification of the election results allows the Parcels to be annexed into CFD No.*



*1 and authorizes the City to levy the special tax on the annual property tax bills for the Parcels.*

**2. Do not adopt the proposed CSD resolution** to certify the results of the special election to add property into CFD No. 1 as Annexation No. 2015-35 and 2015-36. *If the proposed Resolution is not adopted, the CSD is unable to annex the Parcels into CFD No. 1 or levy the special tax on the annual property tax bills at the Property Owner's request. This may delay the developer's ability to satisfy its conditions of approval and may delay the construction of the two projects.*

**3. Do not adopt the proposed CSD resolution to certify the results of the special election to add property to CFD No. 1 but rather continue the item to a future CSD Board meeting** (regular City Council meeting). *This may delay the developer's ability to satisfy its conditions of approval and may delay the construction of the two projects.*

### **FISCAL IMPACT**

The FY 2015/16 maximum special tax rate is \$158.44 per dwelling unit; however, the special tax applied to the property tax bill is \$124.84 per dwelling unit. The annual special tax is levied on the Riverside County property tax bills. As outlined in the RMA for CFD No. 1, the maximum special tax is subject to an annual inflation adjustment by the percentage increase for the prior fiscal year in the CPI or by two percent (2%), whichever is greater. The CSD Board must authorize any proposed CPI increase each year, prior to the special tax being levied on the property tax bills. The annual increase cannot exceed the terms outlined in the RMA without approval of the registered voters within CFD No. 1.

Villa Camille, LP plans to construct a 112-unit apartment complex and M. Williams plans to construct a custom home. Based on the FY 2015/16 applied special tax rate, both projects would contribute \$14,106.92 in additional revenue to be used for the benefit of CFD No. 1. The use of CFD No. 1 special taxes is restricted to the maintenance and operation of CFD No. 1 park facilities and services and such taxes are only collected on properties where property owners have previously approved the special tax to be levied on their annual property tax bill.

### **NOTIFICATION**

On August 10, 2015, documents to annex into CFD No. 1 were mailed to the property owners.

### **PREPARATION OF STAFF REPORT**

Prepared by:  
Jennifer Terry,  
Senior Management Analyst

Department Head Approval:  
Ahmad Ansari, P.E.,  
Public Works Director/City Engineer

Concurred by:  
Candace E. Cassel,  
Special Districts Division Manager

Concurred by:  
Betsy Adams,  
Parks & Community Services Director

**CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Public Facilities and Capital Projects.** Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

**ATTACHMENTS**

- 1. Resolution confirming Annexation No. 2015-35 and 2015-36
- 2. Annexation Boundary Maps
- 3. Flowchart

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/23/15 5:06 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 11:36 AM
City Manager Approval	<u>✓ Approved</u>	10/07/15 1:42 PM

## RESOLUTION NO. CSD 2015-30

A RESOLUTION OF THE MORENO VALLEY COMMUNITY SERVICES DISTRICT OF THE CITY OF MORENO VALLEY, CALIFORNIA, CERTIFYING THE RESULTS OF TWO ELECTIONS AND ADDING PROPERTY TO COMMUNITY FACILITIES DISTRICT NO. 1 (PARK MAINTENANCE) FOR ANNEXATION NO. 2015-35 AND 2015-36

WHEREAS, the Moreno Valley Community Services District of the City of Moreno Valley, California ("CSD"), previously formed a Community Facilities District pursuant to the provisions of the "Mello-Roos Community Facilities Act of 1982", being Chapter 2.5, Part 1, Division 2, Title 5 of the Government Code of the State of California ("Act"). The Community Facilities District is designated as Community Facilities District No. 1 ("District"); and

WHEREAS, the CSD has established a procedure to allow and provide for future annexations to the District and the territory proposed to be so annexed in the future was designated as Community Facilities District No. 1, Future Annexation Area; and

WHEREAS, at this time the unanimous consent to the annexation of certain territory to the District has been received from the property owners of such territory, and such territory has been designated as Annexation No. 2015-35 and 2015-36 ("Annexed Areas"); and

WHEREAS, less than twelve (12) registered voters have resided within the territory of the annexed Areas for each of the ninety (90) days preceding August 13, 2015, therefore, pursuant to the Act the qualified electors of the Annexed Areas shall be the "landowners" of such Annexed Areas as such term is defined in Government Code Section 53317(f) and each such landowner who is the owner of record as of August 31, 2015, or the authorized representative thereof, shall have one vote for each acre or portion of an acre of land that she or he owns within such Annexed Area; and

WHEREAS, the time limit specified by the Act for conducting an election to submit the levy of the special taxes on the property within the Annexed Areas to the qualified electors of the Annexed Areas and the requirements for impartial analysis and ballot arguments have been waived with the unanimous consent of the qualified electors of the Annexed Areas; and

WHEREAS, the Secretary of the CSD has caused a ballot to be distributed to the qualified elector of the Annexed Areas, has received, verified, counted such ballots, and made a report to this Board of Directors regarding the results, copies of which are attached as Exhibit A hereto and incorporated herein by this reference; and

1  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015

WHEREAS, at this time the measure has been voted upon and such measure did receive unanimous vote of the qualified elector, and this Board of Directors desires to declare the results of the election; and

WHEREAS, maps showing the Annexed Areas and designated as Annexation Map No. 2015-35 and Annexation Map No. 2015-36 ("Annexation Maps"), copies of which are attached as Exhibit B hereto and incorporated herein by this reference, have been submitted to this legislative body.

NOW, THEREFORE, THE MORENO VALLEY COMMUNITY SERVICES DISTRICT OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. Recitals. The above recitals are all true and correct.

SECTION 2. Findings. This legislative body does hereby further determine as follows:

A. Less than twelve (12) registered voters have resided within the territory of Annexed Areas for each of the ninety (90) days preceding August 13, 2015, therefore, pursuant to the Act the qualified electors of the Annexed Areas are to be the "landowner" of such Annexed Areas as such term is defined in Government Code Section 53317(f).

B. Unanimous consent to shorten the timeframe to conduct the annexation to the District was provided and such consent shall be kept on file in the Office of the Secretary of the CSD.

C. The qualified electors of the Annexed Areas have unanimously voted in favor of the levy of special taxes within the Annexed Areas upon its annexation to the District.

SECTION 3. Annexed Areas. The boundaries and parcels of territory within the Annexed Areas and on which special taxes will be levied in order to pay for the costs and expenses of authorized public services are shown on the Annexation Maps as submitted to and hereby approved by this legislative body.

SECTION 4. Declaration of Annexation. This legislative body does hereby determine and declare that the Annexed Areas are now added to and become a part of the District and District is hereby empowered to levy the authorized special tax within the Annexed Areas.

SECTION 5. Notice. Immediately upon adoption of this resolution, notice shall be given as follows:

A. A copy of the Annexation Maps as approved shall be filed in the Office of the County Recorder no later than fifteen (15) days after the date of adoption of this

2  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015

Resolution.

B. An amendment to the Notice of Special Tax Lien shall be recorded in the Office of the County Recorder no later than fifteen (15) days after the date of adoption of this Resolution.

SECTION 6. Effective Date. This Resolution shall become effective upon its adoption.

APPROVED AND ADOPTED this 13<sup>th</sup> day of October, 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley,  
Acting in the capacity of President of the  
Moreno Valley Community Services District

ATTEST:

\_\_\_\_\_  
City Clerk, acting in the capacity of  
Secretary of the Moreno Valley  
Community Services District

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney, acting in the capacity  
of General Counsel of the Moreno  
Valley Community Services District

3  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015

Attachment: Resolution confirming Annexation No. 2015-35 and 2015-36 [Revision 3] (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS

**RESOLUTION JURAT**

STATE OF CALIFORNIA)  
COUNTY OF RIVERSIDE) ss.  
CITY OF MORENO VALLEY)

I, Jane Halstead, Secretary of the Moreno Valley Community Services District, Moreno Valley, California do hereby certify that Resolution No. CSD 2015-30 was duly and regularly adopted by the Board of Directors of the Moreno Valley Community Services District at a regular meeting held on the 13<sup>th</sup> day of October, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Boardmembers, Vice-President and President)

\_\_\_\_\_  
SECRETARY

(SEAL)

4  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015

Attachment: Resolution confirming Annexation No. 2015-35 and 2015-36 [Revision 3] (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS

**EXHIBIT A**

**Certificate of Election Official and Statement of Votes Cast for  
Community Facilities District Annexation No. 2015-35**

**CERTIFICATE OF ELECTION OFFICIAL  
AND STATEMENT OF VOTES CAST**

STATE OF CALIFORNIA )  
COUNTY OF RIVERSIDE ) ss.  
CITY OF MORENO VALLEY )

The undersigned, Election Official of the Moreno Valley Community Services District of the City of Moreno Valley, County of Riverside, State of California, Does Hereby Certify that pursuant to the provisions of Section 53326 of the Government Code and Division 12, commencing with Section 17000 of the Elections Code of the State of California, on September 10, 2015, I did count and verify the votes cast for

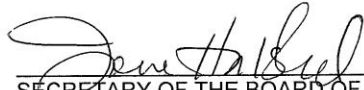
**ANNEXATION NO. 2015-35 TO COMMUNITY FACILITIES DISTRICT NO. 1 OF THE  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
OF THE CITY OF MORENO VALLEY**

**SPECIAL ELECTION**

I FURTHER CERTIFY that this Statement of Votes Cast shows the whole number of votes cast in the area proposed to be annexed to Community Facilities District No. 1 (Park Maintenance) for or against the Measure are full, true and correct.

VOTES CAST ON PROPOSITION 1:                     YES        6     
   NO        0   

WITNESS my hand this 10<sup>th</sup> day of September, 2015.

  
\_\_\_\_\_  
SECRETARY OF THE BOARD OF DIRECTORS  
ELECTION OFFICIAL  
MORENO VALLEY COMMUNITY SERVICES DISTRICT OF  
THE CITY OF MORENO VALLEY  
STATE OF CALIFORNIA

<sup>5</sup>  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015

**Attachment: Resolution confirming Annexation No. 2015-35 and 2015-36 [Revision 3] (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS**

Certificate of Election Official and Statement of Votes Cast for  
Community Facilities District Annexation No. 2015-36

CERTIFICATE OF ELECTION OFFICIAL  
AND STATEMENT OF VOTES CAST

STATE OF CALIFORNIA )  
COUNTY OF RIVERSIDE ) ss.  
CITY OF MORENO VALLEY )

The undersigned, Election Official of the Moreno Valley Community Services District of the City of Moreno Valley, County of Riverside, State of California, Does Hereby Certify that pursuant to the provisions of Section 53326 of the Government Code and Division 12, commencing with Section 17000 of the Elections Code of the State of California, on September 10, 2015, I did count and verify the votes cast for

ANNEXATION NO. 2015-36 TO COMMUNITY FACILITIES DISTRICT NO. 1 OF THE  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
OF THE CITY OF MORENO VALLEY

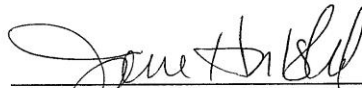
SPECIAL ELECTION

I FURTHER CERTIFY that this Statement of Votes Cast shows the whole number of votes cast in the area proposed to be annexed to Community Facilities District No. 1 (Park Maintenance) for or against the Measure are full, true and correct.

VOTES CAST ON PROPOSITION 1:

YES 8  
NO 0

WITNESS my hand this 10<sup>th</sup> day of September, 2015.



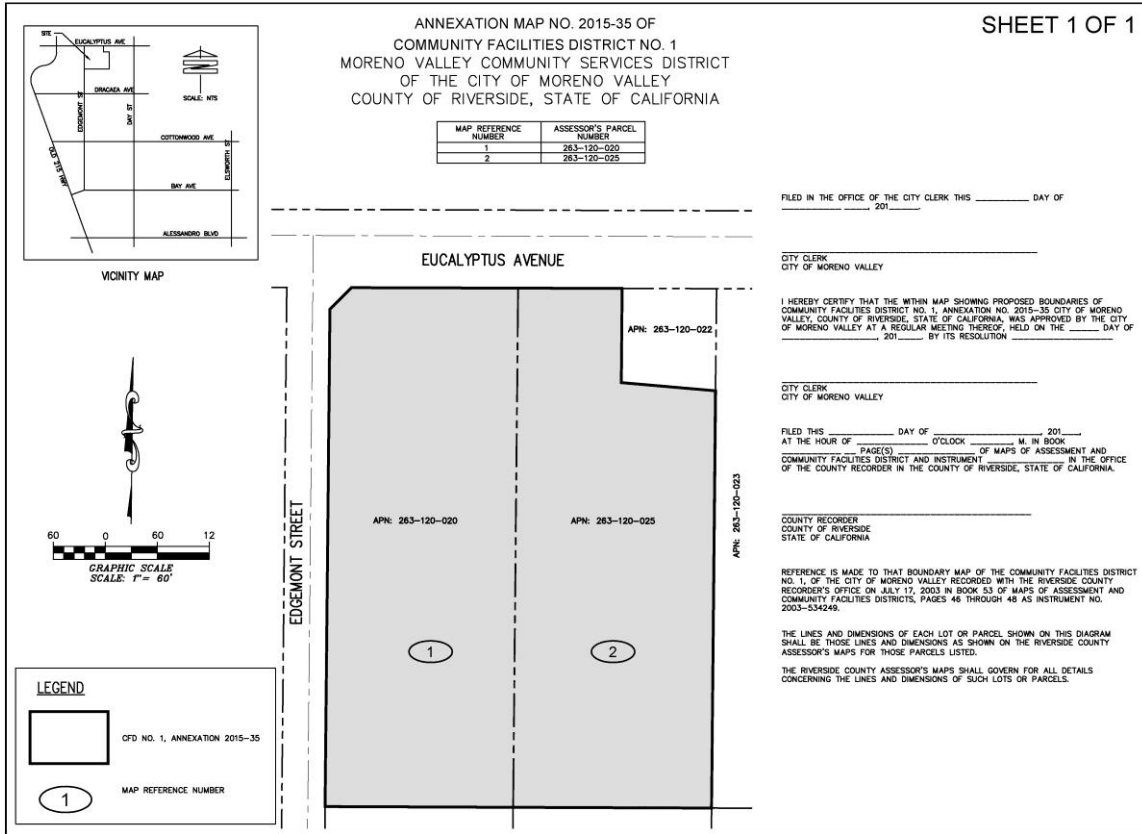
SECRETARY OF THE BOARD OF DIRECTORS  
ELECTION OFFICIAL  
MORENO VALLEY COMMUNITY SERVICES DISTRICT OF  
THE CITY OF MORENO VALLEY  
STATE OF CALIFORNIA

6  
Resolution No. CSD 2015-30  
Date Adopted: October 13, 2015



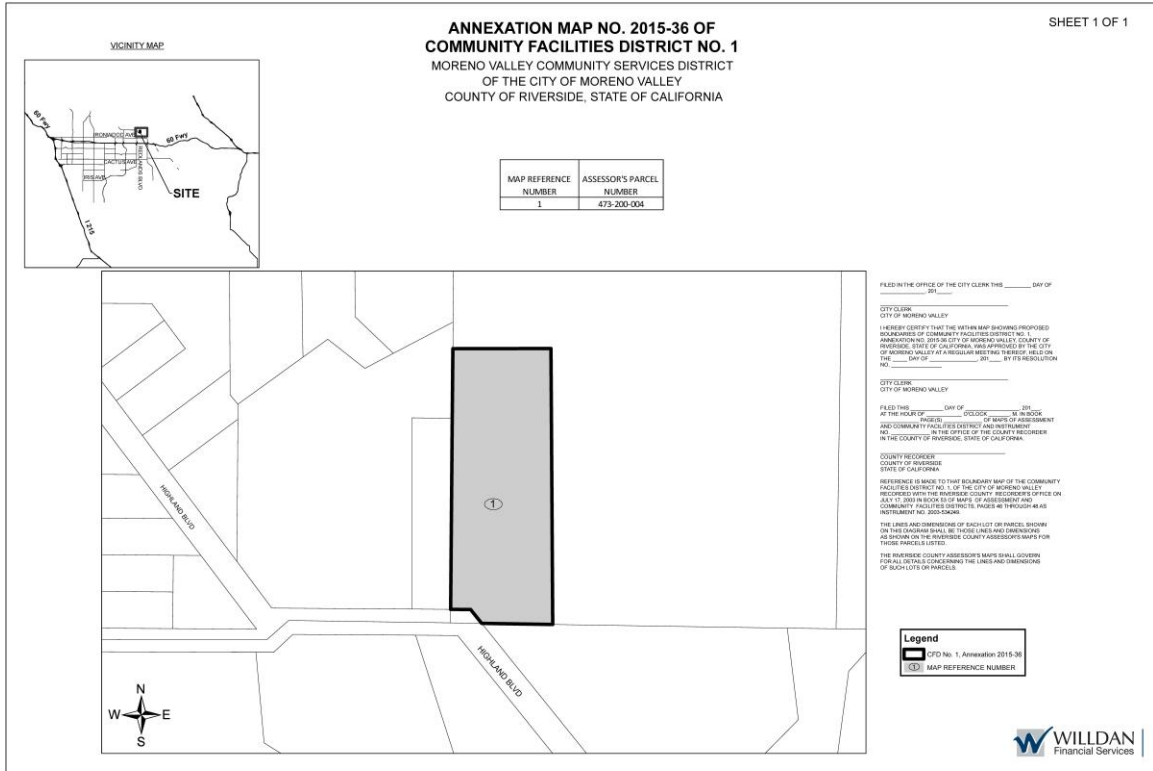
# EXHIBIT B

## Boundary Map for Community Facilities District Annexation No. 2015-35



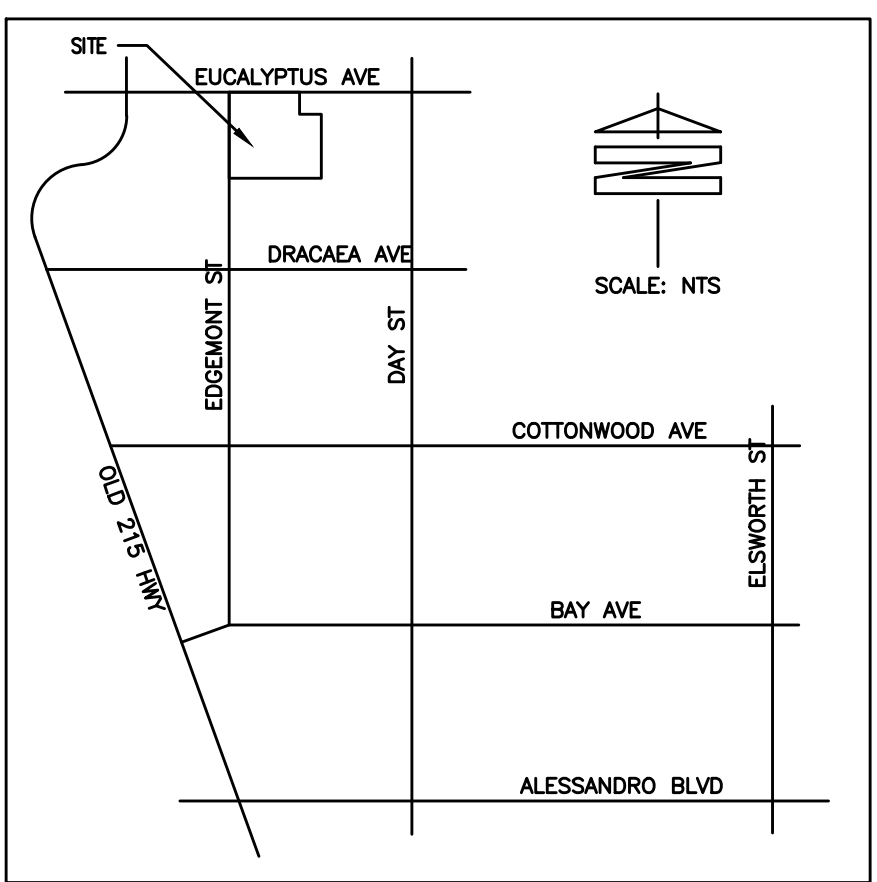
Attachment: Resolution confirming Annexation No. 2015-35 and 2015-36 [Revision 3] (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS

# Boundary Map for Community Facilities District Annexation No. 2015-36



Attachment: Resolution confirming Annexation No. 2015-35 and 2015-36 [Revision 3] (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS

ANNEXATION MAP NO. 2015-35 OF  
COMMUNITY FACILITIES DISTRICT NO. 1  
MORENO VALLEY COMMUNITY SERVICES DISTRICT  
OF THE CITY OF MORENO VALLEY  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA



VICINITY MAP

MAP REFERENCE NUMBER	ASSESSOR'S PARCEL NUMBER
1	263-120-020
2	263-120-025

FILED IN THE OFFICE OF THE CITY CLERK THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_\_.

CITY CLERK  
CITY OF MORENO VALLEY

I HEREBY CERTIFY THAT THE WITHIN MAP SHOWING PROPOSED BOUNDARIES OF COMMUNITY FACILITIES DISTRICT NO. 1, ANNEXATION NO. 2015-35 CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, WAS APPROVED BY THE CITY OF MORENO VALLEY AT A REGULAR MEETING THEREOF, HELD ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_\_. BY ITS RESOLUTION \_\_\_\_\_.

CITY CLERK  
CITY OF MORENO VALLEY

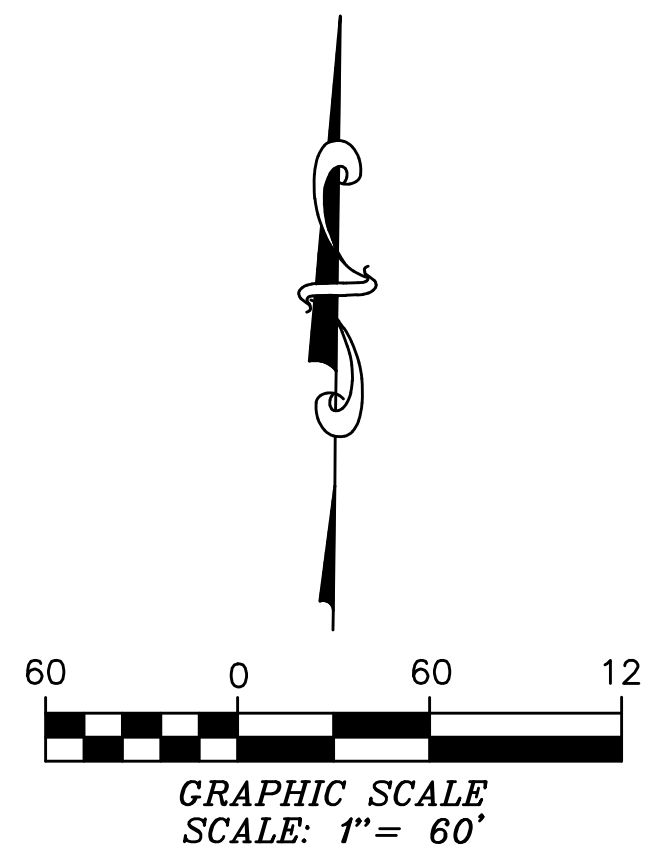
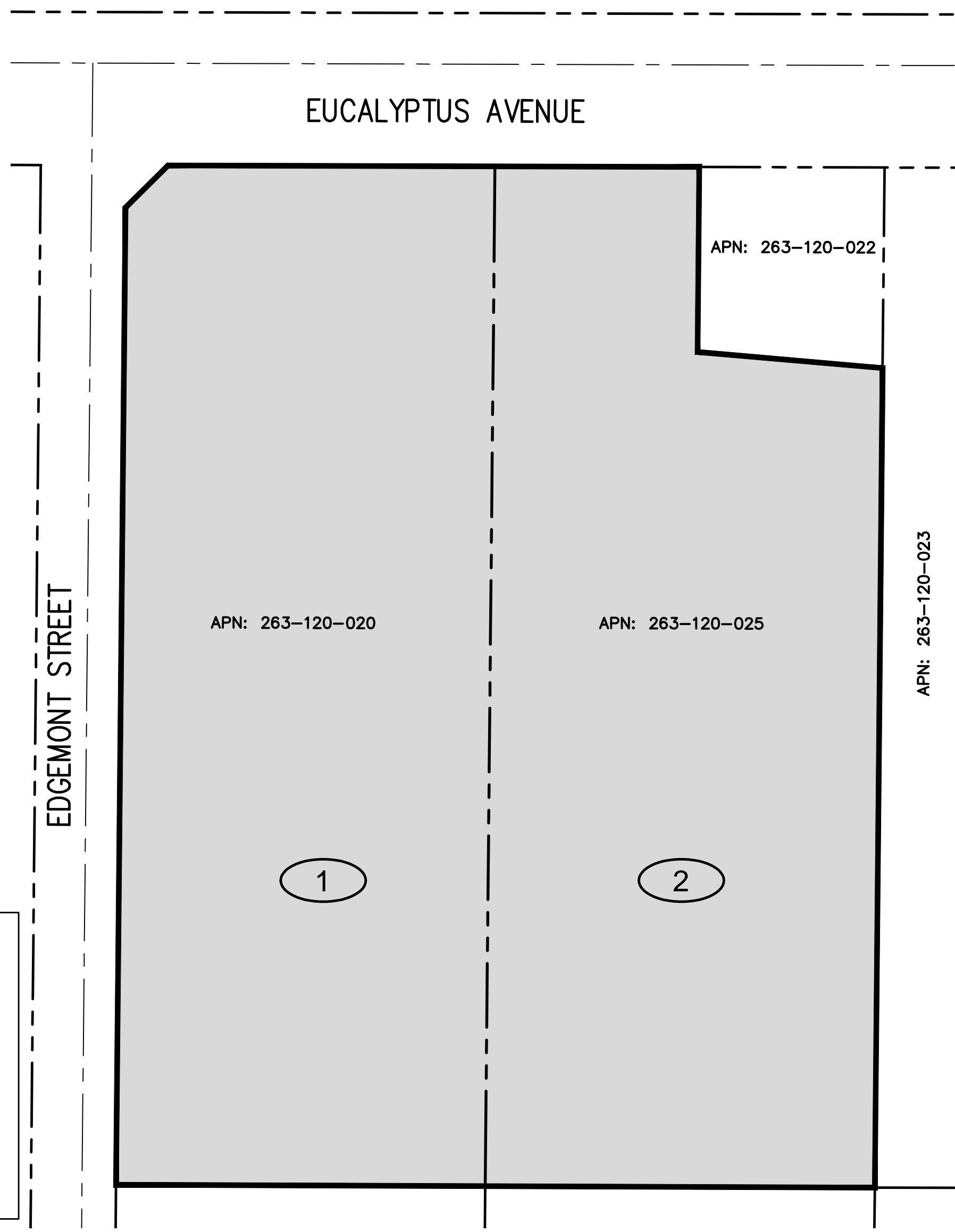
FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_\_,  
AT THE HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_\_, M. IN BOOK \_\_\_\_\_  
PAGE(S) \_\_\_\_\_ OF MAPS OF ASSESSMENT AND  
COMMUNITY FACILITIES DISTRICT AND INSTRUMENT \_\_\_\_\_ IN THE OFFICE  
OF THE COUNTY RECORDER IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

COUNTY RECORDER  
COUNTY OF RIVERSIDE  
STATE OF CALIFORNIA

REFERENCE IS MADE TO THAT BOUNDARY MAP OF THE COMMUNITY FACILITIES DISTRICT NO. 1, OF THE CITY OF MORENO VALLEY RECORDED WITH THE RIVERSIDE COUNTY RECORDER'S OFFICE ON JULY 17, 2003 IN BOOK 53 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, PAGES 46 THROUGH 48 AS INSTRUMENT NO. 2003-534249.

THE LINES AND DIMENSIONS OF EACH LOT OR PARCEL SHOWN ON THIS DIAGRAM SHALL BE THOSE LINES AND DIMENSIONS AS SHOWN ON THE RIVERSIDE COUNTY ASSESSOR'S MAPS FOR THOSE PARCELS LISTED.

THE RIVERSIDE COUNTY ASSESSOR'S MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH LOTS OR PARCELS.



GRAPHIC SCALE  
SCALE: 1" = 60'

**LEGEND**

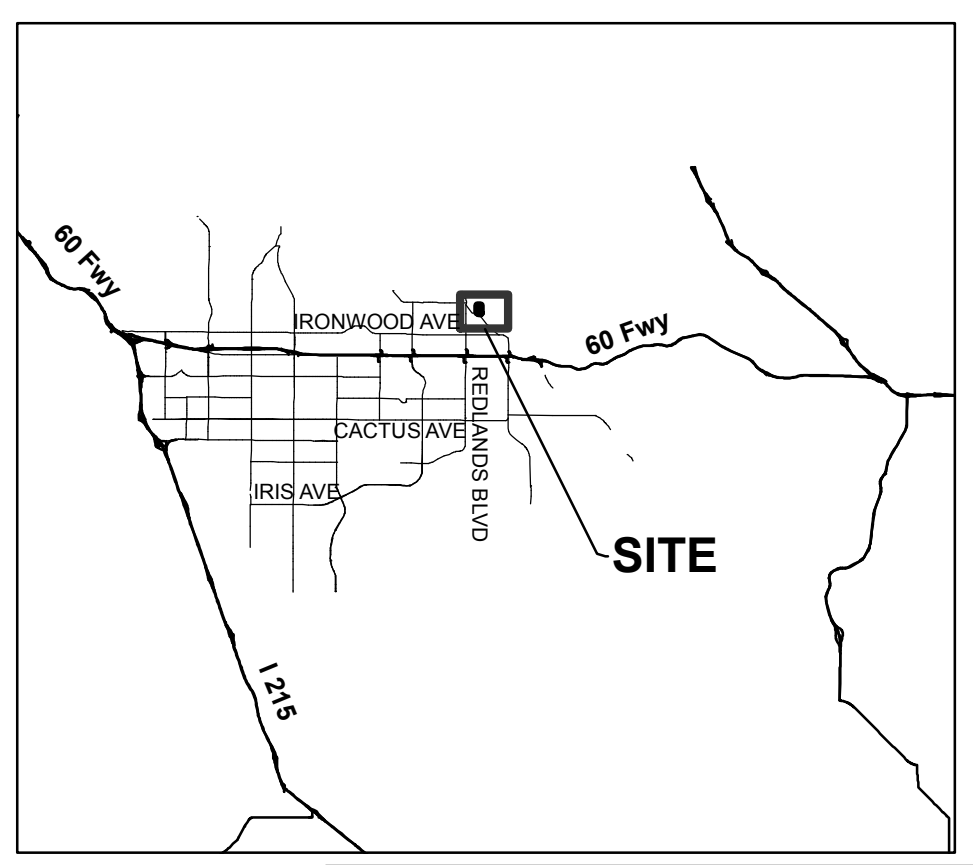
CFD NO. 1, ANNEXATION 2015-35

MAP REFERENCE NUMBER

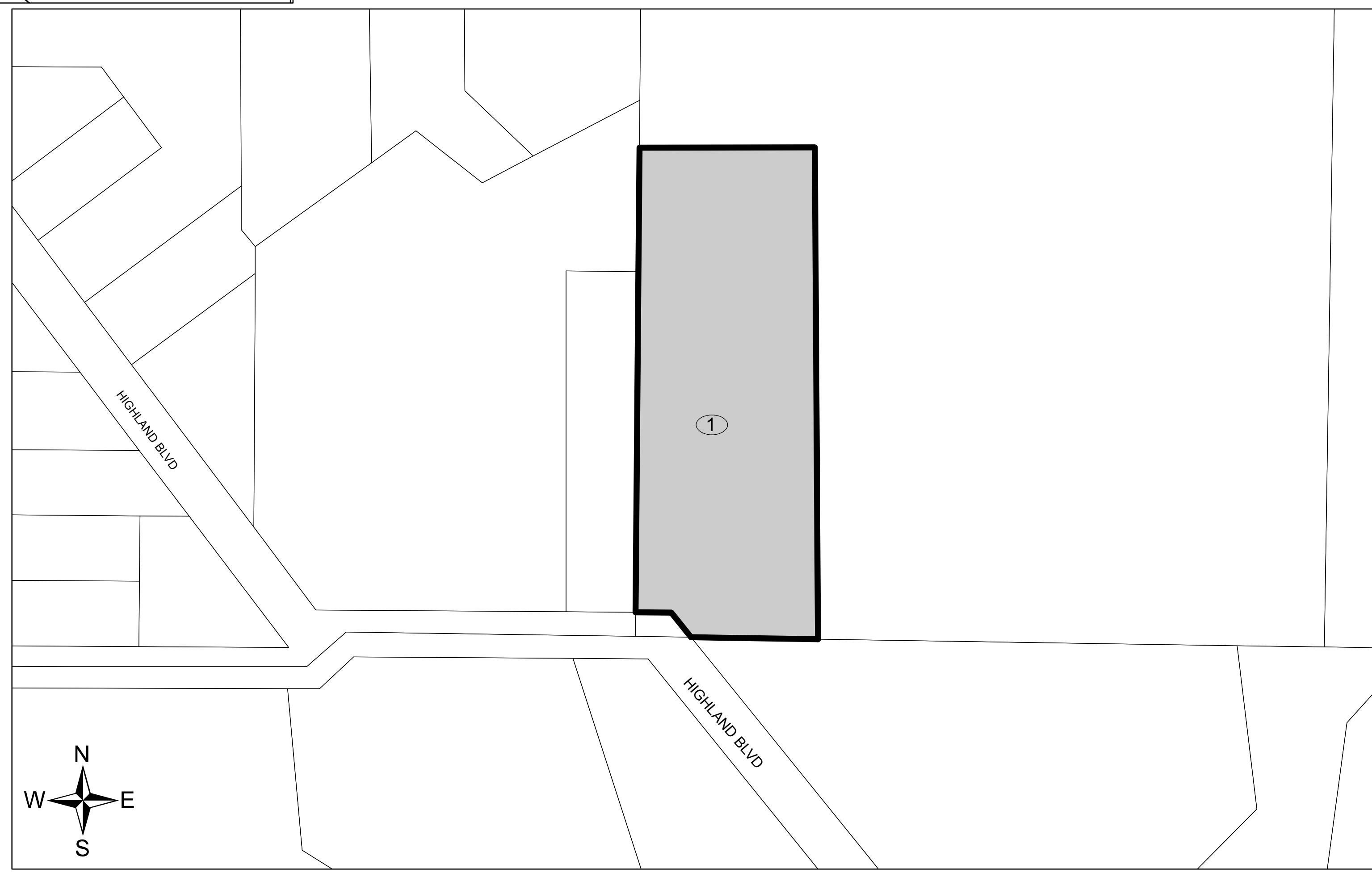
Attachment: Annexation Boundary Maps (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS FOR ANNEXATION NO. 2015-35 AND 2015-36 TO COMMUNITY FACIL)

**ANNEXATION MAP NO. 2015-36 OF  
COMMUNITY FACILITIES DISTRICT NO. 1**  
 MORENO VALLEY COMMUNITY SERVICES DISTRICT  
 OF THE CITY OF MORENO VALLEY  
 COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

VICINITY MAP



MAP REFERENCE NUMBER	ASSESSOR'S PARCEL NUMBER
1	473-200-004



FILED IN THE OFFICE OF THE CITY CLERK THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_.

CITY CLERK  
CITY OF MORENO VALLEY

I HEREBY CERTIFY THAT THE WITHIN MAP SHOWING PROPOSED BOUNDARIES OF COMMUNITY FACILITIES DISTRICT NO. 1, ANNEXATION NO. 2015-36 CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, WAS APPROVED BY THE CITY OF MORENO VALLEY AT A REGULAR MEETING THEREOF, HELD ON THE \_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_, BY ITS RESOLUTION NO. \_\_\_\_\_.

CITY CLERK  
CITY OF MORENO VALLEY

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 201\_\_\_\_, AT THE HOUR OF \_\_\_\_\_ O'CLOCK \_\_\_\_\_ M. IN BOOK \_\_\_\_\_ PAGE(S) \_\_\_\_\_ OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICT AND INSTRUMENT NO. \_\_\_\_\_ IN THE OFFICE OF THE COUNTY RECORDER IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA.

COUNTY RECORDER  
COUNTY OF RIVERSIDE  
STATE OF CALIFORNIA

REFERENCE IS MADE TO THAT BOUNDARY MAP OF THE COMMUNITY FACILITIES DISTRICT NO. 1, OF THE CITY OF MORENO VALLEY RECORDED WITH THE RIVERSIDE COUNTY RECORDER'S OFFICE ON JULY 17, 2003 IN BOOK 53 OF MAPS OF ASSESSMENT AND COMMUNITY FACILITIES DISTRICTS, PAGES 46 THROUGH 48 AS INSTRUMENT NO. 2003-534249.

THE LINES AND DIMENSIONS OF EACH LOT OR PARCEL SHOWN ON THIS DIAGRAM SHALL BE THOSE LINES AND DIMENSIONS AS SHOWN ON THE RIVERSIDE COUNTY ASSESSOR'S MAPS FOR THOSE PARCELS LISTED.

THE RIVERSIDE COUNTY ASSESSOR'S MAPS SHALL GOVERN FOR ALL DETAILS CONCERNING THE LINES AND DIMENSIONS OF SUCH LOTS OR PARCELS.

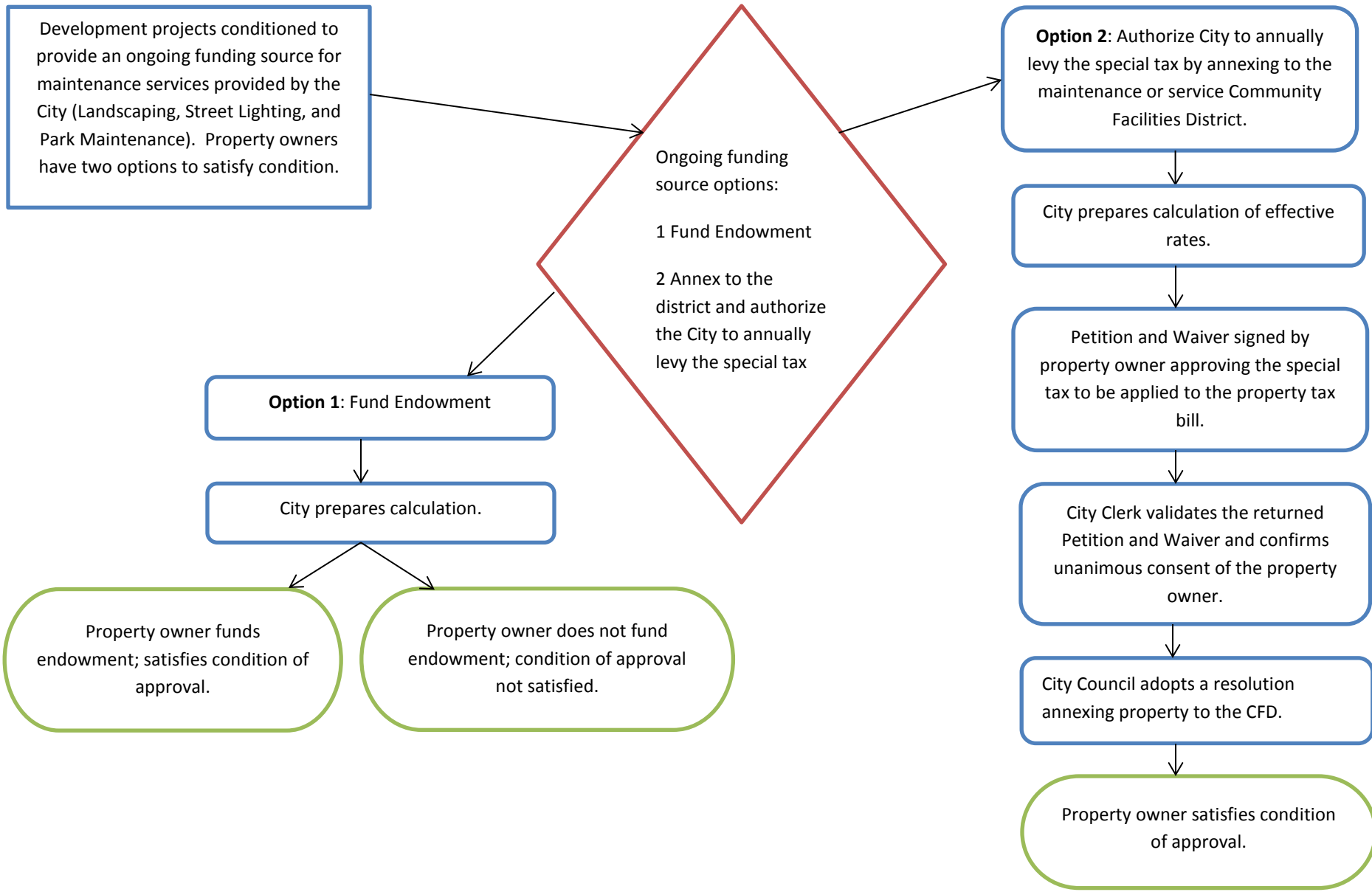
**Legend**

- CFD No. 1, Annexation 2015-36
- MAP REFERENCE NUMBER



Attachment: Annexation Boundary Maps (1563 : CERTIFICATION OF SPECIAL ELECTION RESULTS FOR ANNEXATION NO. 2015-35 AND 2015-36 TO COMMUNITY FACIL)

## Process Flow for Property Owners/Developers to Satisfy Funding Requirement for Existing Maintenance or Service Community Facilities Districts



This process flow is simplified for illustration purposes. Contact the Special Districts Division at 951.413.3480 for the detailed process. The developer has the option to fund the maintenance through a home owners association for Community Facilities District No. 2014-01 (Maintenance Services).



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Michelle Dawson, City Manager  
Richard Teichert, Chief Financial Officer

**AGENDA DATE:** October 13, 2015

**TITLE:** PROPOSED BUDGET ADJUSTMENTS - CROSSING  
GUARD PROGRAM

---

### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Approve the amendments to the Position Control Roster as detailed in Table 1 of this staff report.
2. Approve the budget adjustments to the Gas Tax Fund budget as set forth in Table 2 in the Fiscal Impact section of this report.

### **SUMMARY**

This report presents the City Council with the actions required to defund the Crossing Guard Program through phased reductions consistent with direction provided to staff on September 22, 2015.

### **DISCUSSION**

On September 22, 2015, the City Council received an update from staff regarding discussions held to date with the Moreno Valley Unified School District (MVUSD) on the City's desire to transfer the cost of the existing crossing guard program to the District.

Following receipt of staff's update, the Council considered a phased transition plan presented by Council Member Giba. Following this discussion, the Council directed staff to notify the District of the City's intent to defund the program over a three-month period. The City's September 24, 2015 notification letter to MVUSD is attached to this report.

This report presents the Council with actions required to implement the phased approach as directed on September 22<sup>nd</sup>:

- Effective October 31, 2015 Phase 1 eliminates crossing guard services for the 8 locations that no longer meet “warrants.” (Warrants are established based upon consideration of elements such as road conditions, sight distance, presence/absence of traffic control devices, traffic/pedestrian volumes, school route plans and adjacent land uses, consistent with guidelines prescribed in the California Manual on Uniform Traffic Control Devices.) This reduces budget appropriations by \$40,000 and reduces 11 crossing guards and 3 alternate crossing guards from Position Control.
- Effective November 30, 2015 Phase 2 eliminates crossing guard services for 8 locations at controlled intersections (with stop signs or traffic lights), reduces budget appropriations by an additional \$100,000 and reduces an additional 11 crossing guards, 3 alternate crossing guards, and one part-time assistant supervisor from Position Control.
- Effective December 31, 2015 Phase 3 eliminates crossing guard services from the remaining 11 warranted locations at uncontrolled intersections, eliminates the remaining program budget appropriation (to achieve a total ongoing annual reduction of \$545,387) along with the reduction of the remaining 13 crossing guards, 4 alternate crossing guards, and one full-time supervisor from Position Control.

To carry out the Council’s direction, affected positions must be removed from the authorized Position Control document and appropriations must be reduced to remove the positions from the FY 2015/16 budget. Staff has also included, for Council consideration, the corresponding transfer of Gas Tax funds to Street Maintenance programs, consistent with authorized uses for these funds. This transfer totals \$550,000 annually, which will help to offset the current-year loss of \$1.5 million in annual gas tax revenues (which represents a 25% reduction from the prior year).

#### Position Control Actions

The Position Control Roster is the document through which the City Council establishes authorized positions for the City. The Crossing Guard program is currently staffed with 47 positions; reductions to those positions, which correspond with the Council’s direction, are presented in the Table below.

Table 1  
*Crossing Guard Positions*

Positions	Current Position Count	Oct. 31, 2015 Adjustments	Nov. 30, 2015 Adjustments	Dec. 31, 2015 Adjustments	Position Count as of Jan. 1, 2016
Crossing Guard Supervisor	1			(1)	-
Asst. Crossing Guard Supervisor	1		(1)		-
Crossing Guards	35	(11)	(11)	(13)	-
Alternate Crossing Guards	10	(3)	(3)	(4)	-
Total	47	(14)	(15)	(18)	-

The Council's approval of these actions will reallocate Gasoline Tax revenue (which is the source of the funding for the program) to fund other City programs and/or projects related to roadway improvements and/or other qualified projects. Gas tax revenues may be used for services which include capital projects, street maintenance and operations, street sweeping, street signing and striping, traffic signal maintenance and graffiti removal.

Staff has met with Crossing Guard program staff to advise them of the Council's direction from September 22<sup>nd</sup> and to discuss scheduled layoffs that would take effect upon the Council's approval of the requisite budget adjustments. Human Resources is also providing affected staff members with information regarding job placement assistance available through the Employment Resource Center and partnership with Workforce Development programs.

City staff is prepared to assist MVUSD in exploring alternatives such as the following:

- Transferring Crossing Guards, who are currently Temporary City Employees, to direct employment with the District;
- Transferring funds from the District to the City to fully fund Crossing Guard services in a manner that ensures no cost to the City;
- Seeking community members to serve the School District as volunteer Crossing Guards;
- Seeking state and/or federal grants to fund Crossing Guard services; and
- Jointly exploring grant funds to augment the City's longstanding investment of approximately \$1 million annually in Safe Routes to School grants which assist local students throughout Moreno Valley.

### **ALTERNATIVES**

1. Approve amendments to the Position Control Roster and Budget adjustments as presented in this report.
2. Provide further direction to staff.



## **FISCAL IMPACT**

The phased approach to reduce the crossing guard program will direct \$271,000 to street maintenance in FY 2015/16. This amount will increase to 545,387 in FY 2016/17.

Table 2  
*Appropriations/Budget Adjustments*

Description	Fund	GL Account No.	Type (Rev/Exp)	FY 15/16 Budget	Proposed Adjustments	FY 15/16 Amended Budget
Crossing Guard Program	Gas Tax	2000-70-76-45130	Exp.	\$541,979	(\$271,000)	\$270,979
Street Maintenance	Gas Tax	2000-70-78-45311	Exp.	2,334,919	271,000	2,605,919

Description	Fund	GL Account No.	Type (Rev/Exp)	FY 16/17 Budget	Proposed Adjustments	FY 16/17 Amended Budget
Crossing Guard Program	Gas Tax	2000-70-76-45130	Exp.	\$545,387	(\$545,387)	\$0
Street Maintenance	Gas Tax	2000-70-78-45311	Exp.	2,386,664	545,387	2,932,051

## **PREPARATION OF STAFF REPORT**

Approved By:  
Michelle Dawson  
City Manager

Concurred by:  
Richard Teichert, Chief Financial Officer/City Treasurer  
Ahmad Ansari, Public Works Director/City Engineer  
Chris Paxton, Administrative Services Director

## **CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

## **CITY COUNCIL GOALS**

None

## **ATTACHMENTS**

1. Letter to Dr White with attachments

## **APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/06/15 12:40 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 12:04 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 2:44 PM



**City Manager's Office**  
 14177 Frederick Street  
 P. O. Box 88005  
 Moreno Valley CA 92552-0805  
 Telephone: 951.413.3020

September 24, 2015

Judy D. White, Ed.D.  
 Superintendent of Schools  
 Moreno Valley Unified School District  
 25634 Alessandro Boulevard  
 Moreno Valley, California 92553

Dear Dr. White,

I'm writing to inform you of the direction provided by the Moreno Valley City Council during its meeting on September 22 regarding the City-funded School Crossing Guard Program.

As discussed in the June 15 Joint Meeting between the City Council and MVUSD Trustees, the City is no longer in a fiscal position where it can continue to support the annual \$550,000 cost of funding the School Crossing Guard Program. The City has experienced sharp declines in Gasoline Tax revenues, which have necessitated cost reductions in many areas, and which is the source of funding for the School Crossing Guard Program. Accordingly, the Council directed that my office provide sufficient notice to the District that the program will be de-funded over a three month period, which provides the District sufficient time for the District to take over the program, find an alternative source of funding or establish a program similar to the one operated by the Val Verde Unified School District.

To provide schools with time to notify parents and implement this change, the City Council directed that the program's transition to MVUSD take place in a phased manner. The program will be defunded over a three month period which will result in no crossing guards being provided by the City as follows:

- October 31, 2015 – There will be no City-funded crossing guards provided at the following eight (8) "unwarranted" intersections as listed on the attached Transition Plan document;

- November 30, 2015 – There will be no City-funded crossing guards provided at the following eight (8) intersections as listed on the attached Transition Plan document;
- December 31, 2015 – There will be no City-funded crossing guards provided at the following eleven (11) intersections as listed on the attached Transition Plan document.

The Council will take formal action to reallocate Gasoline Tax revenue (which is the source of the funding for the program) to fund other City programs and/or projects related to roadway improvements and/or other qualified projects which will result in making the City's street system safer for all - - including the children traveling to and from our local schools. The Council will consider budget adjustments to implement its decision during the City Council meeting at 6 p.m. on October 13.

Notwithstanding the above, my office is willing to assist the District in exploring alternatives such as the following:

- Transferring Crossing Guards, who are currently Temporary City Employees, to direct employment with the Schools;
- Transferring funds from the Schools to the City to fully fund Crossing Guard services, at no cost to the City;
- Seeking community members to serve the School District as volunteer Crossing Guards; and
- Seeking state and/or federal grants to fund Crossing Guard services.

As you know, the Val Verde Unified School District recently assumed funding and management responsibility for its Crossing Guard program. In doing so, Val Verde was fully successful in determining the level and type of service provided at VVUSD's school sites in our community.

As you recall from our July 24<sup>th</sup> staff level meeting, we also agreed to jointly explore grant funds to augment the City's longstanding investment of approximately \$1 million annually in Safe Routes to School grants which assist local students throughout Moreno Valley.

Please feel free to share the enclosed News Release to assist the District's schools in notifying parents of this matter. The City will make full use of its media and communication program to share this information with the community.

Sincerely,



**MICHELLE DAWSON**

City Manager

Enclosures:

- Schedule
- News Release

c: Mayor, Mayor Pro Tem, City Council Members

## 2015 Crossing Guard Transition Plan

MORENO VALLEY UNIFIED SCHOOL DISTRICT	CROSSING GUARD LOCATIONS	Intersection (Nearest Elementary School)	October 31	November 30	December 31
		Heacock Street and Cottowood Avenue (Creekside)		✓	
Heacock Street and Fir Avenue (Sunnymead)		✓			
Heacock Street and Eucalyptus Avenue (Sunnymead)		✓			
Heacock Street and Dracaea Avenue (Sunnymead)		✓			
Kitching Street and Brodiaea Avenue (Hendrick Ranch)		✓			
Kitching Street and Dracaea Avenue (Butterfield)		✓			
Lasselle Street and Fir Avenue (Bear Valley)		✓			
Dracaea Avenue and Elsworth Street (Towngate)		✓			
Sunnymead Ranch Pkwy/Old Country Road (Sugar Hill)				✓	
Bay Avenue and Pecan Place (Ramona)				✓	
Cottonwood Avenue and Jade Way (Moreno)				✓	
JFK and Pepper Court (Serrano)				✓	
Delphinium and Wintergreen (Chaparral Hills)				✓	
Sunnymead Drive and Eucalyptus Avenue (Sunnymead)				✓	
Spinnaker Lane and Delphinium Avenue (Serrano)				✓	
Running Deer and Eucalyptus Avenue (Sunnymead)				✓	
Davis Street and Sandy Glade Ave (Midland)				✓	
Cactus Avenue and Philo Street (Chaparral Hills)				✓	
Dracaea Avenue and Snowbell Lane (Towngate)				✓	
JFK and La Brisas Way (Armada)		✓			
Ironwood Avenue and Barclay Drive (Box Springs)		✓			
Morrison Street and Cottonwood Avenue (Moreno)		✓			
Eucalyptus Avenue and School Frontage (Edgemont)		✓			
Kitching Street and Cactus Ave (Hendrick Ranch)		✓			
Heacock Street and Sunnymead Ranch Pkwy (Sugar Hill)		✓			
Oliver Street and Delphinium Avenue (La Jolla)		✓			
Wordsworth Road and Lands End (Seneca)		✓			



## Funding for School Crossing Guard Program Transitions to MVUSD

During its meeting on September 22, the Moreno Valley City Council directed staff to announce its decision to defund the School Crossing Guard Program which supports the Moreno Valley Unified School District. The decision comes after sharp declines in Gasoline Tax revenues - - which fund this program - - have required cost reductions in many areas. The Council will consider budget adjustments to implement its decision during the City Council meeting at 6 p.m. on October 13.

The Program will be de-funded over a three month period, which provides the District sufficient time to take over the program, find an alternative source of funding or establish a Program similar to the one operated by the Val Verde Unified School District.

Council Members discussed this situation with the District's Board at a joint meeting in June of this year, when both agencies acknowledged the situation and agreed to explore options. Alternatives discussed between City and District representatives included:

- Transferring Crossing Guards, who are currently Temporary City Employees, to direct employment with the Schools;
- Transferring funds from the Schools to the City to fully fund Crossing Guard services, at no cost to the City; and
- Seeking community members to serve the School District as volunteer Crossing Guards; and

To provide schools with time to notify parents of this change, the Council directed that the program's transition to MVUSD take place in a phased manner. The program will be defunded over a three month period, with eight crossings on October 31, eight additional crossings on November 30 and the final 11 crossings on December 31. The transition schedule is provided below.

"The loss of more than \$1.5 million in Gas Tax funds leaves the City with very few options," said Mayor Pro Tem Yxstian Gutierrez. "We are committed to keeping students and their families safe, which is why we must direct available funds to repair roadways," he said.

In proposing a transition that will occur over more than three months, Council Member Jeffrey Giba wanted to ensure that the District has time to consider how best to move forward with the program. "The City and District are partners in serving Moreno Valley families. This schedule empowers the District to determine the level and type of service provided," he said.

Transferring funding of the Program to the District does not affect the City's longstanding investment of approximately \$1 million annually in Safe Routes to School infrastructure which provides enhanced walking routes for local students throughout Moreno Valley.



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Jane Halstead, City Clerk

**AGENDA DATE:** October 13, 2015

**TITLE:** APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING LOGISTICS INDUSTRY TRAINING AND EDUCATION

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### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Approve Resolution No. 2015-66, a Resolution of the City Council of the City of Moreno Valley, California, Establishing a Logistics Industry Training / Education Ad Hoc Committee of the City Council.
2. Appoint two members of the City Council to serve as the Ad Hoc Committee tasked with working with community stakeholders to guide the development of Logistics Industry Training / Education.

### **SUMMARY**

As part of the City Council approval of the World Logistics Center project on August 25, 2015, the Development Agreement contains provisions that require the developer to commit to local hiring practices and to provide funding to support workforce development. This report recommends that the Council establish an Ad Hoc Committee by resolution and appoint two members of the City Council to work with community stakeholders to guide the development of logistics industry training and/or education for Moreno Valley residents.

### **DISCUSSION**

The August 25, 2015 adoption of Ordinances 900 and 901 by the Moreno Valley City Council approved the World Logistics Center project. The World Logistics Center is a world class business park specifically designed to support the requirements of large



global communities and their logistics operations.

The adoption of Ordinance 901 approved the Development Agreement between the City of Moreno Valley and HF Properties, Sunnymead Properties, Theodore Properties Partners, 13451 Theodore LLC, and HL Property Partners (collectively, the “The Property Owners”). Among the provisions contained in the Development Agreement are sections that commit to local hiring practices (Section 4.11 Local Hiring Program) and the provision of funding to support workforce development (Section 4.12 Education/Innovation/Training/Library Funding.) See Attachment 1.

Considering the 20,000 jobs estimated to be created by the operation of the World Logistics Center at build-out, and in order to prepare the workforce in Moreno Valley to take advantage of career opportunities in the logistics industry, well planned and synergistic education and training strategies must be developed.

To that end, the proposed resolution would establish a logistics industry training / education ad hoc committee to work with community stakeholders to guide the development of those strategies. City Resolution 2003-17 enacted the *Rules of Procedure for Council Meetings and Related Functions and Activities*. Section 9.3 Other Committees states “The City Council may by resolution create other standing committees and by motion or resolution may appoint ad hoc committees for particular temporary purposes.” See Attachment 2. Staff support shall be initially provided to the Committee by the City Council Office staff with the provision that other department staff may be utilized for expertise as needed

### **ALTERNATIVES**

1. Approve proposed Resolution establishing an Ad Hoc Committee regarding the development of logistics industry training / education and appoint two members of the City Council to work with community stakeholders to guide the development of logistics industry training / education for Moreno Valley residents. *Staff recommends this alternative due to the extensive level of coordination and time anticipated to successfully identify, establish, and/or design program opportunities at various educational levels.*
2. Do not approve proposed Resolution establishing an Ad Hoc Committee regarding the development of logistics industry training / education and do not appoint two members of the City Council to work with community stakeholders to guide the development of logistics industry training / education for Moreno Valley residents. *Staff does not recommend this alternative.*

### **FISCAL IMPACT**

There is no fiscal impact in establishing an Ad Hoc Committee.

### **NOTIFICATION**

N/A

**PREPARATION OF STAFF REPORT**

Prepared By:  
Shanna Palau  
Management Analyst

Department Head Approval:  
Jane Halstead, CMC  
City Clerk

**CITY COUNCIL GOALS**

**Advocacy.** Develop cooperative intergovernmental relationships and be a forceful advocate of City policies, objectives, and goals to appropriate external governments, agencies and corporations.

**Positive Environment.** Create a positive environment for the development of Moreno Valley's future.

**ATTACHMENTS**

- 1. Development Agreement
- 2. Logistics Training Ad Hoc Committee Resolution

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/06/15 12:30 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 3:05 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 5:56 PM

Recorded in Official Records  
County of Riverside  
Peter Aldana  
Assessor-County Clerk-Recorder

Recording Requested by And  
When Recorded Return to:

City of Moreno Valley  
14177 Frederick Street  
Moreno Valley, CA 92552  
Attn: City Clerk



9					R	A	Exam: 771		
Page 48	DA	PCOR	Misc	Long	RFD	1st Pg	Adtl Pg	Cert	CC
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[Exempt From Recording Fee Per Gov. Code § 27383]

DEVELOPMENT AGREEMENT

(World Logistics Center)

This DEVELOPMENT AGREEMENT ("Agreement") is entered into as of this 27<sup>th</sup> day of August, 2015, by and between the CITY OF MORENO VALLEY, a California general law municipal corporation ("City"), and HF PROPERTIES, a California general partnership, SUNNYMEAD PROPERTIES, a Delaware general partnership, THEODORE PROPERTIES PARTNERS, a Delaware general partnership, 13451 THEODORE, LLC, a California limited liability company, and HL PROPERTY PARTNERS, a Delaware general partnership (collectively "HF"). The City and HF hereafter are referred to collectively as the "Parties" and individually as a "Party."

RECITALS

A. Consistent with the City's economic development and general plan, the City and HF have agreed to enter into this Agreement because the World Logistics Center will be a master planned business park specifically designed to support large global companies and their business and logistics operations which will be a significant revenue generating, job creating and training/education project as further detailed in Exhibit A-3.

B. The City is authorized to enter into development agreements with persons having legal or equitable interests in real property for the development of such property pursuant to California State general laws: Article 2.5 of Chapter 4 of Division I of Title 7 of the California Government Code commencing with section 65864 (the "Development Agreement Law"), and Article XI, Section 7, of the California Constitution, together with City ordinances.

C. The City has enacted an ordinance, codified and set forth in the Moreno Valley Municipal Code as Title 9, Section 9.02.110 (the "Development Agreement Ordinance") that establishes the procedures and requirements for its consideration of such development agreements upon application by, or on behalf of, persons having legal or equitable interests in real property pursuant to the Development Agreement Law.

D. HF represents and hereby warrants that it has a legal and equitable interests in approximately two thousand, two hundred sixty three (2263) acres of real property located in the region commonly referenced as the Rancho Belago area of the City, as described in the legal

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

description set forth in Exhibit "A-1" and as illustrated in the depiction set forth in Exhibit "A-2" (the "Subject Property"). The City has been provided proof of the records HF relies upon for the representation and warranty by HF. City is relying upon this evidence and considers it to be an element of HF's consideration for this Agreement.

E. In clarification of the foregoing the Subject Property includes approximately 85 acres, as described on Exhibit "A-1" and depicted in Exhibit "A-2" that is currently located in an unincorporated area of Riverside County but is proposed by HF to be annexed to the City within five years, subject to the process and approval of the Riverside County Local Area Formation Commission (the "Annexation").

F. The World Logistics Center Specific Plan ("WLCSP") allows the development of approximately forty million, six hundred thousand (40,600,000) square feet of industrial, logistics, warehouse and support use on the land subject to the WLCSP. The Development, as hereinafter defined, includes both HF improvements to the subject property and City entitlements, including but not limited to, a General Plan Amendment, adoption of the WLCSP, a Zone Change, Tentative Parcel Map 36457 and annexation of an 85-acre parcel along Gilman Springs Road. The Development, including the Project, as defined herein, will also include subdivision maps and other approvals needed to construct the facilities proposed for the Subject Property. The permitted uses of the Subject Property, including a plan of development, the density and intensity of use, the maximum height and size of proposed buildings are set forth in the WLCSP, as it may be amended from time to time, and are hereby incorporated by reference. The City's certification of the Environmental Impact Report, approval of the General Plan Amendment, adoption of the WLCSP, adoption of the Zone Change, approval of the Tentative Parcel map are conditions precedent to this Agreement.

G. The development of the Subject Property will generate a variety of public benefits to the City, its residents, property owners, taxpayers and surrounding communities. The Project is believed to substantially advance the goals of the City's adopted Economic Development Action Plan, expand and improve the City's property and sales tax base, invest significant private capital into the local economy, generate extensive construction employment and new permanent employment opportunities for Moreno Valley and the region, and help to reduce the severe jobs to housing imbalance that currently exists in the City. Among the public benefits, the development of this Project pursuant to the WLCSP will implement goals, objectives and policies of the City's General Plan, and the WLCSP, which will provide logistics development, public utility and open space uses for the Subject Property and for the City. In exchange for the duties and obligations imposed by this Agreement, HF will receive the vested right to develop the Subject Property for the Term in accordance with the terms of this Agreement.

H. The City has previously adopted the Economic Development Action Plan ("EDAP"). The WLCSP responds to a portion of the EDAP. The eastern portion of Moreno Valley is deficient in the infrastructure necessary to support and implement the City's EDAP. To allow for the development of the World Logistics Center and the WLCSP, HF is willing to provide and assist the City in the development of infrastructure in support of the City's economic plan which may be in excess of HF's fair share and therefore may provide broader benefits. The City and HF desire to ensure that all beneficiaries of the Infrastructure Improvements will pay their fair share per the Municipal Code. Therefore this Agreement includes reference to the

City's usual method for reimbursement to an owner for the amount of the costs of such Infrastructure Improvements which exceeds the fair share of those costs and accrues to the benefit of other owners.

I. On June 30, 2015, the Planning Commission of the City, at a duly noticed public hearing, recommended, in Resolution 2015-12, that the City Council certify the Environmental Impact Report (SCH # 2012021045) (the "EIR"). The Planning Commission also recommended that the City Council approve General Plan Amendment PA12-0010, the WLCSP, the Annexation, Zone Change No. PA12-0012 and Tentative Parcel Map 36457.

J. On August 19, 2015, the City Council of the City, at a duly noticed public hearing held pursuant to all legal preconditions, adopted Resolution No. 2015-56 certifying the EIR for the Project and the related Mitigation Monitoring and Reporting Program and also (i) adopted Resolution 2015-57 approving General Plan Amendment No. PA12-0010, (ii) adopted Resolution 2015-58 approving Tentative Parcel Map 36457, (iii) adopted Resolution 2015-59 approving the Annexation, (iv) introduced for first reading Ordinance No. 900 approving the WLCSP, and (v) introduced, for first reading Ordinance No. 900 approving Zone Change No. PA12-0012. The WLCSP and Zone Change No. PA12-0012 were subsequently adopted on August 25, 2015 and effective on September 24, 2015.

K. The Planning Commission of the City, at a duly noticed public hearing held pursuant to the Development Agreement Law and the Development Agreement Ordinance, recommended that the City Council find and determine, among other things, that this Agreement is consistent with the goals, objectives, policies, general land uses and programs specified in the City General Plan, as amended by the Project Approvals; is compatible with the uses authorized in and the land use regulations prescribed by the City in its Zoning Code; and will promote and encourage the development of the Subject Property by providing a greater degree of certainty with respect thereto, while also providing specified public benefits to the City.

L. On August 19, 2015, after a duly noticed public hearing held pursuant to the Development Agreement Law and the Development Agreement Ordinance, the City Council of the City approved the introduction of Ordinance No. 901 (the "Enacting Ordinance") that would approve and adopt this Agreement and authorize its execution on behalf of the City. On August 25, 2015, the City Council of the City adopted the Enacting Ordinance.

M. The Parties intend that HF will proceed with the Development upon the Subject Property pursuant to this Agreement within the Term.

#### AGREEMENT

NOW, THEREFORE, in consideration of the above recitals which are incorporated herein and intended to assist with the interpretation of this Agreement, and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and HF agree as follows:

## ARTICLE 1 DEFINITIONS.

The following terms when used in this Agreement shall, unless defined elsewhere in this Agreement, have the meanings set forth below:

1.1 “Agreement” shall mean this Development Agreement by and between the City and HF and any subsequent amendments.

1.2 “City” shall mean the City of Moreno Valley, a municipal corporation, organized and existing under the general laws of the State of California.

1.3 “City Council” shall mean the governing body of the City.

1.4 “Development” shall mean the improvement of the Subject Property for the purposes of completing the structures, improvements and facilities composing the Project, including but not limited to: grading; the construction of infrastructure related to the Project whether located within or outside the Subject Property; the construction of buildings and structures; construction of post-development storm drain related improvements and the installation of landscaping and public facilities and improvements. “Development” also includes the maintenance, repair, reconstruction, modification, or redevelopment of any building, structure, improvement, landscaping, or facility after the construction and completion thereof on the Subject Property. The Development shall at all times conform to the Agreement.

1.5 “Development Impact Fee,” “Development Impact Fees” or “DIF” means for purposes of this Agreement only those fees imposed pursuant to Moreno Valley Municipal Code Sections 3.42.070 (police facilities), 3.42.080 (City hall facilities), 3.42.090 (corporate yard facilities) and 3.42.100 (maintenance equipment). The term “Development Impact Fees” (or “DIF”) does not include those fees imposed by Moreno Valley Municipal Code Sections 3.42.030 (arterial streets), 3.42.040 (traffic signals), 3.42.050 (interchange improvements) and 3.42.060 (fire facilities).

1.6 “Development Plan” shall mean the plan for Development of the Subject Property pursuant to the Existing Regulations and including the Infrastructure Improvements.

1.7 “Development Requirement(s)” shall mean any fees or requirement(s) of the City imposed in connection with or pursuant to the Project Approvals such as the construction or improvement of public facilities or the payment of fees or assessments in order to lessen, offset, mitigate or compensate for the impacts of the Development.

1.8 “Effective Date” shall mean the date that is ninety (90) days after the date the City Council adopts the Enacting Ordinance unless litigation is commenced in which case the Effective Date shall mean the date on which the litigation is finally terminated, whether by dismissal which leaves all of the Project Approvals in place or by the entry of a final judgment, free from further appellate review, which upholds the Project Approvals. Notwithstanding the forgoing, Article 7 shall be immediately effective thirty one (31) days after the date the City Council adopts the enacting ordinance.

1.9 “Enacting Ordinance” shall mean the City Council adopted ordinance described in Recital K of this Agreement.

1.10 “Existing Regulations” shall mean the Project Approvals, Development Requirements, and all ordinances, resolutions, codes, rules, regulations and official policies of City, adopted and effective on the date of the adoption of the Enacting Ordinance governing Development and use of the Subject Property, including but not limited to the permitted use of land, the density or intensity of use, the maximum height and size of proposed building, and the architectural design, improvement and construction standards and specifications applicable to the Development of the Subject Property. The City shall compile two sets of the Existing Regulations. Once that compilation has been completed by the City, one set will be stored with the Agreement by the City Clerk for future use and certainty of requirements and the other set will be given to HF.

1.11 “HF” shall mean HF PROPERTIES, SUNNYMEAD PROPERTIES, THEODORE PROPERTIES PARTNERS, 13451 THEODORE, LLC and HL PROPERTY PARTNERS, and/or its successors or assigns to all or any portion of the Subject Property

1.12 “Infrastructure Improvements” shall mean all public infrastructure improvements on and off the Subject Property.

1.13 “Judgment(s)” shall mean one or more final or interim judgment(s) of a court of competent jurisdiction affecting the rights of the Parties hereunder.

1.14 “Moreno Valley Municipal Code” shall mean the City’s Municipal Code in effect on the date of the adoption of the Enacting Ordinance.

1.15 “Mortgagee” shall mean a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security device, a lender, or each of their respective successors and assigns.

1.16 “Parcel” shall mean any lot created by a recorded subdivision or parcel map.

1.17 “Project” shall mean the Development and operation of the Subject Property pursuant to and consistent with the Development Plan and the provisions of this Agreement.

1.18 “Project Approvals” shall mean, collectively, General Plan Amendment No. PA12-0010, the WLCSP, Zone Change No. PA12-0012, the Annexation and Tentative Parcel Map 36457.

1.19 “Subject Property” shall mean that certain real property consisting of the property more particularly described in Exhibit “A-1” attached hereto and depicted on Exhibit “A-2” attached hereto, any real property subject to the WLCSP acquired by HF after the date on which the Enacting Ordinance is adopted and all real property intended to be included by the Annexation. Until the Annexation is finally accomplished by HF at its sole cost and expense, nothing in this Agreement shall apply to the property to be annexed.

1.20 “Subsequent Development Approvals” shall mean any and all ministerial and/or discretionary permits, licenses, consents, rights and privileges, and other ministerial and/or

discretionary actions approved or issued by City in connection with Development of the Subject Property after the date of the adoption of the Enacting Ordinance, including all associated environmental documentation and mitigation measures pursuant to the California Environmental Quality Act.

1.21 "Subsequent Regulations" shall mean any ordinances, resolutions, codes, rules, regulations and official policies of the City adopted and effective after the date of the adoption of the Enacting Ordinance.

1.22 "Term" shall mean the period of time during which this Agreement shall be in effect, enforceable and bind the Parties, as set forth below in Section 3.5 of this Agreement.

## **ARTICLE 2 EXHIBITS.**

The following documents are attached to, and by this reference made a part of, this Agreement:

Exhibit "A-1"	Legal Description of the Subject Property
Exhibit "A-2"	Depiction of the Subject Property
Exhibit "A-3"	Public Benefits

## **ARTICLE 3 GENERAL PROVISIONS.**

3.1 **Binding Effect of Agreement.** From and following the Effective Date of this Agreement and throughout the Term, Development of the Subject Property and the City's actions on applications for Subsequent Development Approvals affecting the Subject Property and the Development of the Subject Property shall be governed by the terms and conditions of this Agreement, all Project Approvals and all Subsequent Development Approvals. Any matter not addressed in the foregoing documents shall be regulated pursuant to then applied routine City practices and ordinances.

3.2 **Ownership of Subject Property.** HF represents and warrants that it is the holder of legal and equitable interests to all of the property described and shown in Exhibits "A-1" and "A-2" and thus is qualified to enter into and to be a party to this Agreement in accordance with Government Code section 65865(b), as set forth in documentation HF provided to City and upon which City relies as part of the consideration for this Agreement.

3.3 **Addition of Parcels to This Agreement.** The terms of this Agreement shall apply to the 85 acre Parcel described in Recital E upon its annexation into the City which process is intended to be completed within five years by HF at HF's sole cost and to any real property subject to the WLCSP acquired by HF after the date on which the Enacting Ordinance is adopted.

3.4 **Assignment Rights.** From time to time HF may sell or otherwise transfer title to buildings or property in the WLC. HF shall have the right subject to City's prior written approval to sell, transfer, or assign the Subject Property, in whole or in part (provided that no such parcel



transfer shall violate the Subdivision Map Act, Government Code Section 66410, et seq.) to any person, partnership, joint venture, firm or corporation at any time during the Term of this Agreement; provided, however, that any such sale, transfer or assignment (collectively, "Assignment") shall include the assignment and assumption of the rights, duties and obligations arising under or from this Agreement be made in strict compliance with the following conditions:

(a) No assignment of any right or interest under this Agreement shall be made unless made together with the assignment of all or the concomitant part of the Subject Property.

(b) Prior to any such Assignment, HF shall provide City with an executed agreement, in a form reasonably acceptable to City, by the purchaser, transferee or assignee (collectively, "Assignee") and providing therein that the Assignee expressly and unconditionally assumes all the duties and obligations of HF under this Agreement with respect to the portion of the Subject Property being transferred. City shall have the sole power to allocate, prorate, or otherwise apportion any term, provision, fee, contribution, or similar duty or obligation of HF, so that City, HF, and assignee have a specific agreement as to the duties and obligations, of all Parties after the Transfer.

(c) Any Assignment of this Agreement will require the prior written consent of the City, which will not be unreasonably withheld or delayed. The City's approval will be based upon the City's reasonable determination, in accordance with the standard set forth in Section 3.4.1(d) as to whether or not such Assignee has the requisite ability to complete the portion of the Subject Property being transferred. Within thirty (30) days following receipt by the City of written notice regarding Assignment (such notice must include development experience information regarding the Assignee sufficient to allow the City to make the above determination) the City will notify HF regarding its approval or disapproval of such Assignment. Failure of the City to respond in writing within thirty (30) days of receipt of the notice of the Assignment shall constitute approval of the assignment.

Any Assignment not made in compliance with the foregoing conditions shall result in HF continuing to be responsible for all obligations under this Agreement. Notwithstanding the failure of any Assignee to receive City approval and/or execute the Agreement required by subparagraph (c) above, the burdens of this Agreement shall be binding upon such Assignee, but the benefits of this Agreement including but not limited to DIF, shall not inure to such Assignee until and unless such Assignment is approved by the City and executed.

3.4.1 Release of HF. Notwithstanding any Assignment, HF shall continue to be obligated under this Agreement unless HF is given a release in writing by City, which release shall be provided by City upon the full satisfaction by HF of the following conditions:

(d) HF no longer has a legal or equitable interest in the portion of the Subject Property being transferred other than a lien on the portion of the Subject Property being transferred to secure the payment of the purchase price to HF. HF shall provide the City written notice to the City of the party to which the lien is to be transferred, upon transfer of the lien, pursuant to this Article 3.

(e) HF is not then in default under this Agreement in City's sole reasonable determination, subject to procedure set forth in Section 5.2 of this Agreement.

(f) HF has provided City with the notice and executed agreement and other information required under subparagraphs (b) and (c) of Subsection 3.4 above.

(g) The City has reviewed and approved the Assignee and the Assignment, such approval to include a determination by the City that the Assignee has the requisite ability to complete the portion of the Subject Property being transferred.

(h) The Assignee provides City with security equivalent to any security previously provided by HF to secure performance of its obligations hereunder with respect to the portion of the Subject Property being transferred. The City shall cooperate with HF to effectuate the substitution of security provided by HF to that to be provided by the Assignee with respect to the portion of the Subject Property being transferred.

(i) HF has paid City all monies then due and owing to City under this Agreement.

3.4.2. Subsequent Assignment. Any subsequent Assignment after an initial Assignment shall be made only in accordance with and subject to the terms and conditions of this Article. All subsequent Assignors must deliver written acknowledgement of this Agreement, and the Assignees duties under the Agreement or the City may, in its sole discretion, terminate this Agreement as to that owner's parcel(s).

3.4.3. Termination of Agreement With Respect to Individual Parcels upon Sale and Completion of Construction. Notwithstanding any other provisions of this Agreement, this Agreement shall terminate with respect to any Parcel and such Parcel shall be released and no longer be subject to this Agreement without the execution or recordation of any further document upon satisfaction of the following conditions:

(a) The Parcel has been finally subdivided and sold or leased for a period longer than one year to a member of the public or other ultimate user; and,

(b) A Certificate of Occupancy has been issued for each structure on the Parcel shown on the plot plan required by Section 11.3.2 of the WLCSP, and the fees set forth under this Agreement have been paid.

(c) The Parcel has no duty to contribute monies or render performance under this Agreement.

3.5 Term. Unless earlier terminated as provided in this Agreement, this Agreement shall continue in full force and effect until the earlier of (i) the date of completion of the last portion of the Development, or (ii) the date that is fifteen (15) years from and after the Effective Date of this Agreement unless Certificates of Occupancy have been granted by the City for buildings on the Subject Property consistent with the Development Plan for not less than twelve-million (12,000,000) square feet (gross floor area as defined by Moreno Valley Municipal Code 9.15.030) in which event the Term shall be extended for an additional ten (10) years, subject to

extension pursuant to Section 11.9 below (the "Term"). Alternatively, if HF is, for any reason, unable to obtain Certificates of Occupancy for not less than eight (8) million square feet, and up to twelve million (12,000,000) square feet within the original fifteen (15) year Term, it shall be entitled to have this Agreement extended for an additional ten (10) years, subject to extension pursuant to Section 11.9 below, upon the payment to the City of one million dollars (\$1,000,000) prior to the expiration of the original fifteen (15) year term.

### 3.6 City Cooperation.

(a) In anticipation of the effort necessary to facilitate the timely processing and permitting of project improvements, HF may request the City to designate a mutually agreeable individual (the "City's WLC Coordinator") who shall have the authority to facilitate and coordinate development services within the City and with HF for all actions to be taken by the City which are needed for the development of the Project, including, but not limited to, discretionary approvals, entitlements, site plans, grading, building and occupancy permit applications and inspections through the City's review and approval processes, all at the full cost of HF, which HF shall pay in advance and replenish upon City's request, from time to time. If any payments are not received by City when requested, the WLC coordinator shall cease acting until the funds are received and normal City protocols shall govern. All applications submitted to the City shall be evaluated for completeness within twelve (12) working days of receipt by the City. If not complete, the City shall immediately ensure that HF is notified of what additional information is required.

(b) Upon receipt of an application deemed complete pursuant to subsection 3.6(a) above for a site, grading, building, occupancy, or similar permit, the City shall process, review and approve or disapprove the application within ten (10) working days for the first submittal and within ten (10) working days of any subsequent submittals.

(c) It shall be the City's WLC Coordinator's responsibility to ensure that all of the time limits set forth above are met.

(d) The Project shall, pursuant to ordinary procedures, participate in the City's "Time and Materials Fee Program" which is designed to ensure that the City is reimbursed by HF for its actual costs of providing discretionary approvals, entitlements, planning, grading, and building permits and inspections and fire prevention services. For convenience this shall include the payments due under sub sections 3.6(a) and 3.6(e).

(e) The City shall, pursuant to City's standard contracting procedures, maintain on-call contracts with at least three qualified entities or persons, mutually acceptable to both the City and HF, who can be called upon to immediately provide the services set forth above when the City's WLC Coordinator determines that the City, utilizing typical city staff resources, is unlikely to be able to meet the time limits set forth above. HF shall be solely responsible for the cost of using the qualified private entities or persons. HF shall deposit with City a sum City then determines necessary for such consultants, immediately upon written request from City. HF shall replenish such funds, from time to time, upon written request from City. If any funds are not received per City's request, the consultants shall, without liability, cease work until such money is received.

(f) The City's WLC Coordinator shall cooperate with HF in obtaining any permits or approvals needed from any other agency at full cost to HF.

(g) The City, at HF's request, shall meet with HF to consider in good faith, economic incentives sought by HF similar to those approved for logistics projects in other areas of the City after the Effective Date.

3.7 Time of the Essence. The Parties expressly acknowledge and agree that time is of the essence in the performance of the provisions of this Agreement.

3.8 Mutual Waiver of Estoppel Defenses by Parties. Notwithstanding any legal authorities to the contrary concerning the doctrines of waiver and estoppel as applied to public entities and the actions or inactions of public agencies or public agency officers and officials, the Parties acknowledge and agree that each party and its successors and assigns to all or any interest in the Subject Property are relying upon the contents of this Agreement and the Parties' execution of this Agreement and the recordation hereof, and that in consideration of such material reliance, each party shall now be estopped from denying the underlying validity of this Agreement and each party knowingly and expressly waives any such claim or defense.

#### ARTICLE 4 DEVELOPMENT OF THE PROPERTY.

4.1 Vested Right to Develop. During the Term, HF or its Assignee, shall have a vested right to develop the Subject Property in accordance with the Existing Regulations, and as subject to the provisions of this Agreement.

4.2 Effect of Agreement on Land Use Regulations. Except as otherwise provided under the terms of this Agreement, the rules, regulations and official policies governing permitted uses of the Subject Property, the density and intensity of use of the Subject Property, the maximum height and size of proposed buildings, and the design, improvement, and construction standards and specifications applicable to Development of the Subject Property, shall be only the Existing Regulations and those contained in the Development Plan.

4.3 Subsequent Development Approvals. When required by the Moreno Valley Municipal Code, the City shall accept for processing, review and take action upon all properly filed applications for Subsequent Development Approvals. The City further agrees that, unless otherwise requested by HF, the City shall not amend or rescind any Subsequent Development Approvals after such approvals have been granted by the City except as otherwise provided for in Title 9 of the City Municipal Code, or as directed by court order, or as related to approvals not granted by the City. Any Subsequent Development Approval, when granted, shall be deemed to be part of the Existing Regulations from the date of approval except as mandated by court order, or as specified in approvals not granted by the City.

4.4 Timing of Development. HF represents that it intends to commence and complete the physical improvements specified in the Development Plan for the Project. HF cannot specify the specific timing of development. HF will use its best efforts to commence construction at the earliest possible date consistent with market conditions. Because the California Supreme Court held in *Pardee Construction Co. v. City of Camarillo* (1984) 37 Cal.3d 455, that the failure of the parties therein to provide for the timing of development resulted in a latter adopted initiative

restricting the timing of development to prevail over such parties' agreement, it is the Parties' intent to cure that deficiency by expressly acknowledging and providing that HF shall have the right to develop the Subject Property at its own timing. In addition, to the extent HF decides to proceed with the Development of the Subject Property, City shall cooperate with HF with respect to the improvement of the Development of the Subject Property. If HF determines, in its sole and absolute discretion, to develop portions or phases of the Project, the City shall allow the phasing of public improvements unless the City determines that generally applied City of Moreno Valley Municipal engineering or planning requirements demand that additional or complete public improvements be made. The public improvements to be provided would be only those needed to serve the portion or phase being developed consistent with the environmental analysis which shall demonstrate to the City that the public improvements to be provided would be only those needed to serve the portion or phase being developed.

4.5 Terms of Maps and Other Project Approvals. Pursuant to California Government Code Sections 66452.6(1) and 65863.9, the term of any subdivision or parcel map that may be processed on all or any portion of the Subject Property and the term of each of the development approvals, including Tentative Parcel Map 36457, and any Subsequent Development Approvals, shall be extended until the expiration of the Term.

4.6 Changes and Amendments. The Parties acknowledge that although Development of the Project may require Subsequent Development Approvals, such Development shall be in compliance with this Agreement including the Development Plan. The above notwithstanding, HF may determine that changes are appropriate and desirable in the existing Project Approvals or Development Plan. In the event HF finds that such a change is appropriate or desirable, HF may apply in writing for an amendment to the existing Project Approvals or the Development Plan to effectuate such change. The City shall review and process any request for an amendment in the same manner that it would review and process a similar request for an amendment from any other owner of commercial or industrial land in similar circumstances. Any amendment to the Project Approvals or the Development Plan, when granted, shall be deemed to be part of the Existing Regulations from the date of the grant. Such amendments shall not be unreasonably withheld.

#### 4.7 Reservation of Authority.

4.7.1. Limitations, Reservations and Exceptions. Notwithstanding any other provision of this Agreement, the following Subsequent Regulations shall apply:

(a) Procedural regulations consistent with this Agreement relating to hearing bodies, petitions, applications, notices, findings, records, hearing, reports, recommendations, appeals and any other matter of procedure subject to the City's obligations under Section 3.6, and as may be the subject to future general law enactments by the State of California.

(b) Changes adopted by the International Code Council, or other similar body, as part of the then most current versions of the California Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, or National Electrical Code, and also adopted by the City as Subsequent Regulations.

(c) Subsequent Regulations, not otherwise specified under this Section 4.7.1, that are not in conflict with the Existing Regulations and the Development Plan.

(d) Subsequent Regulations, not otherwise specified under this Section 4.7.1, that are in conflict with the Existing Regulations or the Development Plan provided HF has given written consent to the application of such regulations to Development of the Subject Property at HF's sole and absolute discretion.

(e) Increased DIF, as defined in Section 1.5 of this Agreement, which shall be paid in the amount of the DIF in effect at the time that they are to be paid.

(f) Judgment(s) and/or federal, state and county laws and regulations which the City is required to enforce as against the Subject Property or the Development of the Subject Property.

4.7.2. Further Future Discretion of City. This Agreement shall not prevent the City, in acting on Subsequent Development Approvals, from applying Subsequent Regulations allowed under Section 4.7.1. Further, it is also understood and acknowledged by the Parties that the Project Approvals contemplate that the City may be required, in certain circumstances, to undertake further environmental review of Subsequent Development Approvals. If the circumstances set forth in CEQA Guideline Section 15162 occur in the context of the City considering Subsequent Development Approvals, or if otherwise required by the EIR, the City is required to, and shall, without being subject to claim, assertion of breach or other challenge by HF or Assignee exercise the maximum discretion authorized by law, consistent with the terms of CEQA and this Agreement.

4.7.3. Modification or Suspension by Federal or State, County, or Multi-Jurisdictional Law. In the event that any Judgment(s) or federal, state, county, or multi-jurisdictional laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such Judgment(s) or federal, state, county, or multi-jurisdictional laws or regulations, and this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provision impractical to enforce.

4.8 Payment of, and Reimbursement for, the Cost of Improvements Paid for by HF Which Are in Excess of HF's Fair Share. HF shall satisfy the requirements imposed by Mitigation Measure 4.15.7.4.A, as set forth in the EIR, to ensure that all of the Development's impacts on the City's circulation system, including, but not limited to, improvements to arterial streets, traffic signals and interchanges, are mitigated. Because HF will be responsible for paying for or constructing all circulation-related improvements, it shall not pay the fees imposed by Moreno Valley Municipal Code Sections 3.42.030 (arterial streets), 3.42.040 (traffic signals) and 3.42.050 (interchange improvements). City will provide to HF the reimbursement agreement(s) in the form and type as specified in Chapter 9.14 of Title 9 of the Moreno Valley Municipal Code.

4.9 Provision of a “turnkey” Fire Station. HF shall, at its own cost, provide a fully constructed, fully equipped fire station and fire station site, including fire trucks, as specified by the City’s Fire Chief. The fire station’s furniture and fixtures shall be reasonably comparable to those of the most recently completed fire station within the City. The fire station, equipment and trucks shall be provided as and when directed by the Fire Chief. Because HF will be responsible for the provision of the fire station, fire station site, equipment, and trucks, it shall not pay the fee imposed by Moreno Valley Municipal Code Section 3.42. 060 (fire facilities). City will provide to HF the reimbursement agreement(s) in the form and type as specified in Chapter 9.14 of Title 9 of the Moreno Valley Municipal Code.

4.10 City’s Provision of Public Infrastructure and Services. Except as otherwise prescribed in this Agreement and/or as required of the development through existing or future mitigation measures, development standards, and conditions of approval, the City shall provide the public infrastructure and services which are not HF’s responsibility as determined by the City with timing at the sole and absolute discretion of the City.

4.11 Local Hiring Program. HF will establish a WLC Local Hiring Program, at HF’s cost to identify, align, and facilitate educational interests and programs with workforce development programs that facilitate the hiring of Moreno Valley residents for job opportunities at the World Logistics Center, and associated jobs not directly at WLC, but in industries that support WLC. HF will require its contractors, suppliers and tenants to be active participants in Moreno Valley Employment Resource Center (“ERC”) programs including, but not limited to, the job opportunity announcement program. World Logistics Center employers will be requested to submit all job announcements to the ERC at least one week prior to providing such announcements to other agencies or to the general public. Potential employers will be requested to provide information regarding job opportunities to the ERC including details regarding job titles, minimum qualifications, application processes, and employer contact information. HF shall request that subsequent users to make good faith efforts to hire Moreno Valley City residents. HF shall, upon City’s request from time to time, provide to the City proof of its efforts under this section and the success of HF’s efforts. HF shall also participate with the Hire MoVal Incentive Program, which was adopted by the City Council on April 28, 2015, and as it may be amended from time to time.

#### 4.12 Education/Innovation/Training/Library Funding.

The City and HF are especially interested in ensuring that the residents of Moreno Valley are provided education resources and obtain every opportunity to secure the jobs which will be created by the operation of the World Logistics Center. Toward that end, HF is willing to contribute six million, nine hundred and ninety three thousand dollars (\$6,993,000), to be used by the City to provide and enhance educational and workforce development training in the supply chain and logistics industries, as follows:

- (a) HF shall contribute no less than five million, two hundred sixty eight thousand dollars (\$5,268,000), one million dollars (\$1,000,000) to be contributed at the issuance of the first building permit for a logistics building on the Subject Property and \$0.11/square foot to be paid at the time of the issuance of the building permit for each succeeding building, excluding the fire station;

(b) In addition to the foregoing, beginning on the Effective Date and on each anniversary of that date thereafter, HF shall contribute to the City one hundred thousand dollars (\$100,000) per year for the next six (6) years; and

(c) In addition to the foregoing, beginning in the 7th year on the anniversary date of the Effective Date and continuing throughout the Term, HF shall contribute to the City one hundred twenty five thousand dollars (\$125,000) per year, on the specified anniversary date of the Effective Date, so long as this Agreement is in effect.

4.13 State Route 60 Landscape, Signage, Bridge Design Program. City shall set up a joint City/HF committee to develop freeway related landscaping, bridge architectural concepts, engineering and freeway signage regulations for SR-60 between Redlands Boulevard and Gilman Springs Road. The guidelines, concepts and regulations shall be developed in an expeditious manner. The City shall contribute up to Fifty Thousand Dollars (\$50,000) and HF shall match the City's contributions on a ten to one basis, up to Five-Hundred Thousand dollars (\$500,000).

4.14 Air Filtration Systems for Seven Properties at Theodore Street and Dracaea Avenue. Notwithstanding the findings of the EIR, Owner agrees to fund the installation of air filtration systems meeting ASHRSE Standard 52.2 MERV-13 standards at the locations listed below, not to exceed \$25,000 per property. Property owners shall be under no obligation to accept such offer. Prior to the issuance of the first construction permit within the WLCSP, Owner shall provide documentation to the City confirming that an offer has been extended to each of the owners of said properties, and \$175,000 shall be deposited in a City account designated for this purpose and an agreement regarding the use and distribution of funds shall be executed between City and Owner. The affected property owners shall have until December 31, 2021 to accept the offer. Upon acceptance of each offer, Owner shall work with each owner to ensure the filtration system is properly installed in a timely fashion. Owner shall invoice City for reimbursement of payments up to \$25,000 per property. This provision applies only to the following seven houses:

13100 Theodore Street, Morcno Valley, CA 92555 current APN: 422-070-029

13200 Theodore Street, Moreno Valley, CA 92555 current APN: 422-070-032

13241 Theodore Street, Moreno Valley, CA 92555 current APN: 478-220-014

29080 Dracaea Avenue, Moreno Valley, CA 92555 current APN: 478-220-030

29140 Dracaea Avenue, Moreno Valley, CA 92555 current APN: 478-220-009

30220 Dracaea Avenue, Moreno Valley, CA 92555 current APN: 422-070-035

30240 Dracaea Avenue, Moreno Valley, CA 92555 current APN: 422-070-037



## ARTICLE 5 REVIEW FOR COMPLIANCE.

5.1 Periodic Review. The City shall review this Agreement annually, on or before the anniversary of the Effective Date, in order to ascertain the good faith compliance by HF with the terms of the Agreement. As part of that review, HF or its successor and assigns shall submit an annual monitoring review statement describing its actions in compliance with this Agreement, in a form acceptable to the Community Development Director or his/her authorized designee, within thirty (30) calendar days after written notice therefrom requesting such a statement. The statement shall be accompanied by an annual review and administration fee sufficient to defray the estimated costs of review and administration of the Agreement during the succeeding year. The amount of the annual review and administration fee shall be set by resolution of the City Council. No failure on part of the City to conduct or complete the review as provided herein shall have any impact on the validity of this Agreement. HF shall, for the first year, deposit \$1,000.00 on the Effective Date for the first year of review.

5.2 Procedure. Each Party shall have a reasonable opportunity to assert matters which it believes have not been undertaken in accordance with the Agreement, to explain the basis for such assertion, and to receive from the other Party a justification of its position on such matters.

5.2.1. If on the basis of the Parties' review of any terms of the Agreement, either Party concludes that the other Party has not complied in good faith with the terms of the Agreement, then such Party may issue a written "Notice of Non-Compliance" specifying the grounds therefor and all facts demonstrating such non-compliance.

5.2.2. The Party receiving a Notice of Non-Compliance shall have thirty (30) calendar days to cure or remedy the non-compliance identified in the Notice of Non-Compliance, or if such cure or remedy is not reasonably capable of being cured or remedied within such thirty (30) days period, to commence to cure or remedy the non-compliance and to diligently and in good faith prosecute such cure or remedy to completion.

5.2.3. If the Party receiving the Notice of Non-Compliance does not believe it is out of compliance and contests the Notice, it shall do so by responding in writing to said Notice within thirty (30) calendar days after receipt of the Notice.

5.2.4. If a Notice of Non-Compliance is contested, the Parties shall, for a period of not less than fifteen (15) calendar days following receipt of the response, seek to arrive at a mutually acceptable resolution of the matter(s) occasioning the Notice. In the event that a cure or remedy is not timely effected or, if the Notice is contested and the Parties are not able to arrive at a mutually acceptable resolution of the matter(s) by the end of the fifteen (15) calendar day period, the party alleging the non-compliance may thereupon pursue the remedies provided in Article 6 of this Agreement.

5.2.5. Neither Party hereto shall be deemed in breach if the reason for non-compliance is due to a "force majeure" as defined in, and subject to the provisions of, Section 11.9 below or any other non performance authorized by this Agreement.

5.3 Certificate of Agreement Compliance. If, at the conclusion of an annual review, HF is found to be in compliance with this Agreement, City shall, upon request by HF, issue a Certificate of Agreement Compliance ("Certificate") to HF stating that after the most recent Periodic Review and based upon the information known or made known to the City that (1) this Agreement remains in effect and that (2) HF is in compliance. The Certificate, shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance, and shall state that the Certificate expires upon the earlier of (i) one (1) year from the date thereof, or (ii) the date of recordation of a Notice of Termination of Development Agreement. HF may record the Certificate with the County Recorder. Additionally, HF may at any time request from the City a Certificate stating, in addition to the foregoing, which obligations under this Agreement have been fully satisfied with respect to the Subject Property, or any lot or parcel within the Subject Property.

## ARTICLE 6 DEFAULT AND REMEDIES.

6.1 Specific Performance; Waiver of Damages. The Parties acknowledge and agree that specific performance is the preferred remedy available for the enforcement of this Agreement. Accordingly, both parties hereby waive the right to obtain monetary damages from the other Party by reason of default of this Agreement. Subject to the procedure set forth in Section 5.2 above, any material default by HF or the City of the Agreement that is not timely cured by HF or the City shall be deemed a material default by HF or the City of this Agreement.

### 6.2 Termination of the Agreement.

6.2.1. Termination of Agreement for Default of HF. The City in its reasonable discretion may terminate this Agreement for any failure of HF to perform any material duty or obligation of HF hereunder or to comply in good faith with the terms of this Agreement (hereinafter referred to as "default" or "breach"); provided, however, the City may terminate this Agreement pursuant to this Section only after following the procedure set forth in Section 5.2 and HF and/or Assignee fail to remedy any issue. Further, if a mortgage of HF comes into possession of the Subject Property by default of HF, City may without liability, and in its sole and absolute discretion, terminate this Agreement. A bankruptcy filing by HF or general Partner of HF, or HF's successors and assigns, shall also be grounds by City for termination of this Agreement.

6.2.2. Termination of Agreement for Default of City. HF in its reasonable discretion may terminate this Agreement for any default by the City; provided, however, HF may terminate this Agreement pursuant to this Section only after following the procedure set forth in Section 5.2 and thereafter providing written notice by HF to the City of the default setting forth the nature of the default and the actions, if any, required by the City to cure such default and, where the default can be cured, the failure of the City to cure such default within thirty (30) days after the effective date of such notice or, in the event that such default cannot be cured within such thirty (30) day period, the failure of the City to commence to cure such default within such thirty (30) day period and to diligently proceed to complete such actions and to cure such default.

6.2.3. Rights and Duties Following Termination. Upon the termination of this Agreement, no Party shall have any further right or obligation hereunder and City shall treat HF

and the Subject Property pursuant to all ordinances, policies, and laws as uniformly applied in the City.

6.3 Institution of Legal Action. Subject to notice of default and opportunity to cure under Section 5.2, in addition to any other rights or remedies, any Party to this Agreement may institute an equitable action to cure, correct, or remedy any default, to enforce any covenants or agreements herein, to enjoin any threatened or attempted violation hereof, or to obtain any other equitable remedies consistent with this Agreement. Any action at law or in equity arising under this Agreement or brought by any Party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of Riverside, State of California, or such other appropriate court in said County, and the Parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court. Service of process on the City shall be made in accordance with California law. Service of process on HF shall be made in any manner permitted by California law and shall be effective whether served inside or outside California. If an action or proceeding is brought by any Party to this Agreement because of default, or to enforce a provision hereof, the prevailing Party shall be entitled to reimbursement of all costs and expenses, including attorneys' fees, incurred in prosecuting such legal action or proceeding. This provision is separate and severable, and shall survive the merger of this Agreement into any judgment on this Agreement. In all instances, the Parties agree that §6.1 also survives and controls the actions of the Parties, and further, that the Parties shall stipulate to the limitation on remedies imposed by §6.1.

#### ARTICLE 7 THIRD PARTY LITIGATION.

7.1 Notice, Defense and Indemnification of Third Party Litigation. The City shall promptly notify HF of any claim, action, or proceeding filed and served against the City to challenge, set aside, alter, void, annul, limit or restrict the approval and continued implementation and enforcement of this Agreement or any Existing Regulation, including but not limited to Project Approvals and CEQA challenges, as they may be filed from time to time by one or more third parties. HF agrees to fully defend, indemnify and hold the City harmless for all costs of defense and/or judgment(s) obtained in any such action or proceeding by reimbursing City, on a monthly basis, for any and all costs. The City shall notify HF within ten (10) calendar days after the City has selected the defense counsel(s). The City and HF agree to cooperate in the defense of such action(s), which includes HF being provided the opportunity to present City its views and recommendations regarding defense counsel or defense strategy. City shall use its best efforts to reasonably manage case costs and seek reasonable attorney rates.

7.2 Effect of Third Party Litigation on Implementation of Agreement. If any third party litigation referred to in Section 7.1 is filed, the City shall continue to comply with the terms of this Agreement unless prohibited from doing so by court order.

7.3 If third party litigation is filed and if HF decides, in its sole and absolute discretion, not to defend the litigation then upon providing written notice of that decision to the City not to defend the litigation this Agreement shall terminate and no Party shall thereafter have any rights or obligations under it. Nothing in this Agreement shall prevent the City, if it decides in its sole and absolute discretion, from defending the litigation at its own sole cost.

## ARTICLE 8 MORTGAGEE AND LENDER PROTECTION.

8.1 The Parties hereto agree that this Agreement shall not prevent or limit HF, in any manner, at HF's sole discretion, from encumbering the Subject Property or any portion thereof or any improvement thereon by any mortgage, deed of trust or other security device securing financing with respect to the Subject Property. The City acknowledges that the lenders providing such financing may require certain Agreement interpretations and modifications and agrees upon request, from time to time, to meet with HF and representatives of such lenders to negotiate in good faith any such request for interpretation or modification but City reserves the right to make the final decisions, pursuant to law of such requests. The City is not bound nor is there any predetermination as to matters requiring public hearing or any adjudicative proceeding. Subject to compliance with applicable laws, the City will not unreasonably withhold its consent to any such requested interpretation or modification provided the City determines such interpretation or modification is consistent with the intent and purposes of this Agreement and not harmful to City in any manner, in City's sole and absolute discretion. HF shall reimburse City for all costs incurred by City in connection with compliance with this Section 8.1 HF represents and warrants that there are presently no financing of any type or nature that encumber the Subject Property and further represents there are no covenants, financings or other burdens that impair City's rights under this Agreement, and further, no third party holds rights to the Subject Property superior to this Agreement as regards to City's rights.

8.2 Any Mortgagee of the Subject Property shall be entitled to the following rights and privileges:

(a) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Subject Property made in good faith and for value, unless otherwise required by law.

(b) The Mortgagee of any mortgage or deed of trust encumbering the Subject Property, or any part thereof, which Mortgagee has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive written notification from the City of any default by HF in the performance of HF's obligations under this Agreement.

(c) If the City timely receives a request from a Mortgagee requesting a copy of any notice of default given to HF under the terms of this Agreement, the City shall make a good faith effort to provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to HF. The Mortgagee shall have the right, but not the obligation, to cure the default during the period that is the longer of (i) the remaining cure period allowed such Party under this Agreement, or (ii) thirty (30) days.

(d) Any Mortgagee who comes into possession of the Subject Property, or any part thereof, pursuant to foreclosure of the mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Subject Property, or part thereof, subject to the terms of this Agreement. Notwithstanding any other provision of this Agreement to the contrary, no Mortgagee shall have an obligation or duty under this Agreement to perform any of HF's obligations or other affirmative covenants of HF hereunder, or to guarantee such performance;

except that (i) to the extent that any covenant to be performed by HF is a condition precedent to the performance of a covenant by the City, the performance thereof shall continue to be a condition precedent to the City's performance hereunder, and (ii) in the event any Mortgagee seeks to develop or use any portion of the Subject Property acquired by such Mortgagee by foreclosure, deed of trust, or deed in lieu of foreclosure, such Mortgagee shall strictly comply with all of the terms, conditions and requirements of this Agreement and the Development Plan applicable to the Subject Property or such part thereof so acquired by the Mortgagee. The successor Mortgagee is hereby on notice that the event of taking possession of the Subject Property allows, but does not require City to terminate this Agreement without cost or liability to City.

8.3 The City shall, at HF's cost paid to City immediately upon City's request, provide publically available information requested by potential lenders in a timely fashion. City shall not be required, but may, provide any information exempt from disclosure under the California Public Records Act. (G.C. 6250 et. seq.)

## ARTICLE 9 INSURANCE.

9.1 Liability Insurance. HF shall maintain an insurance policy protecting against death or injury to person or property for claims arising out of activities on the Subject Property in the amount of at least five million dollars (\$5,000,000) with the City, its officers, officials, employees, agents and representatives named as additional insured. This requirement is in addition to any liability insurance requirement which the City routinely imposes as a condition to the issuance of a building or grading permit. In addition, all such insurance:

(a) shall be primary insurance and not contributory with any other insurance the City or its officers, officials, employees, agents, and representatives may have;

(b) shall contain no special limitations on the scope of protection affordable to the City and its officers, officials, employees, agents, and representatives;

(c) shall be claims made and not dates of occurrence insurance;

(d) shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability;

(e) shall provide that the policy shall not be canceled by the insurer or Owner unless there is a minimum of thirty (30) days prior written notice to the City;

(f) shall be endorsed to include a waiver of subrogation rights against the City or its officers, officials, employees, agents, and representatives; and

(g) shall not require Owner to meet a deductible of more than One Hundred Thousand Dollars (\$100,000) unless approved in writing by the City's Community Development Director in his/her sole and absolute discretion.

9.2 Workers Compensation Insurance. HF shall ensure that any consultant or contractor hired by HF for work on or related to the Subject Property shall carry workers

compensation insurance as required by the State of California. This requirement is in addition to any workers compensation insurance requirement which the City routinely imposes as a condition to the issuance of a building or grading permit.

#### ARTICLE 10 INDEMNITY FOR INJURY TO PERSON OR PROPERTY.

HF agrees to and shall indemnify, defend, and hold harmless the City and the City's officers, officials, members, employees, agents, and representatives, from and against any and all claims, liabilities, awards, settlements, agreements, damages, and losses, including without limitation reasonable attorneys' fees and litigation expenses, including court and expert witness fees (collectively, "Claims"), with respect to any action brought due to the death or personal injury of any person; or physical damage to any person's real or personal property, caused by the construction of improvements by, or construction-related activities of, HF or HF's employees, agents, representatives, servants, invitees, consultants, contractors, or subcontractors (collectively, "HF's Representatives") on the Subject Property, or for any construction defects in any improvements constructed by HF or HF's Representatives on the Subject Property or for any other work related to this Agreement. The foregoing indemnification provision shall survive the termination of this Agreement.

Notwithstanding the above, HF agrees to and shall indemnify, defend, and hold harmless the City and the City's officers, officials, members, employees, agents and representatives, from and against any and all claims, liabilities, damages, and losses, including without limitation reasonable attorneys' fees and litigation expenses, including court and expert witness with respect to any action brought to challenge the Project's entitlement approvals and/or the EIR.

#### ARTICLE 11 MISCELLANEOUS PROVISIONS.

11.1 Recordation of Agreement. The City Clerk shall have this Agreement recorded with the County Recorder within the period required by Government Code section 65868.5. Any amendments to this Agreement approved by the Parties, and any cancellation hereof, shall be similarly recorded. A failure to record this Agreement in a timely fashion shall not affect its validity in any manner.

11.2 Entire Agreement. This Agreement sets forth and contains the entire understanding and agreement of the Parties with respect to the subject matter set forth herein, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement except as to future and further agreements and the exercise of the Existing Regulations.

11.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the invalid provision shall be deemed to be severable from the remaining provisions contained within the Agreement. The Parties hereby state and acknowledge they would have adopted each provision contained within this Agreement notwithstanding the presence of an invalid provision.

11.4 Interpretation and Governing Law. This Agreement and any dispute arising hereunder shall be governed and interpreted in accordance with the laws of the State of California. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the Parties, and the rule of construction to the effect that ambiguities are to be resolved against both the drafting parties or in favor of the City or HF shall not be employed in interpreting this Agreement, all Parties having been represented by counsel in the negotiation and preparation, adoption, application and execution hereof.

11.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

11.6 Singular and Plural. As used herein, the singular of any word includes the plural.

11.7 Waiver. Failure of a Party to insist upon the strict performance of any of the provisions of this Agreement by the other Party, or the failure by a Party to exercise its rights upon the default of the other Party, shall not constitute a waiver of such Party's right to insist and demand strict compliance by the other Party with the terms of this Agreement thereafter.

11.8 No Third Party Beneficiaries. This Agreement is made and entered into for the sole protection and benefit for the Parties and their successors and assigns. No other person shall have any right of action based upon any provision of this Agreement.

11.9 Force Majeure. Neither Party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by earthquakes, acts of God, fires, wars, riots or similar hostilities, strikes and other labor difficulties beyond the Party's control (including the Party's employment force), economic or environmental/physical conditions (such as lack of utilities) beyond HF's control which make Development uneconomic or infeasible, other causes beyond the Party's reasonable control or court actions (such as restraining orders or injunctions). If any such events shall occur, the Term of this Agreement and the time for performance shall be extended for the duration of each such event, provided that the Term shall not be extended under any circumstances for more than three (3) years regardless of the number or length of individual extensions and further, in no instance, shall be for a duration longer than the circumstance serving to cause the delay. Notwithstanding the foregoing, if construction ceases after commencement, but prior to the issuance of Certificates of Occupancy, HF, at its sole cost, shall secure, preserve and prevent any nuisance conditions from occurring on the Subject Property.

11.10 Mutual Covenants. The covenants contained herein are mutual covenants and also constitute conditions to the concurrent or subsequent performance by the Party benefited thereby of the covenants to be performed hereunder by such benefited Party.

11.11 Counterparts. This Agreement may be executed by the Parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the Parties had executed the same instrument.

11.12 Covenant Not To Sue Each Other Regarding the Construction of the Agreement. The Parties to this Agreement, and each of them, agree that this Agreement and each term hereof

are legal, valid, binding, and enforceable. The Parties to this Agreement, and each of them, hereby covenant and agree that each of them will not commence, maintain, or prosecute any claim, demand, cause of action, suit, or other proceeding against any other Party to this Agreement, in law or in equity, or based on an allegation, or assert in any such action, that this Agreement or any term hereof is void, invalid, or unenforceable.

11.13 Project as a Private Undertaking. It is specifically understood and agreed by and between the Parties that the Development of the Subject Project is a private development, that neither Party is acting as the agent of the other in any respect hereunder, and that each Party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between the City and HF is that of a government entity regulating the Development of private property, on the one hand, and the holder of legal or equitable title to such property, on the other hand.

11.14 Further Actions and Instruments. Each of the Parties shall cooperate in good faith with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and the satisfaction of the conditions of this Agreement. Upon the request of either Party at any time, the other Party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or to evidence or consummate the transactions contemplated by this Agreement.

11.15 Amendments in Writing/Cooperation. This Agreement may be amended only by written consent of both Parties specifically approving the amendment and in accordance with the Government Code section 65868. The Parties shall cooperate in good faith with respect to any amendment proposed in order to clarify the intent and application of this Agreement, and shall treat any such proposal on its own merits, and not as a basis for the introduction of unrelated matters. Subject to the provisions of Moreno Valley Municipal Code Section 9.02.110E, minor, non-material modifications which are clerical or strictly technical corrections which do not affect the substantive terms and conditions of the Agreement may be approved by the Community Development Director in consultation with the City Attorney as an operating Memorandum. City, upon its request, may be compensated for its costs reasonably incurred in reviewing and processing any request under this section, including costs arising from third parties engaged by the City in furtherance of any request.

11.16 Operating Memoranda. The Parties acknowledge and agree that the provisions of this Agreement require a close degree of cooperation between the City and HF, and Development of the Subject Property hereunder may demonstrate that refinements or clarifications are appropriate with respect to the details of performance of the City and HF. If and when, from time to time, during the Term of this Agreement, the City and HF agree that such refinements or clarifications are necessary or appropriate, they will effectuate such refinements or clarifications through operating memoranda approved by the City and HF, which, after execution, will be attached to this Agreement as addenda and become a part hereof, and may be further refined or clarified from time to time as necessary with future approval by the City and HF. The Community Development Director, in consultation with the City Attorney,



will be authorized to make the determination whether a requested refinement or clarification and corresponding operating memoranda may require a public hearing and approval by the City Council. Notwithstanding the foregoing, the City staff or contract staff may decline to execute any operating Memoranda and may instead submit the matter to the City Council for its consideration and action.

11.17 Corporate Authority. The person(s) executing this Agreement on behalf of each of the Parties hereto represent and warrant that (i) such Party are duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said Party, (iii) without representing and warranting whether or not the Agreement is lawful by so executing this Agreement, such Party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other agreement to which such Party is bound.

11.18 Notices. All notices under this Agreement shall be effective upon any of the following: personal delivery, via e-mail, via facsimile so long as the sender receives confirmation of successful transmission from the sending machine, or three (3) business days after deposit in the United States mail, registered, certified, postage fully prepaid and addressed to the respective Parties as set forth below or as to such other address as the Parties may from time to time designate in writing:

To City: City of Moreno Valley  
14177 Frederick Street  
Moreno Valley, California 92552  
Attn: City Manager  
Telephone: (951) 413-3000  
Facsimile: (951) 413-3210  
E-mail address: cmoffice@moval.org

Copies to: City Attorney  
  
\_\_\_\_\_  
\_\_\_\_\_, California  
Telephone: (951)413-3036  
Facsimile: (413) 413-3034  
E-mail address: cityelerk@moval.org

To HF: Iddo Benzeevi  
President and Chief Executive Officer  
Highland Fairview Operating Co.  
14225 Corporate Way  
Moreno Valley, CA 92553  
Telephone: (951) 867-5327  
Facsimile: (951) 867-5328  
E-mail Address: ibenzeevi@highlandfairview.com

Copy to: Kenneth B. Bley, Esq.  
Cox, Castle & Nicholson LLP

Attachment: Development Agreement (1710) : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

2029 Century Park East, Suite 2100  
Los Angeles, CA 90067  
Telephone: (310) 284-2231  
Facsimile: (310) 284-2100  
E-mail address: kbley@coxeastle.com

11.19 Nonliability of City Officials. No officer, official, member, employee, contractor, attorney, agent, or representatives of the City shall be liable for any amounts due hereunder, and no judgment or execution thereon entered in any action hereon shall be personally enforced against any such officer, official, member, employee, agent, or representative.

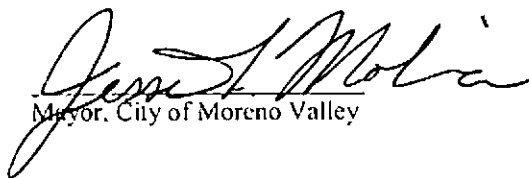
11.20 No Brokers. The City and HF represent and warrant to the other that neither has employed any broker and/or finder to represent its interest in this transaction. Each Party agrees to indemnify and hold the other free and harmless from and against any and all liability, loss, cost, or expense (including court costs and reasonable attorney's fees) in any manner connected with a claim asserted by any individual or entity for any commission or finder's fee in connection with this Agreement arising out of agreements by the indemnifying Party to pay any commission or finder's fee.

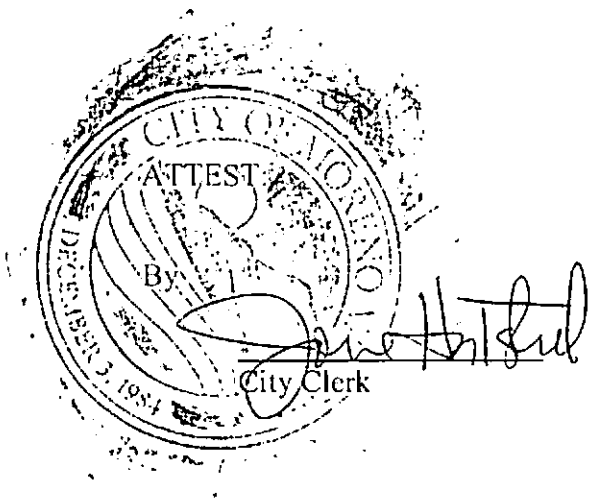
IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

City:

CITY OF MORENO VALLEY

By

  
Mayor, City of Moreno Valley



APPROVED AS TO FORM:

By   
City Attorney

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING


HF:  
HF PROPERTIES,  
a California general partnership

By: 

Name: Iddo Benzeevi

Its: President

SUNNYMEAD PROPERTIES,  
a Delaware general partnership

By: 

Name: Iddo Benzeevi

Its: President

THEODORE PROPERTIES PARTNERS,  
a Delaware general partnership

By: 

Name: Iddo Benzeevi

Its: President

13451 THEODORE, LLC,  
a California limited liability company


By: 

Name: Iddo Benzeevi

Its: Sole member

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

HL PROPERTY PARTNERS,  
a Delaware general partnership

By: 

Name: Iddo Benzeevi

Its: President

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

### ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Riverside

On Sept 3, 2015 before me, Mitzi Turner, Notary Public  
(here insert name and title of the officer)  
personally appeared Ido Benzeevi

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Mitzi Turner

(Seal)



Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

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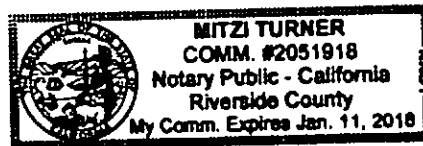
who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ ~~(is/are)~~ subscribed to the within instrument and acknowledged to me that ~~he/she/they~~ executed the same in ~~his/her/their~~ authorized capacity~~(ies)~~, and that by ~~his/her/their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.

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who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is are subscribed to the within instrument and acknowledged to me that he she/they executed the same in his her/their authorized capacity(ies), and that by his her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

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Signature Mitzi Turner

(Seal)



Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

EXHIBIT "A-1"  
LEGAL DESCRIPTION

THOSE CERTAIN PARCELS OF LAND IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

(APN: 478-220-01)

LOTS 1, 2 AND 7 IN BLOCK 59 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 488-350-3, 4)

LOTS 5 AND 6 IN BLOCK 55 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-220-7)

LOT 4 IN BLOCK 60 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN: 423-250-2, 7, 10, 11, 18)

PARCELS 1, 2 AND 10 OF PARCEL MAP 17905, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 114, PAGES 70 THROUGH 83, INCLUSIVE OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN: 422-070-18, 20, 22)

THAT PORTION OF THE NORTH HALF OF THE NORTH HALF OF FRACTION 7, TOWNSHIP 3 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO OFFICIAL PLAT THEREOF, WHICH LIES NORTH OF THE SOUTH LINE OF LOTS 1, 2, 3 AND 4 IN BLOCK 57 AND WHICH LIES NORTH OF THE SOUTH LINE OF LOT 1 AND ITS EASTERLY EXTENSION AND LOT 2 IN BLOCK 58 AS LOTS AND BLOCKS ARE SHOWN ON MAP 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY RECORDED IN BOOK 11, PAGE 10 OF MAPS, SAN BERNARDINO RECORDS.

EXCEPT THAT PORTION LYING WEST OF THE EAST LINE OF PARCELS 2 AND 3 OF PARCEL MAP NO. 8113, ON FILE IN BOOK 28, PAGE 38 OF PARCEL MAPS, RIVERSIDE COUNTY RECORDS.

ALSO EXCEPT THAT PORTION WHICH LIES NORTHEAST OF THE WESTERLY LINE OF STATE HIGHWAY ROUTE 194, 100.00 FEET IN WIDTH AS DESCRIBED IN THE DEEDS RECORDED OCTOBER 27, 1936 AS FILE NOS. 1498 AND 1499 IN BOOK 300, PAGES 344 AND 345 OF OFFICIAL RECORDS, RIVERSIDE COUNTY RECORDS.

ALSO EXCEPT ONE-HALF OF ALL GAS, OIL AND MINERAL RIGHTS 500.00 FEET BELOW THE SURFACE AS RESERVED IN THE DEEDS RECORDED SEPTEMBER 01, 1960 AS FILE NOS. 77097, 77098, 77099 AND 77100 ALL OF OFFICIAL RECORDS.

TOGETHER WITH:

(APN: 478-220-17, 18, 19, 20, 21, 22, 23, 24)

LOTS 1 THROUGH 8, INCLUSIVE, IN BLOCK 81 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-220-15, 16, 25, 26, ,28)

LOTS 1, 2, 3, 4, 5, 6, AND 8 IN BLOCK 82 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

EXCEPTING FROM LOT 7, ONE HALF OF ALL OIL, GAS, MINERAL AND SUBSURFACE RIGHTS 500 FEET OR MORE BELOW THE SURFACE, BUT WITHOUT ANY RIGHTS WHATSOEVER TO THE USE OF THE SURFACE OR THE SUBSURFACE AREA OF SAID LAND TO A DEPTH OF 500 FEET FROM SAID SURFACE FOR ANY PURPOSE INCIDENTAL TO THE OWNERSHIP OF SAID SUBSTANCES, AS RESERVED TO MARY B. TRAUTWEIN, A WIDOW, ET AL. BY DEED RECORDED MARCH 6, 1964 AS INSTRUMENT NO. 28654 OF OFFICIAL RECORDS

TOGETHER WITH:

(APN: 478-230-7)

LOTS 1 THROUGH 8 IN BLOCK 87 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11 PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-230-1, 2, 3, 4, 5, 6)

LOTS 1 THROUGH 4, 7 AND 8 IN BLOCK 88 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11,

PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-230-19-0, 20)

LOTS 2 AND 7 IN BLOCK 109 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

EXCEPT FROM SAID LOT 7 BLOCK 109 THAT PORTION CONVEYED TO THE COUNTY OF RIVERSIDE IN DEED RECORDED JULY 24, 1973 AS FILE NO. 97183 OF OFFICIAL RECORDS.

TOGETHER WITH:

(APN: 478-230-11, 14)

LOTS 1 AND 8 IN BLOCK 109 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-230-9, 10)

LOTS 3 AND 4 IN BLOCK 110 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA AS PER MAP RECORDED IN BOOK 11 PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-210-54-9)

LOTS 1 THROUGH 4, BLOCK 1 OF THE TOWN OF MORENO, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 19, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH THE NORTHERLY 10 FEET OF THAT PORTION OF BAY AVENUE, VACATED BY RESOLUTION RECORDED JANUARY 10, 1974 AS FILE NO. 4002 OF OFFICIAL RECORDS, LYING BETWEEN THE SOUTHERLY PROLONGATION OF THE EAST LINE OF RUSSELL STREET AND THE SOUTHERLY PROLONGATION OF EAST LINE OF LOT 4 IN BOOK 1 AS SHOWN ON AS MAP OF TOWN OF MORENO.

TOGETHER WITH:

(APN: 478-210-55-0)

LOTS 1 THROUGH 4, BLOCK 2 OF TOWN OF MORENO, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN

BOOK 11, PAGE(S) 19, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH THE NORTHERLY 10 FEET OF THAT PORTION OF BAY AVENUE, VACATED BY RESOLUTION RECORDED JANUARY 10, 1974 AS FILE NO. 4002 OF OFFICIAL RECORDS, LYING BETWEEN THE SOUTHERLY PROLONGATION OF THE EAST LINE OF REDLANDS BOULEVARD AND THE SOUTHERLY PROLONGATION OF THE WEST LINE OF RUSSEL STREET AS SHOWN ON SAID MAP OF TOWN OF MORENO.

TOGETHER WITH:

(APN: 478-220-4, 5, 6, 10, 11)

LOTS 1, 2, 3, 7 AND 8 IN BLOCK 60 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 488-350-8, 9, 10)

LOTS 6, 7 AND 8 IN BLOCK 56 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-220-2, 3, 12, 13)

LOTS 3, 4, 5 AND 6 IN BLOCK 59 AS SHOWN BY MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 488-350-5)

LOT 7 IN BLOCK 55 OF MAP NO. 1, OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, TOGETHER WITH THAT PORTION OF EUCALYPTUS AVENUE, WITHIN SAID BLOCK LYING SOUTHERLY AND ADJACENT TO SAID LOT 7.

TOGETHER WITH:

(APN: 488-350-6)

LOT 8 IN BLOCK 55 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, TOGETHER WITH THOSE PORTIONS

OF EUCALYPTUS AVENUE AND SINCLAIR STREET, WITH SAID BLOCK LYING SOUTHERLY, EASTERLY AND ADJACENT TO SAID LOT 8.

TOGETHER WITH:

(APN: 488-350-7)

LOT 5 IN BLOCK 56 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 423-250-8, 9, 12 AND 423-260-10)

PARCELS 3 THROUGH 5, AND 11 OF PARCEL MAP 17905, IN THE CITY OF, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 114, PAGE(S) 70 THROUGH 83, INCLUSIVE OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN: 423-260-3, 4, 5, 7, 8, 9 AND 423-310-1, 2)

PARCELS 6 THROUGH 9 AND 14 THROUGH 17 OF PARCEL MAP 17905, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 114, PAGE(S) 70 THROUGH 83, INCLUSIVE OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN: PORTION 488-350-15)

ALL THOSE PORTIONS OF LOTS 1, 2, 3 AND 4 OF BLOCK 55, MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP ON FILE IN BOOK 11 PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA LYING SOUTHERLY OF PARCEL MAP 35629, FILED IN MAP BOOK 231 PAGES 77 THROUGH 82 OF PARCEL MAPS.

EXCEPTING THEREFROM THAT PORTIONS OF LOTS 3 AND 4 OF BLOCK 34 CONVEYED TO THE STATE OF CALIFORNIA IN DEED RECORDED MAY 25, 1962 AS INSTRUMENT NO. 48967 IN BOOK 3147 PAGE 181 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

ALSO EXCEPTING THEREFROM ONE HALF OF ALL OIL, GAS, MINERAL AND SUBSURFACE RIGHTS 500 FEET OR MORE BELOW THE SURFACE, BUT WITHOUT ANY RIGHTS WHATSOEVER TO THE USE OF THE SURFACE OR THE SUBSURFACE AREA OF SAID LAND TO A DEPTH OF 500 FEET FROM SAID SURFACE FOR ANY PURPOSE INCIDENTAL TO THE OWNERSHIP OF SAID SUBSTANCES, AS RESERVED IN DEED RECORDED JULY 12, 1961 AS INSTRUMENT NO. 59232 IN BOOK 2942 PAGE 318 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA. SAID EXCEPTION AFFECTS LOTS 1, 2 AND 4 OF SAID BLOCK 55.

TOGETHER WITH:

(APN 478-240-011-3, 017-9, 026-7, 027-8, 030-0)  
 LOT(S) 3, 4, 5, 6 AND 7 IN BLOCK 136, MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH THOSE PORTIONS OF BRODIAEA AVENUE, SINCLAIRE STREET AND CACTUS AVENUE, WITHIN SAID BLOCK, LYING WESTERLY OF THE EAST LINE OF SAID LOTS PROLONGED NORTHERLY AND SOUTHERLY, THAT WOULD PASS WITH A CONVEYANCE OF SAID LOTS.

TOGETHER WITH:

(APN 478-240-028-9)  
 LOT 1 IN BLOCK 136 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, TOGETHER WITH THOSE PORTIONS OF BRODIAEA AVENUE AND THEODORE STREET, WITHIN SAID BLOCK, LYING NORTHERLY OF THE SOUTH LINE OF SAID LOT PROLONGED EASTERLY AND EASTERLY OF THE EAST WEST LINE OF SAID LOT PROLONGED NORTHERLY.

TOGETHER WITH:

(APN 478-240-019-1)  
 LOT 8 IN BLOCK 136 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, TOGETHER WITH THOSE PORTIONS OF CACTUS AVENUE AND THEODORE STREET, WITHIN SAID BLOCK, LYING EASTERLY OF THE WEST LINE OF SAID LOT PROLONGED SOUTHERLY AND SOUTHERLY OF THE NORTH LINE OF SAID LOT PROLONGED EASTERLY.

TOGETHER WITH:

(APN 478-240-025-6)  
 LOT 8 IN BLOCK 113 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, TOGETHER WITH THOSE PORTIONS OF BRODIAEA AVENUE AND THEODORE STREET, WITHIN SAID BLOCK, LYING EASTERLY OF THE WEST LINE OF SAID LOT PROLONGED SOUTHERLY AND SOUTHERLY OF THE NORTH LINE OF SAID LOT PROLONGED EASTERLY.

TOGETHER WITH:

(APN 478-240-29-0)

LOT 2 IN BLOCK 136 OF MAP NO.1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, CALIFORNIA, TOGETHER WITH THOSE PORTIONS OF BRODIAEA AVENUE, THEODORE STREET, CACTUS AVENUE, AND SINCLAIR STREET WHICH WOULD PASS BY OPERATION OF LAW.

TOGETHER WITH:

(APN 478-240-24-5)

LOT 7 IN BLOCK 113 OF MAP NO. 1, BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, TOGETHER WITH THOSE PORTIONS OF BRODIAEA AVENUE AND THEODORE STREET WHICH WOULD PASS BY OPERATION OF LAW.

TOGETHER WITH:

(APN 478-240-005-8, 008-1)

LOTS 3 AND 6, BLOCK 113, MAP NO. 1 BEAR VALLEY & ALESSANDRO DEVELOPMENT COMPANY., IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, CALIFORNIA.

TOGETHER WITH:

(APN 422-070-033-1)

PARCEL 4 OF PARCEL MAP 8113, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 28, PAGE 38 OF PARCEL MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN 422-130-002-8, 003-9)

THE EASTERLY 80 ACRES OF THAT PORTION OF FRACTION SECTION 8, TOWNSHIP 3 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY UNITED STATES GOVERNMENT SURVEY, LOCATED SOUTHWESTERLY OF THE SOUTHWESTERLY LINE OF THE PORTION OF SAID SECTION GRANTED TO THE STATE OF CALIFORNIA FOR HIGHWAY PURPOSES BY DEED RECORDED MARCH 17, 1937 IN BOOK 318. PAGE 57 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA;

EXCEPT FROM GOVERNMENT LOTS 3, 4, 5, 6 AND 9, THE SOUTH 30 FEET THEREOF, AS GRANTED TO RIVERSIDE COUNTY FOR ROAD PURPOSES BY DEED RECORDED JUNE 23, 1916 IN BOOK 433, PAGE 192 OF DEEDS, RECORDS OF RIVERSIDE COUNTY, CALIFORNIA, AND AS SHOWN ON LICENSED SURVEYOR'S MAP ON FILE IN BOOK 5, PAGE 44 OF RECORDS OF SURVEY. RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.



THE WESTERLY LINE OF SAID 80 ACRES BEING PARALLEL WITH THE WESTERLY LINE OF SAID SECTION 8. (TO BE ANNEXED)

TOGETHER WITH:

(APN 422-130-001, 422-110-001)

THAT PORTION OF FRACTION SECTION 8, TOWNSHIP 3 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORING TO THE OFFICIAL PLAT THEREOF, LYING SOUTHWESTERLY OF THE SOUTHWESTERLY LINE OF THE PORTION OF SAID LAND DESCRIBED IN DEED TO THE STATE OF CALIFORNIA RECORDED MARCH 17, 1937 IN BOOK 318, PAGE 57 OF OFFICIAL RECORDS OF RIVERSIDE COUNTY, CALIFORNIA.

EXCEPT THE EASTERLY 80 ACRES THEREOF, THE WESTERLY LINE OF SAID 80 ACRES BEING PARALLEL WITH THE WESTERLY LINE OF SAID SECTION.

ALSO EXCEPT THE SOUTH 30.00 FEET AS DESCRIBED IN DEED TO THE COUNTY OF RIVERSIDE RECORDED JUNE 23, 1916 IN BOOK 433, PAGE 192 OF DEEDS.

ALSO EXCEPTING THEREFROM ANY PORTION THAT LIES WITHIN PARCEL 3 OF PARCEL MAP 16950 AS PER MAP ON FILE IN BOOK 99 OF PARCEL MAPS, AT PAGES 34 THROUGH 42, RIVERSIDE COUNTY RECORDS.

ALSO EXCEPT ONE HALF OF ALL GAS, OIL, AND MINERAL RIGHTS 500.00 FEET FROM BELOW THE SURFACE AS RESERVED BY MARIE B. ERRAMUSPE, A WIDOW, BY DEED RECORDED SEPTEMER 01, 1960 AS INSTRUMENT NO. 77098, OFFICIAL RECORDS.

TOGETHER WITH:

(APN 422-070-6, 10, 17, 19, 21, AND 422-080-01, 02, 03, 04)

LOTS 1 THROUGH 4 BOTH INCLUSIVE, IN BLOCK 111; LOTS 1 THROUGH 8 BOTH INCLUSIVE, IN BLOCK 83; LOTS 1 THROUGH 8 BOTH INCLUSIVE, IN BLOCK 84; LOTS 1 THROUGH 8 BOTH INCLUSIVE, IN BLOCK 85; LOTS 1 THROUGH 8 BOTH INCLUSIVE, IN BLOCK 86; LOTS 5 THROUGH 8 BOTH INCLUSIVE, IN BLOCK 57; LOTS 5, 6, 7 AND 8 IN BLOCK 58 AND LOTS 1THROUGH 4 BOTH INCLUSIVE, IN BLOCK 112, Of MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CAUFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, SAN BERNARDINO COUNTY RECORDER, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH THOSE PORTIONS OF THEODORE STREET, ULYSSES STREET, VIRGINIA STREET, DRACAEA AVENUE, COTTONWOOD AVENUE, BAY AVENUE AND ALESSANDRO BOULEVARD ADJOINING SAID LOTS WITHIN SAID BLOCKS.

TOGETHER WITH THAT PORTION OF SECTION 7, TOWNSHIP 3 SOUTH, RANGE 2 WEST, SAN BERNARDINO MERIDIAN, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, ACCORDING TO THE OFFICIAL PLAT THEREOF, WHICH LIES EAST OF THE EAST LINE OF SAID BLOCKS 57, 84, 85 AND 112.

EXCEPT THAT PORTION OF BLOCK 58 LYING WITHIN PARCEL. MAP 8113 AS PER MAP RECORDED IN BOOK 28, PAGE 38 OF PARCEL MAPS, RECORDS OF RIVERSIDE COUNTY.

ALSO EXCEPT THAT PORTION LYING NORTHEAST OF THE SOUTHWEST LINE OF THE LAND DESCRIBED IN DEEDS TO THE COUNTY OF RIVERSIDE RECORDED OCTOBER 27, 1936 IN BOOK 300, PAGES 344 AND 345 OF OFFICIAL RECORDS, RECORDED JULY 09, 1936 IN BOOK 287, PAGE 315 AND AUGUST 07, 1936 IN BOOK 292, PAGE 85, AND MARCH 17, 1937 IN BOOK 318, PAGE 57, ALL OF OFFICIAL RECORDS.

ALSO EXCEPT PORTION LYING SOUTHERLY OF THE NORTH LINE OF THE LAND DESCRIBED IN DEED TO THE COUNTY OF RIVERSIDE RECORDED DECEMBER 13, 1915 IN BOOK 432, PAGE 254 OF DEEDS.

ALSO EXCEPT THAT PORTION DESCRIBED IN DEED RECORDED NOVEMBER 27, 1934 IN BOOK 205, PAGE 29 OF OFFICIAL RECORDS AND OCTOBER 23, 1934 IN BOOK 199, PAGE 97 OF OFFICIAL RECORDS.

ALSO EXCEPT ONE-HALF OF ALL GAS, OIL AND MINERALS 500.00 FEET FROM BELOW THE SURFACE AS RESERVED IN DEED RECORDED SEPTEMBER 01, 1960 AS INSTRUMENT NOS. 77097, 77098, 77099, 77100 AND 77101, ALL OF OFFICIAL RECORDS.

TOGETHER WITH:

(APN 478-220-029-8)

PARCEL(S) 1 OF PARCEL MAP NO. 9880, AS PER PLAT RECORDED IN BOOK 47 OF PARCEL MAPS, PAGE(S) 25, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

TOGETHER WITH:

(APN 488-350-019)

LOT 1 IN BLOCK 56 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT CO., AS SHOWN BY MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, RECORDS OF SAN BERNARDINO COUNTY, CALIFORNIA, LYING SOUTHERLY OF PARCEL MAP 35629, FILED IN MAP BOOK 231 PAGES 77 THROUGH 82 OF PARCEL MAPS.

TOGETHER WITH THOSE PORTIONS OF FIR AVENUE AND THEODORE STREET WITHIN SAID BLOCK LYING EAST OF THE WEST LINE OF SAID LOT PROLONGED NORTHERLY AND NORTH OF THE SOUTH LINE OF SAID LOT PROLONGED EASTERLY.

TOGETHER WITH:

(APN 488-350-021)

LOT 2 IN BLOCK 56 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, LYING SOUTHERLY OF PARCEL MAP 35629, FILED IN MAP BOOK 231 PAGES 77 THROUGH 82 OF PARCEL MAPS.

TOGETHER WITH:

(APN 488-350-023)

LOT 3 IN BLOCK 56 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, SATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, LYING SOUTHERLY OF PARCEL MAP 35629, FILED IN MAP BOOK 231 PAGES 77 THROUGH 82 OF PARCEL MAPS.

TOGETHER WITH:

(APN 488-350-025)

LOT 4 IN BLOCK 56 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY, LYING SOUTHERLY OF PARCEL MAP 35629, FILED IN MAP BOOK 231 PAGES 77 THROUGH 82 OF PARCEL MAPS.

TOGETHER WITH THOSE PORTIONS OF SINCLAIR STREET WITHIN SAID BLOCK LYING WESTERLY AND NORTHERLY AND ADJACENT TO SAID LOT 4.

TOGETHER WITH:

(APN 478-240-006,007)

LOTS 1 AND 2 IN BLOCK 113 OF MAP NO. 1 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, IN THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS SHOWN BY MAP ON FILE IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

(APN: 478-220-014)

LOT 8 IN BLOCK 59 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE 10 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

TOGETHER WITH:

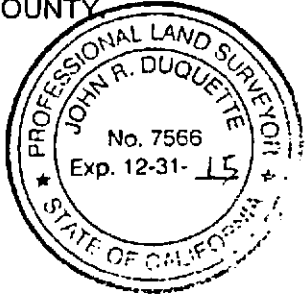
(APN: 478-220-27)

LOT 7 IN BLOCK 82 OF BEAR VALLEY AND ALESSANDRO DEVELOPMENT COMPANY, AS SHOWN BY MAP NO. 1, IN THE CITY OF MORENO VALLEY, COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 11, PAGE(S) 10, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAN BERNARDINO COUNTY.

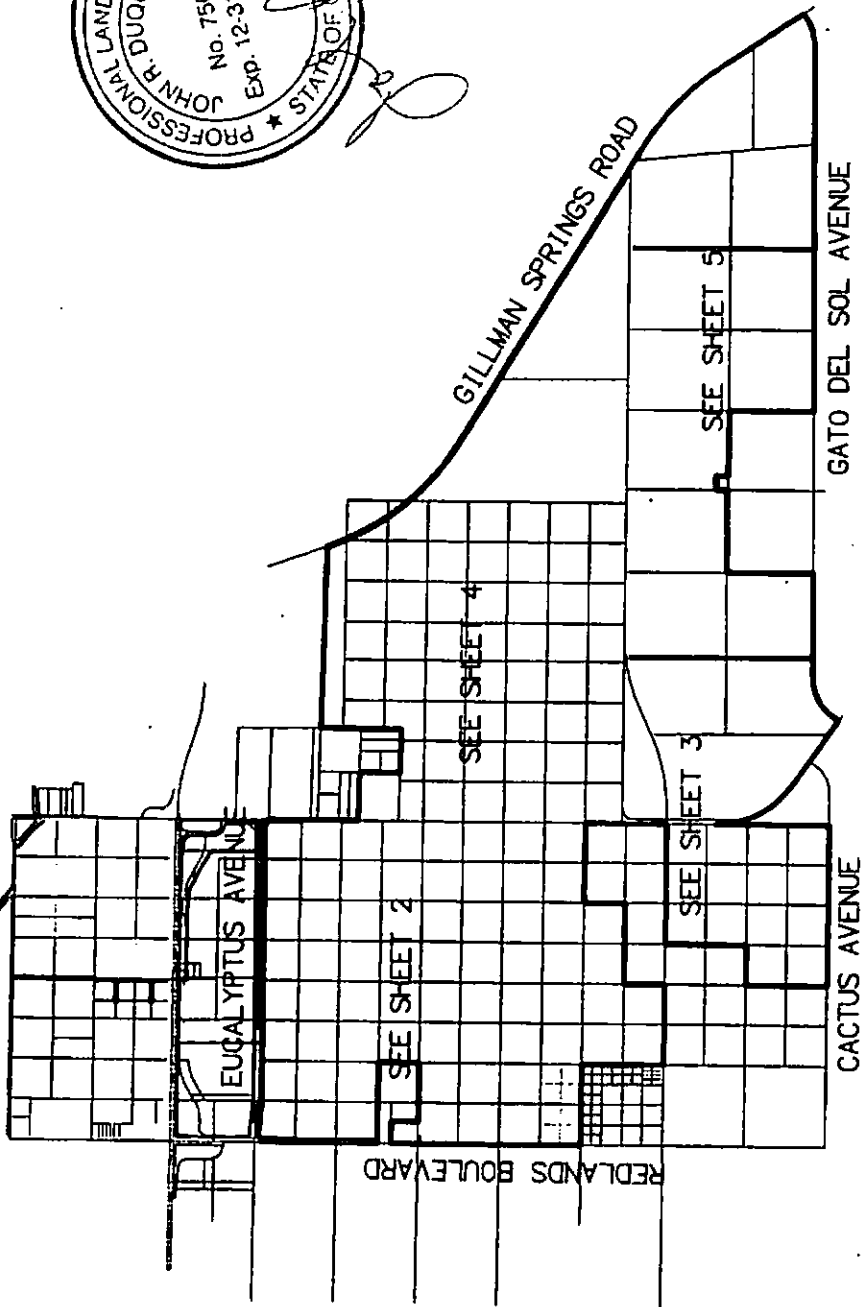
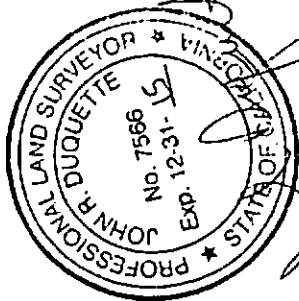
THIS DESCRIPTION WAS PREPARED BY ME OR UNDER MY DIRECTION.

*John R. Duquette*  
\_\_\_\_\_  
JOHN R. DUQUETTE, PLS 7566

DATE: 5/27/15



Attachment: Development Agreement (1710) : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING



**RBF**  
 CONSULTING  
 PLANNING • DESIGN • CONSTRUCTION  
 4080 COUNTY CENTER DRIVE, SUITE 00  
 TEMECULA, CALIFORNIA 92591-0022  
 951.679.8042 • FAX 951.679.7240 • www.RBF.com

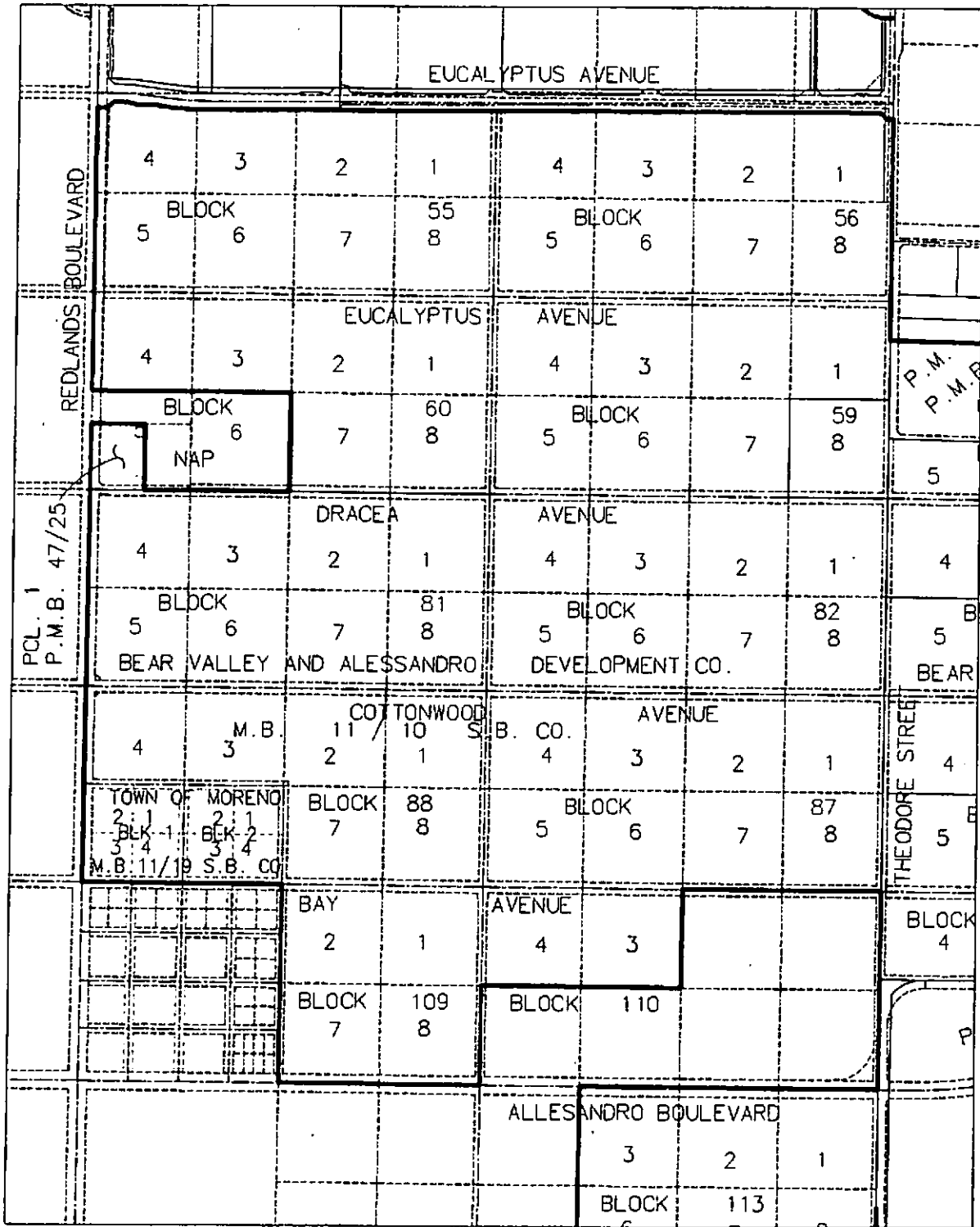
SHEET 1 OF 5 SHEETS

DATE	SCALE	JOB NO.
MAY 27, 2015	1" = 3000'	10-105750

EXHIBIT "A-2"

\\p01a1\external\cadd\105750\105750.dwg 15/05/2015 10:33 am

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING



SEE SHEET 4

SEE SHEET 3

# EXHIBIT "A-2"

SHEET 2 OF 5 SHEETS

DATE	SCALE	JOB NO.
MAY 27, 2015	1"=1000'	10-105750

DATE	SCALE	JOB NO.
MAY 27, 2015	1"=1000'	10-105750

**RBF** CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

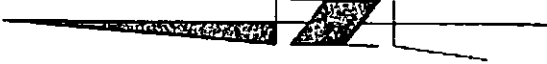
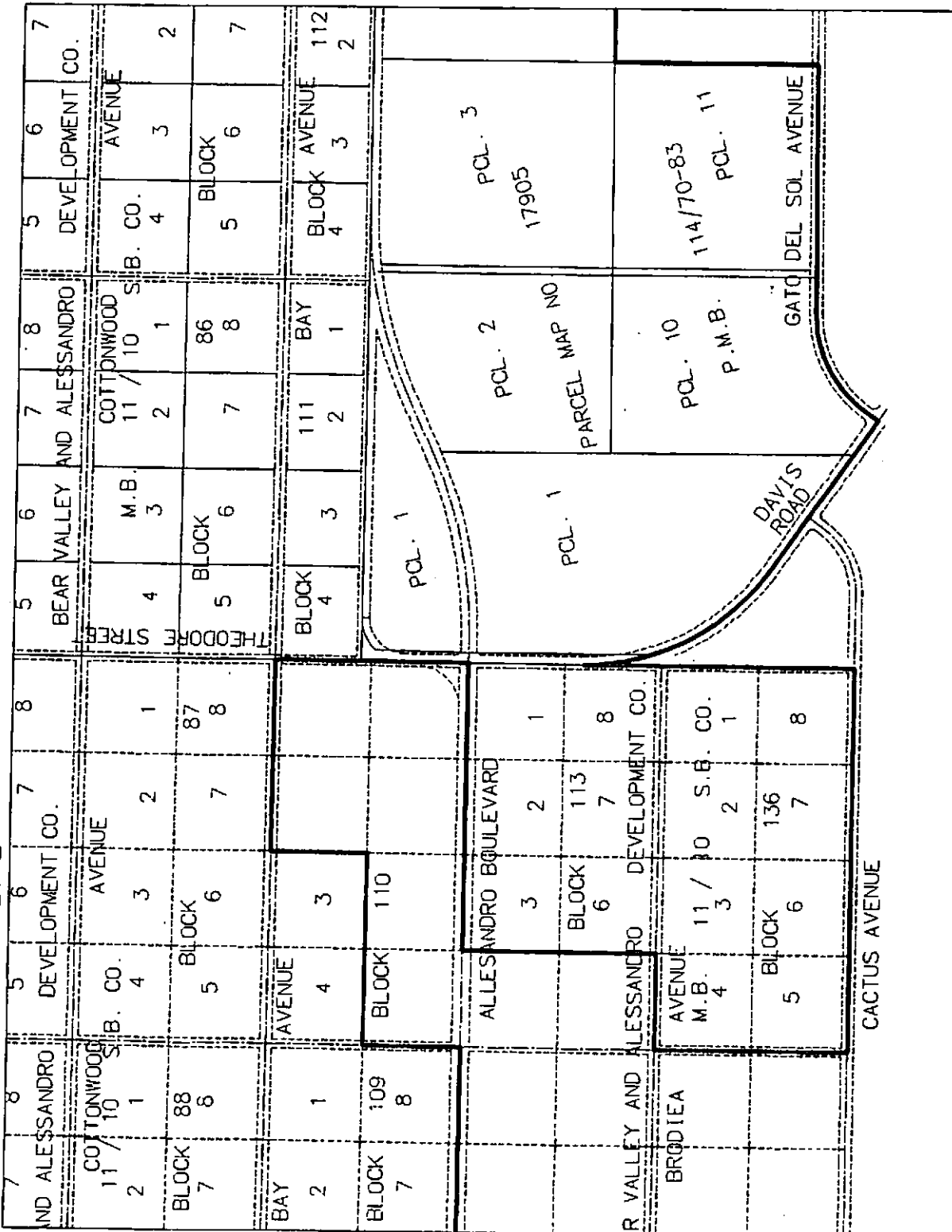
4060 COUNTY CENTER DRIVE, SUITE 100  
 TEMECULA, CALIFORNIA 92591-6022  
 9516768042 • FAX 9516767240 • www.RBF.com

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

SEE SHEET 2

SEE SHEET 4

SEE SHEET 5



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TEJECULA, CALIFORNIA 92090-8022  
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**SHEET 3 OF 5 SHEETS**  
JOB NO. 10-105750

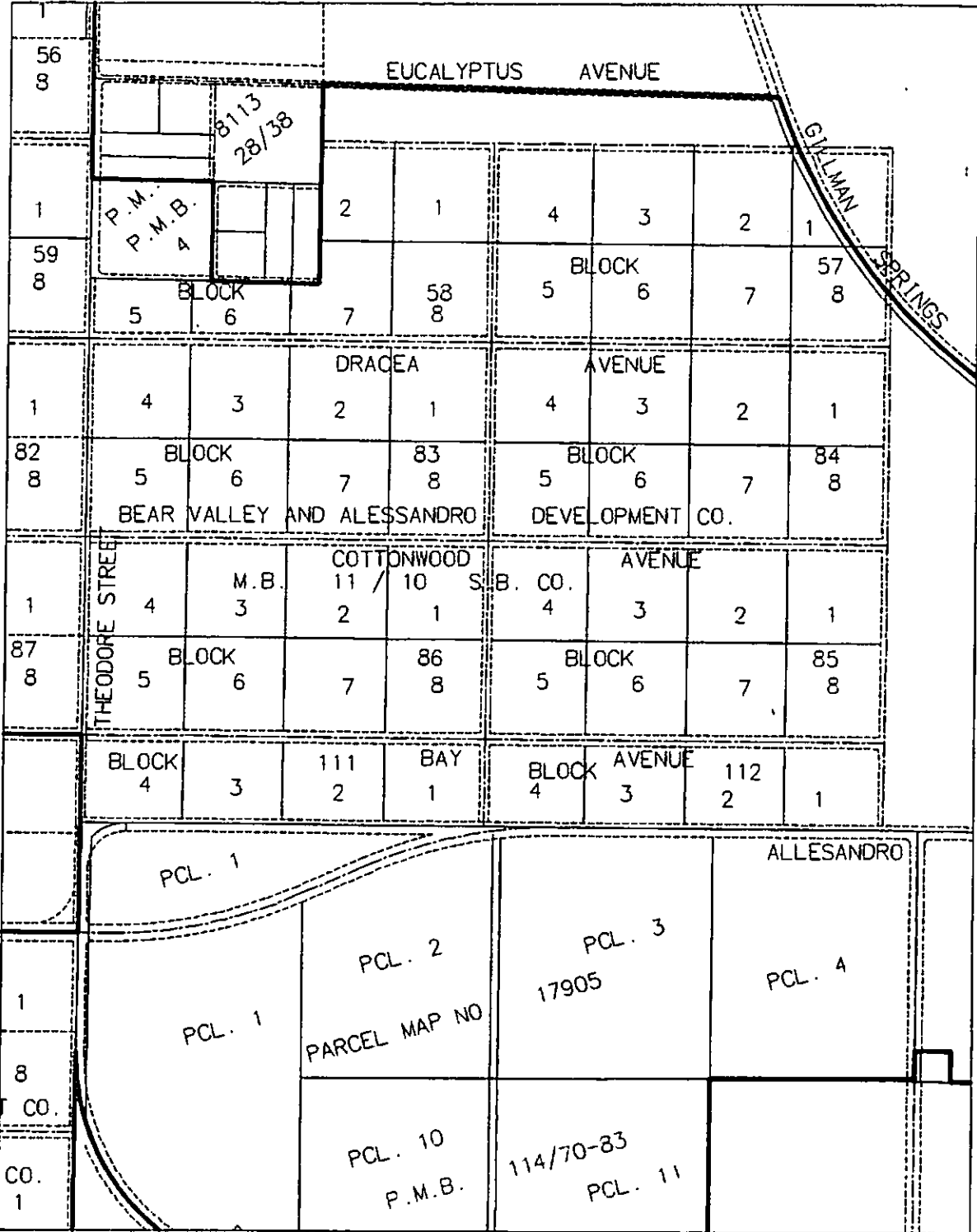
DATE MAY 27, 2015  
SCALE 1" = 1000'

EXHIBIT "A-2"

IN PLAN: 10/05/2010 4:40 PM; PLOTTED: 10/05/2010 4:40 PM; PLOT: 10/05/2010 4:40 PM; PLOT: 10/05/2010 4:40 PM; PLOT: 10/05/2010 4:40 PM

Attachment: Development Agreement (1710) : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

SEE SHEET 2



SEE SHEET 3

SEE SHEET 5

# EXHIBIT "A-2"

SHEET 4 OF 5 SHEETS

DATE	MAY 27, 2015
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SCALE	1"=1000'
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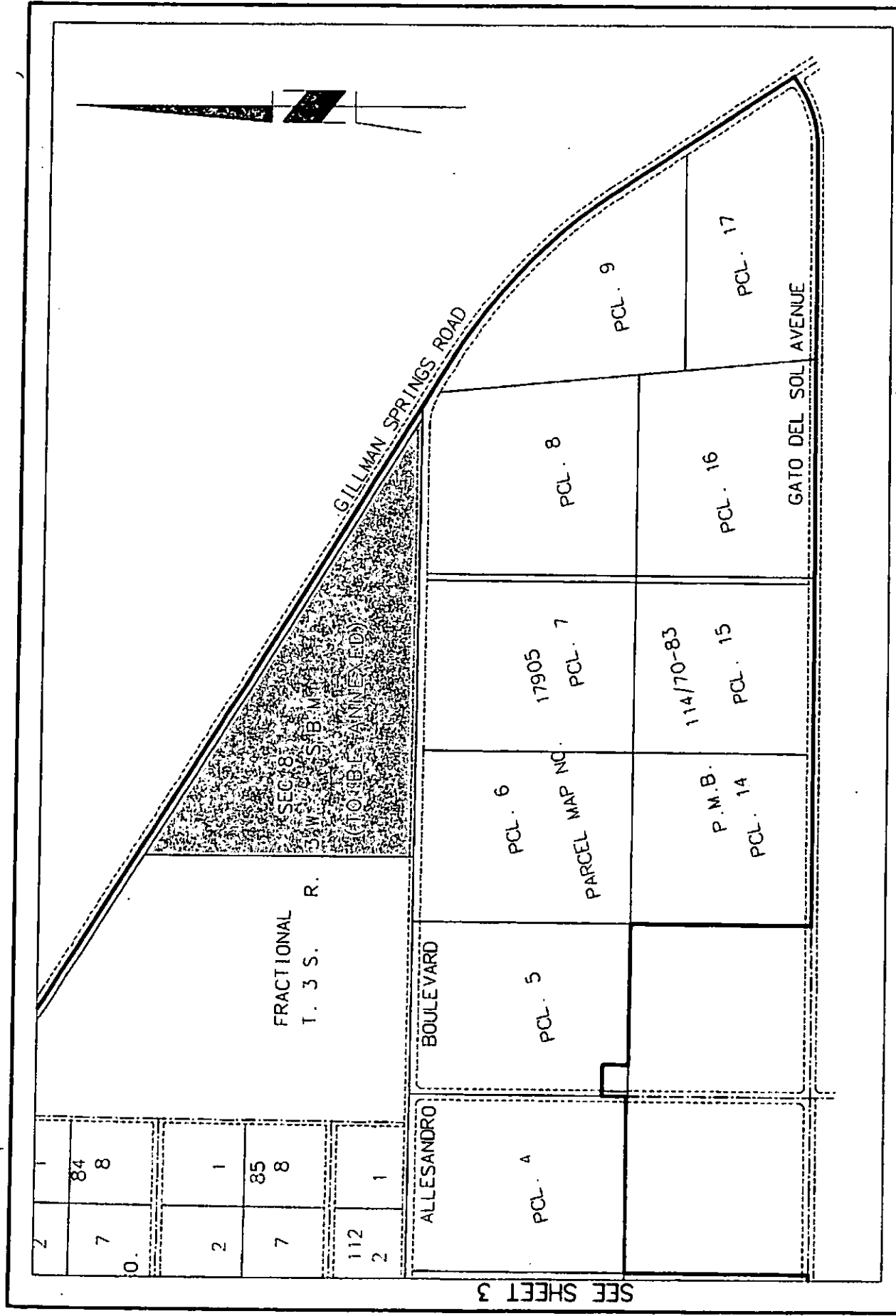
JOB NO.	10-105750
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**RBF** CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

4080 COUNTY CENTER DRIVE, SUITE 100  
 TEMECULA, CALIFORNIA 92591-6022  
 951.678.8042 • FAX 951.678.7240 • www.RBF.com

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING



**RBF**  
 PLANNING & DESIGN & CONSTRUCTION  
 6010 COUNTY CENTER DRIVE, SUITE 100  
 TEMECULA, CALIFORNIA 92591-6022  
 951.676.8047 • FAX: 951.676.7540 • www.RBF.com

**SHEET 5 OF 5 SHEETS**  
 SCALE 1" = 1000'  
 DATE MAY 27, 2015  
 JOB NO. 10-105750

**EXHIBIT "A-2"**

14. Veritas\Veritas\pvc\work\105750\105750.dwg WORLD LOCATION: AZULETE 3/7/13 10:37 am



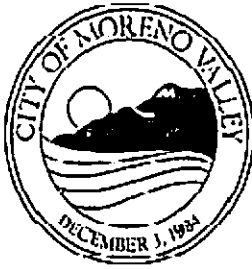
## EXHIBIT NO. A-3

Public Benefits; all are viewed as material consideration for this Agreement, by the City and its Council (not listed in priority).

1. Representation and Warranty in support of HF's legal or equitable interest in the land composing the area subject to this Agreement. (Recital E and 3.2)
2. DIF fees, public improvements, or both will be paid to the City to further public improvements. (1.5, 4.8, 4.9)
3. City has oversight over transfer of land or buildings within the area covered by the Agreement. (3.4)
4. HF pays for special staff and consultants. (3.6)
5. Education/Library/Job training/funding to City/Job opportunities. (4.11, 4.12)
6. Fire station: "turn key" fire station will be built on HF provided land and will be fully funded and equipped by HF. (4.8)
7. Land owners are bound, contractually, to provide City benefits beyond those available via a nexus condition.
8. City advances its General Plan's goals, policies and objectives as anticipated when it was adopted.
9. City controls when HF has qualified to release itself, in whole or part, from the Development Agreement. (3.4, 3.5)
10. City preserves its right to impose the enhanced development standards on the Project outlined in the specific plan. (4.2)
11. City has set performance criteria for the Terms of the Agreement. (3.5, 4.4)
12. City preserves the right to update standards and, as required and lawful, require further CEQA reviews. (4.7.1)
13. City Code Standards are imposed for any reimbursements to HF for oversizing any infrastructure. (4.8)
14. City required and is able to hold HF accountable for a local hiring program for City residents. (4.11)
15. City obtains Education, Library, Training, and Innovation funding for residents in the amount up to \$6,993,000, during the Term of the Development Agreement, with One

Million Dollars (\$1,000,000) of that being provided in a single lump sum payment upon issuance of the first building permit.

16. HF will contribute \$500,000 toward the City's development of SR 60 landscape, signage, bridge design enhancement. (4.13)
17. Specified homes are to be offered air filtration systems at no charge. (4.14)
18. City will annually review and enforce its benefits, and ensure performance of its duties. (Article 5)
19. Defaults and issues in dispute have a specified resolution process. (Article 6)
20. City is covered by HF funded liability insurance (9.1) and from tort claims. (Article 10)
21. City is protected as to ensuring HF performance, despite external causation. (11.9)



## Report to City Council

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**TO:** Mayor and City Council  
 Mayor and City Council Acting in its Capacity as President  
 and Members of the Board of Directors of the Moreno Valley  
 Community Services District (CSD)

**FROM:** Allen Brock, Community Development Director

**AGENDA DATE:** August 18, 2015

**TITLE:** WORLD LOGISTICS CENTER PROJECT INCLUDES A  
 GENERAL PLAN AMENDMENT, A CHANGE OF ZONE,  
 WORLD LOGISTICS CENTER SPECIFIC PLAN, A PRE-  
 ZONING/ANNEXATION, TENTATIVE PARCEL MAP NO.  
 36457, AND A DEVELOPMENT AGREEMENT FOR A 3,818  
 ACRE PROJECT AREA IN THE EASTERN PORTION OF  
 THE CITY

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### RECOMMENDED ACTION

#### **Planning Commission/Staff Recommendations: That the City Council:**

1. **ADOPT** Resolution No. 2015-56. A Resolution of the City Council of the City of Moreno Valley, California, Certifying the Final Environmental Impact Report (P12-016), Adopting the Findings and Statement of Overriding Considerations and Approving the Mitigation Monitoring Program for the World Logistics Center Project.
2. **ADOPT** Resolution No. 2015-57. A Resolution of the City Council of the City of Moreno Valley, California, Approving PA12-0010 (General Plan Amendments) for the Proposed World Logistics Center Project to include Land Use Changes for Property within the World Logistics Center Specific Plan Area to Business Park/Light Industrial (BP) and Open Space (OS) and Properties outside of the World Logistics Center Specific Plan to Open Space (OS) and Corresponding General Plan Element Goals and Objectives Text and Map Amendments to the Community Development, Circulation, Parks, Recreation and Open Space, Safety and Conservation Elements.

3. **INTRODUCE** Ordinance No. 900. An Ordinance of the City Council of the City of Moreno Valley, California, Approving PA12-0012 (Change of Zone), PA12-0013 (Specific Plan) and PA12-0014 (Pre-Zoning/Annexation), which include the Proposed World Logistics Center (WLC) Specific Plan, Full Repeal of the Moreno Highlands Specific Plan No. 212-1, Pre-Zoning/Annexation for 85 acres at Northwest Corner of Gilman Springs Road and Alessandro Boulevard, Change of Zone to Logistics Development (LD), Light Logistics (LL) and Open Space (OS) for areas within the Proposed World Logistics Center Specific Plan Boundary, and a Change of Zone to Open Space (OS) for those Project Areas Outside and Southerly of the Proposed World Logistics Center Specific Plan Boundary.
4. **ADOPT** Resolution No. 2015-58. A Resolution of the City Council of the City of Moreno Valley, California, Approving PA12-0015 (Tentative Parcel Map No. 36457) for the Purposes of Establishing Twenty-Six (26) Parcels for Financing and Conveyance purposes, including an 85 acre parcel of land currently located in the County of Riverside adjacent to Gilman Springs Road and Alessandro Boulevard and which is included in the World Logistics Center Specific Plan.
5. **INTRODUCE** Ordinance No. 901. An Ordinance of the City Council of the City Of Moreno Valley, California, Approving PA12-0011 (Development Agreement) for the World Logistics Center Project which Real Estate Highland Fairview has Legal or Equitable Interest in, on approximately 2,263 acres, within the World Logistics Center Specific Plan area (2,610 acres), intended to be developed as High Cube Logistics Warehousing and related Ancillary uses generally east of Redlands Boulevard, south of State Route 60, west of Gilman Springs Road and north of the San Jacinto Wildlife Area.
6. **ADOPT** Resolution No. 2015-59. A Resolution of the City Council of the City of Moreno Valley, California, Requesting the Riverside Local Agency Formation Commission to initiate proceedings for the expansion of the City Boundary for approximately 85 acres of land located along Gilman Springs Road and Alessandro Boulevard (APN Nos. 422-130-002 and 422-130-003).

**Recommendations: That the CSD:**

1. **ADOPT** Resolution No. CSD 2015-29. A Resolution of the Moreno Valley Community Services District of the City of Moreno Valley, California, to Request the Riverside Local Formation Commission to initiate proceedings for the Expansion of the Community Services District Boundary to include approximately 85 acres of land located along Gilman Springs Road and Alessandro Boulevard in conjunction with a related Annexation (APN Nos. 422-130-002 and 422-130-003).

**SUMMARY**

The World Logistics Center (WLC) encompasses a project area of approximately 3,818 acres in the eastern portion of the City. The project area is generally bound by State

Route 60 on the north, Gilman Springs Road on the east, the San Jacinto Wildlife Area on the south and Redlands Boulevard on the west (Attachments 17 and 18). The project proposes to convert the land use and zoning potential for the area from a variety of residential, commercial, industrial business park, mixed-use and open space land uses to a predominantly industrial and open space based land use mix. Specifically, the industrial-focused Specific Plan would allow for subsequent development of up to 40,600,000 square feet of warehousing and distribution centers to complement anticipated market growth in logistics and goods movement demand. In addition to the proposed industrial land use, the project would result in a significant consolidation of Open Space zoning in the southwestern portion of the Specific Plan area and in the southern portion of the overall project area adjacent to the San Jacinto Wildlife Area. This consolidation would be consistent with the intended land use purpose envisioned in the current General Plan.

The project applications submitted by the project applicant Highland Fairview include: 1) General Plan Amendment, 2) Specific Plan and corresponding zoning atlas changes for approximately 2,610 acres of the total project area, 3) Pre-zoning of an 85-acre parcel within the proposed Specific Plan area that is identified for future annexation to the City of Moreno Valley, 4) A Tentative Parcel Map for financing and conveyance purposes only, 5) A Development Agreement for approximately 2,263 acres of the approximate 2,610 acre proposed Specific Plan, 6) Zoning atlas modifications for approximately 1,104 acres within the overall project area but outside of the proposed Specific Plan area for Open Space, while 104 acres is estimated for off-site improvement areas, and 7) Environmental Impact Report, prepared for the overall project.

The Planning Commission, at their June 30, 2015 meeting, recommended approval of the World Logistics Center Project by the City Council on a 6-1 vote.

## **DISCUSSION**

The proposed World Logistics Center (WLC) project would establish clear City vision and development regulations for a significant portion of the eastern area of the City. The project area is primarily vacant today with seven existing developed rural residential properties. The development regulations currently in place for much of the project area are codified as the Moreno Highlands Specific Plan (MHSP), which was adopted April 17, 1992. Over the past twenty-three years, notwithstanding the MHSP being in place, the area has experienced nearly non-existent growth or development.

The proposed WLC project area encompasses approximately 3,818 acres in the eastern part of the City. The 2,610 acre WLC Specific Plan area is included within the overall project area. The Specific Plan establishes development framework for up to 40,600,000 square feet of industrial, logistics, high cube, warehouse and distribution center land uses and related "logistics support" uses. A 74.3 acre parcel located in the southwest corner of the Specific Plan area is proposed as Open Space. Project areas outside and south of the Specific Plan boundaries make up approximately 1,104 acres and are designated as Open Space zoning. Another 104 acres within the project area will accommodate offsite improvements. The project area is generally bound by State

Route 60 on the north, Gilman Springs Road on the east, the San Jacinto Wildlife Area on the south and Redlands Boulevard on the west.

Exhibit 2-1 of the Specific Plan shows the proposed Land Use Plan. As described on Exhibit 2-1, up to 40,400,000 square feet of high-cube warehouse (i.e. larger than 500,000 square foot buildings) logistics uses and "logistic support" uses (e.g. fueling, convenience retail) are proposed in the planning areas designated for "Logistics Development" (LD) zoning. Up to 200,000 square feet of smaller warehouse (i.e. less than 500,000 square foot buildings) are proposed in areas designated for "Light Logistics" (LL) zoning (Attachment 19). Allowance is provided in the Specific Plan for associated office and accessory uses to be conducted within the warehouse logistics uses. As described in the Specific Plan, logistics uses include facilities intended for storage, assembly and processing of manufactured goods and materials prior to their distribution to other facilities.

The project area and development intensity described in the Draft Environmental Impact Report, which was circulated for public review in early 2013, have since both been reduced. The project area was reduced by approximately 100 acres and the development intensity of the project was reduced by one million square feet.

The applicant has provided documents confirming it holds legal or equitable interest in approximately 2,263 acres within the 2,610 acre Specific Plan area, which was reviewed by special legal counsel. The remainder of the project area is owned by sixteen private entities, the Metropolitan Water District, San Diego Gas & Electric Company, Southern California Gas Company, and California Department of Fish and Game (Attachment 20).

The applicant's proposal is consistent with the Economic Development Action Plan adopted by the City Council in 2011, and updated in 2013. These Council-approved documents recognize opportunities to support the emerging logistics industry in the eastern portion of the City and the economic development potential of logistics development in the area of the proposed WLC. As cited by Highland Fairview, a February 2012 letter from the City Manager indicates that "the City has developed and is now implementing an aggressive economic development strategy which identified logistics as a prime area of focus and opportunity for development in the eastern portion of the city" and references "the City's intent to consider comprehensive General Plan and zoning amendments for the Moreno Highlands area to facilitate the development of logistics uses" (Attachment 21). This direction was subsequently supported by City Council action at a public meeting held on May 22, 2012 (Attachment 22).

The following summarizes discretionary entitlement applications requested with the project, including a description, staff analysis and staff and Planning Commission recommendations with each:

### **General Plan Amendment (PA12-0010)**

#### Description

The applicant is requesting amendments to the Community Development Element, Parks, Recreation and Open Space Element, Conservation Element, Safety Element, and Circulation Element of the City General Plan that collectively set forth policy goals, and exhibits that allow for Open Space (OS) and Business Park/Light Industrial (BP/LI) land uses to occur in the project area, and which can facilitate development of the applicant's desired industrial logistics warehouse and distribution centers (Attachment 4).

Text and map modification to General Plan Elements include amendment of the Community Development Element related to modification of land uses, Parks, Recreation and Open Space Element for modification of existing multi-use trail configurations, open space and future parkland acquisition areas, Conservation Element to modify the Major Scenic Resources Map, Safety Element to modify noise contours and Fire Station Map, Circulation Element to change General Plan Street designations and roadway configurations, and General Plan Goals and Objectives to include a revised Circulation Plan, level of service (LOS) standards and Bikeway Plan Map. With regard to the circulation element one particular modification of note is the extension of Cactus Avenue easterly from its current terminus and realignment to turn north and join Alessandro Boulevard.

### Analysis

The proposed General Plan Land Use Amendment would modify land use designations from the current general plan land use designations of business park, single-family residential, multiple family residential, commercial/retail, public facilities, and open space to Business Park/Light Industrial (BP/LI) and Open Space (OS). The proposed General Plan land use amendments would be consistent with the zoning established in the WLC Specific Plan which would allow industrial related land uses and related office, ancillary and logistics support uses. Land use change to Open Space (OS) is proposed for areas outside and to the south of the WLC Specific Plan which include California Department of Fish and Wildlife, San Diego Gas and Electric and the Southern California Gas Company properties.

The General Plan land use amendment to Business Park/Light Industrial would constitute a significant policy change for the eastern portion of Moreno Valley. The variety of land uses currently shown in the General Plan for this area of the city allow for business park/industrial, single and multiple-family residential, commercial/retail, mixed use, public and open space land uses. The land use change to Business Park/Light Industrial coupled with the proposed Specific Plan regulations would result in two principal land uses: industrial warehouse distribution centers and open space. The proposed land use changes that will reduce residential zoning potential are consistent with assumptions in the earlier 2011 Housing Element update, as well as the current Housing Element adopted on February 12, 2014. The reduction in housing units is consistent with a shift toward industrial zoning strategies and goals outlined in the City's 2011 and 2013 Economic Development Action Plans. A significant driver for the proposed land use change is to expand job producing land uses in the eastern portion

of Moreno Valley. The General Plan Amendment is expected to facilitate improvement in the existing low jobs to high housing imbalance. The shift in land use creates opportunity for a better positive ratio in overall future City revenue to cost figures; given residential land uses typically create a higher demand and cost for city services compared with non-residential industrial uses. The project and its potential for job creation, as envisioned, could substantially benefit the established, but currently under performing, commercial/retail developments located west of the project area. The project may provide momentum, need and interest for future office and hospitality land use development in other areas of the City.

The proposed Open Space land use changes would provide consistency and compatibility with the existing Open Space land use and established wildlife habitat areas. The project area proposed as Open Space, south of the southern edge of the proposed new Specific Plan area, is consistent with policy assumptions and text added to the General Plan when it was last updated in 2006. Those assumptions and text changes were provided in recognition of the acquisition of over 1,000 acres in that area by the California Department of Fish & Wildlife and the Sempra energy company with the intended purpose to maintain them as open area.

Recommendation:

The Planning Commission and staff recommend that the City Council approve the proposed modifications to General Plan text and maps.

### **Change of Zone (PA12-0012)**

#### Description

The proposed Change of Zone application submitted for the WLC Specific Plan (2,610 acres) and areas outside and south of the WLC Specific Plan boundary (1,208 acres) will replace zoning predominantly for land currently within the Moreno Highlands Specific Plan (MHSP), as well as some properties in the project area that are not included in the Moreno Highlands Specific Plan. The proposal will change land use residentially zoned RA2 (96 acres), R3 (133 acres), R5 (60 acres), and R5/R10 (9 acres) and land use established within a Planned Residential Community that included Residential Development (1,359 acres), Golf Course and Open Space (702 acres, Neighborhood Commercial (10 acres), Cemetery (16.5 acres) and Public (348 acres) and a Planned Business Center that included Business Park (361 acres), Mixed Use (80.5 acres), Community Commercial (16 acres), Open Space (78 acres) and Public Facilities (67 acres). The newly proposed zoning within the WLC Specific Plan boundaries, which would allow for primarily industrial warehouse and ancillary uses, would be consistent with proposed land uses established within the proposed WLC Specific Plan. Proposed modifications in land use and zoning are consistent with the proposed General Plan land use amendments and allow for a small variety of industrial related land uses including high cube logistics warehouse uses, ancillary office uses, self-storage and vehicle storage uses. The Open Space (OS) zone, which includes a 74.3 acre area in the southwestern portion of the WLC Specific Plan, would remain as open space.



## Analysis

The Change of Zone (PA12-0012) request proposes to establish Logistics Development (LD), Light Logistics (LL), and Open Space (OS) zoning designations for a proposed warehouse/logistics master planned project on an approximately 2,610 acre portion of land within the WLC Specific Plan. Zoning proposed within the Change of Zone application would be consistent with that which is proposed within the Specific Plan for the project. Specific zones would include Logistics Development (LD) proposed for approximately 2,384 acres allowing for high cube warehouse uses to include buildings with a minimum square footage of 500,000 square feet. Ancillary office uses would also be a permitted land use within the category. Logistics support uses to include motor fuel sales and related retail sales when operated in connection with a primary fuel operation use are also permitted within the zone. The Light Logistics (LL) zone, which is included as part of an approximate 37 acres of the Specific Plan, would allow for warehouses buildings and related ancillary uses less than 500,000 square feet with no minimum square footage requirement. A 74.3 acre site in the southwestern portion of the Specific Plan is proposed as Open Space (OS).

The proposal will also include zoning modifications outside the WLC Specific Plan Area that was originally included within the Moreno Highlands Specific Plan (MHSP). This will include a zone change to Open Space (OS) for areas to the south of the WLC Specific Plan which includes primarily the 910 acre California Department of Fish and Wildlife (CDFG) land that is provided for habitat use and the 174 acre San Diego Gas and Electric properties which are primarily used as an open space noise attenuation buffer area around their property. The 20 acres of land owned by SDG&E and the Southern California Gas Company currently used for natural gas facilities is zoned for Public Utility use and is not a part of the WLC Specific Plan or a component of the request to modify zoning outside of the WLC Specific Plan boundary. Permitted uses under the OS zone would include agricultural uses, animal raising, police stations, museums, wholesale and distribution plant nurseries, and parks, while conditionally permitted uses would include equestrian centers, day care centers, golf courses, open air theaters, and public utility stations/yards.

As a result of the proposed project, the 3,038 acre MHSP will be repealed and replaced with the WLC Specific Plan and proposed Open Space (OS) land use and zoning designations south of the WLC Specific Plan boundary. A remnant 16.5 acre parcel included in the MHSP located north and east of Gilman Springs Road is not included in the WLC Specific Plan or in an area included within the overall project area. Land use designation of Open Space (OS) would remain if the WLC project is approved. The remnant 16.5 acre parcel of land leftover from the proposed repeal of the MHSP will establish consistent zoning with the General Plan Open Space designation, and staff will present this consistency modification at a later date. Pursuant to Government Code Section, 65860c, "in the event that a zoning ordinance becomes inconsistent with a general plan by reason of amendment to the plan, or to any element of the plan, the zoning ordinance shall be amended within a reasonable time so that it is consistent with the General Plan as amended."

Recommendation:

The Planning Commission and staff recommend that the City Council approve the proposed Change of Zone.

**Specific Plan (PA12-0013)**

Description

The proposed WLC Specific Plan will serve as the regulatory framework and implementation tool for future development within the WLC Specific Plan area. The WLC Specific Plan document includes development standards, list of allowable land uses, building and landscape guidelines; on and off-site design standards, infrastructure requirements, maintenance regulations, and other pertinent regulations to ensure a sustainable high quality enclave of the City. Government Code Section 65450 establishes that a Planning Agency may prepare a specific plan for the systematic implementation of the General Plan for all or a part of the area in the City covered by the General Plan. The Municipal Code, Title 9, will serve as the regulatory framework for the portions of the overall project area not included in the WLC Specific Plan boundary.

Specifically, the proposed WLC Specific Plan is a master plan for the development of up to 40.6 million square feet of high-cube logistics warehouse distribution facilities and related ancillary uses. The proposed project includes a 2,610 acre Specific Plan to implement future development and establish comprehensive land use regulations governing the proposed project, including zoning, project infrastructure, location of public improvements such as a required fire station, permitted uses and development standards in each of the zones (primarily industrial warehouse uses), building architecture (including building form/massing and façade treatments), street configurations (including roundabout locations), landscape guidelines, multi-use trail configurations and project phasing.

Analysis

The WLC Specific Plan establishes sixteen (16) separate planning areas for future development. Exhibit 2-1 in the WLC Specific Plan document serves as the land use plan (Attachment 19). The Exhibit shows the sixteen planning areas numbered as 1-12, 20-22, and 30. The Exhibit contains further details with regard to size of each planning area, land use category for each planning area, and anticipated square foot of building development for each planning area. As plot plans for industrial development have not been submitted at this time, the Plan will act as an implementation tool that will provide development standards and allow for future build out of fifteen (15) of the planning areas within the WLC Specific Plan boundary area. The sixteenth planning area is designated for Open Space purposes. It is anticipated that development of the project would occur over time in the form of multiple separate independent projects of varying sizes and configurations. Each of these future projects would be required to be

consistent with the General Plan and zoning and would comply with all applicable regulations of the WLC Specific Plan.

The WLC Specific Plan identifies the type and intensity of land uses permitted within the project. For example, LD land use district will allow for larger high cube logistics warehouse buildings (500,000 square feet or greater) with ancillary office uses as well as facilities for vehicle and container storage, cellular transmission facilities, construction yards, a motor fuel facility and public utility uses. The LL category allows for such uses as smaller high cube logistics warehouse buildings (500,000 square feet or less), self-storage uses, vehicle and container storage, construction yards within or immediately adjacent to construction sites, cellular transmission facilities and public utility uses. Proposed OS zoned areas will be designated for the 74.3 acre parcel located in the southern area of the WLC Specific Plan site as well as parcels outside and south of the WLC Specific Plan boundary down and adjacent to the San Jacinto Wildlife area. All uses and development within the OS designation areas shall comply with the standards, guidelines, and procedures set forth Section 9.06.030 of the Municipal Code.

In order to provide greater compatibility between current residential land uses that are included west of the project site and proposed industrial land uses, the applicant has proposed a buffer area considered as a 250 foot edge treatment area that will be established to create buffers between the project site and adjacent existing land uses. Two distinct buffer or edge treatment areas occurring within the project site, include the Redlands/Bay/Merwin/Street D edge located on the north portion of the project site adjacent to existing residential properties located west of the WLC Specific Plan boundary near Redlands Boulevard, and the San Jacinto Wildlife area edge located outside and south of the WLC Specific Plan boundary area. The San Jacinto Wildlife area edge is located on the southern portion of the project site currently adjacent to designated wildlife areas. This area will include a restricted use area of at least 250 feet from state owned property. In addition to the 250 foot restricted area, additional setback will be provided such that all buildings are a minimum of 400 feet from the San Jacinto Wildlife Area.

A phasing plan is included within the WLC Specific Plan. Project phasing and development within the WLC Specific Plan is expected to occur in two large phases, starting in the western portion of the site south of Eucalyptus Avenue and progress easterly and southerly. The phasing concept is based on beginning construction where infrastructure presently exists and expanding to the south and east. The first phase will include development primarily in the western portion of the WLC Specific Plan, with final phases of development on the eastern portion of the project. As analyzed in the EIR, it is anticipated that the first phase of development will be completed by the year 2022, and could achieve 50% of the entire project or approximately 20,300,000 square feet of logistics warehouse development. The second phase is anticipated to be completed by 2030 and include the remaining 50% of the project or 20,300,000 square feet of warehouse development. The projected time lines are based on the project starting development in 2015, with the actual build out years subject to fluctuations depending upon various conditions. The actual timing of development will be dependent upon numerous factors, including interest by building users, private developers and local,

regional, and economic conditions. A Development Agreement, which is discussed in more detail later in this staff report, has also been requested by the applicant as a means to secure long term vesting of the approvals. The Development Agreement contains provisions that are intended to motivate timely development of the project, along with negotiated public benefits that would apply with, and some without, progress in physical development.

In securing a new specific plan for the WLC project, the existing MHSP would be repealed. The MHSP includes 3,038 acres and was approved for approximately 7,763 residential dwelling units and approximately 603 acres of Business Park, Retail, Residential, Open Space, and Public/ Institutional land uses. A Development agreement for the MHSP expired on September 12, 2012.

Recommendation:

The Planning Commission and staff recommend that the City Council approve the proposed WLC Specific Plan and repeal of the existing MHSP.

### **Pre Zoning/Annexation (PA12-0014)**

#### Description

The WLC Specific Plan Area includes a triangular shaped 85 acre area of land (made up of two separate parcels) west of Gilman Springs and north of Alessandro Boulevard that is currently within the jurisdiction of Riverside County. The area is within the City's Sphere of Influence, and the applicant has demonstrated that they hold a legal or equitable interest in the property. A pre-zoning/annexation application has been submitted by the applicant to incorporate the two parcels of land into the City of Moreno Valley. This project proposes to pre-zone the property as Logistics Development (LD) within the proposed Specific Plan, and it is anticipated that the zoning would carry forward with the intended subsequent annexation.

#### Analysis

The project includes completion of the annexation process for an approximate 85-acre area located on the north side of Alessandro Boulevard at Gilman Springs Road within the County of Riverside. The first step has already been provided to make this parcel part of the City, as the parcel has been included in the City's Sphere of Influence since 1985. The proposed WLC project furthers the annexation with General Plan land use designations and pre-zoning for this parcel, with the intent to incorporate the property into the WLC Specific Plan.

The annexation of additional land in the City's Sphere of Influence will require review and approval by the Riverside County's Local Agency Formation Commission (LAFCO). The current review of the area to be annexed and approval of the tentative map would establish "pre-zoning" of the area in advance of the final annexation action by LAFCO. The proposed annexation is reviewed by the agency once the environmental analysis

has been certified and the project is approved by the City and an application is submitted.

**Recommendation:**

The Planning Commission and staff recommend that the City Council approve the proposed Pre-zoning of the identified 85 acres, consistent with zoning described in the WLC Specific Plan, for future annexation of the property into the City of Moreno Valley.

**Tentative Parcel Map (PA12-0015)**

Description

Tentative Parcel Map No. 36457 proposes the subdivision of a portion of the project site into separate large parcels for financing and conveyance purposes. The tentative parcel map identifies twenty-six (26) parcels within the World Logistics Specific Plan area. This map does not create any development rights for the subdivided properties. Subsequent subdivision applications will be required to be processed, approved and recorded prior to the development of any future buildings on the properties within the WLC Specific Plan area. The tentative map along with the pre-zoning/annexation application will also serve as the mechanism for including the resulting 85 acre parcel, within the proposed map, which is currently within the County of Riverside jurisdiction, to be subsequently annexed into the project site and the City of Moreno Valley.

Analysis

The proposed map is for financing and conveyance purposes only and does not create any development rights for the subdivided properties. Upon consideration of the map by the Planning Commission, it was noted that the numbering of the General Notes needed some minor correction and the Commission requested that Condition P8 in the corresponding Resolution for the map be clarified to ensure that only Parcel 26 and not all of the WLC Specific Plan project area was subject to future annexation. These corrections have been made in the materials presented with this staff report.

**Recommendation:**

The Planning Commission and staff recommend that the City Council approve the proposed Tentative Parcel Map No. 36457.

**Development Agreement (PA12-0011)**

Description

The applicant has requested a Development Agreement (DA) as part of the WLC Specific Plan. The following are general considerations noted with regard to a DA:

- A DA is a negotiation entitlement tool used to lock in ("vest"), for an extended/specified period of time, the underlying approved land use entitlements along with parameters for certain development regulations, fees, processing procedures, and policies, etc. that would be applied to subsequent development approvals in implementing the project and improvements which, in the absence of the DA, would be subject to periodic changes outside of the control of the parties.
- Authority/Approval – Per Municipal Code Section 9.02.110(D)(2) a DA requires review through the Planning Commission with final action by the City Council. The DA is not a "required" approval for the World Logistics Center project. The General Plan Amendments, Zone Change, Specific Plan, Parcel Map, and pre-zoning for the 85 acre future annexation parcel can all be approved without an accompanying or subsequent DA. Approval of the DA is simply contingent upon mutual agreement of the parties entering into the agreement.
- In exchange for longer vested rights to the developer, through a DA the City seeks public benefits above and beyond any required developer obligations. The public benefits are not subject to a nexus finding and do not have to be directly associated with the development project.

The proposed DA has been vetted through multiple negotiation sessions between the applicant's team and City negotiation team. Both teams included legal representatives and used appropriate technical and fiscal expertise as warranted to perform a thoughtful, comprehensive assessment of the elements structured in the DA. The recommended DA represents the collective interests of both parties to provide for the future timely and efficient development of the project. As the applicant does not own all parcels within the proposed 2,610 acre WLC Specific Plan project area, only those properties that the applicant has demonstrated a legal or equitable interest in (2,263 acres) within the boundaries of the WLC Specific Plan area are subject to the DA.

For a DA the City Council has the approval authority to evaluate and determine whether or not the anticipated public benefits of the project coupled with the additional public benefits established in the DA are a fair exchange in allowing for the longer term vested development rights for the applicant. In negotiating the DA, it was noted that the WLC project presents a unique opportunity to expand the City's property and sales tax, generate construction employment and new permanent employment opportunities for Moreno Valley residents, and thereby improve the present jobs and housing imbalance that exists in the City.

### Analysis

The following are key provisions in the DA:

**Term:** The DA contains up to a 25-year term. The initial Term would be for fifteen (15) years, and provisions are included for a ten (10) year extension. Specifically, Section

3.5 of the DA states that the Term will not be extended for the additional 10 years unless within the first 15 years at least 8,000,000 square feet of occupied development is achieved and a payment of \$1,000,000 is made to the City, or 12,000,000 square feet of occupied development is achieved, in which case no additional payment would be due to the City. If less than 8 million square feet is achieved, the DA would terminate at the end of the 15th year.

**Development Impact Fees ("DIF"):** The developer will be obligated to participate in the City DIF programs included in Section 1.5 of the DA. The definition includes the current DIF categories in the City's current Municipal Code; traffic and fire DIF are excluded in lieu of other DA provisions that ensure developer commitments to traffic and fire station infrastructure. Section 4.7.1 of the DA includes language to ensure any future increases to DIF will be applied at the time of development.

**Payments and Reimbursements:** Payments and reimbursements for infrastructure, including any oversized and/or accelerated infrastructure put in place by the developer, will be processed in accordance with the current provisions of Section 9.14 of the Municipal Code. This is addressed in Section 4.8 of the DA. No unique or specialized provisions for reimbursement are included within the DA that is not typically available to other development projects.

**Fire Station and Equipment:** The developer shall, at its own cost, provide a fully constructed, fully equipped "turnkey" fire station and fire station site, including fire equipment, as specified by the City's Fire Chief. The fire station's furniture and fixtures shall be reasonably comparable to those of the most recently completed fire station within the City. The fire station, equipment and trucks shall be provided as and when directed by the Fire Chief. This is included in Section 4.9 of the DA.

**SR-60 Enhancements:** The developer will contribute up to \$500,000 to be used to develop landscape, signage, and bridge architectural guidelines for SR-60 between Redlands Parkway and Gilman Springs Road, based on a 10:1 match of City funds budgeted for the same. This is included in Section 4.13 of the DA. It is noted that this provision will require allocation up to \$50,000 of City funds in order to gain the full developer contribution.

**Force Majeure:** Force majeure provisions in the DA were expanded to cover economic or environmental/physical conditions (such as lack of utilities) that could arise and be beyond the developer's control which would make development uneconomic or infeasible. If any such events occur, the Term of the DA shall be extended for the duration of each such event, provided that the Term shall not be extended under any circumstances for more than three (3) years regardless of the number or length of individual extensions. This is included in Section 11.9 of the DA.

**Local Hiring and Education, Library, Training and Workforce Development Funding:** The developer will participate in the new City Council approved Hire MoVal Incentive Program. In addition, to ensure residents of Moreno Valley are provided

education resources and obtain every opportunity to secure the jobs which will be created by the operation of the WLC, the developer will contribute up to \$6,993,000 towards education and training programs tied to the logistics industry. The funds related to these provisions will begin to flow in to the City immediately with an initial \$100,000 payment, and subsequent \$100,000 annual payments for the next six (6) years. At year seven the annual payments increase to \$125,000 through build out. One million dollars (\$1,000,000) is to be contributed by the developer at the issuance of the first building permit for a logistics building on the Subject Property and \$0.11/square foot to be paid at the time of the issuance of the building permit for each succeeding building, excluding the fire station. The provisions are included in Sections 4.11 and 4.12 of the DA.

#### **Air Filtration:**

In the version of the DA presented to the Planning Commission, the developer and city staff agreed that the developer provide air filtration improvement at three (3) of the existing residences in the project area. Upon discussion of this provision in the DA the Planning Commission requested a modification to increase this commitment to include all seven (7) existing homes. During the course of the discussion with the Planning Commission, Highland Fairview agreed to the requested change. Therefore, Article 4, Section 4.14, of the DA presented for City Council consideration includes the provision for air filtration systems for all seven (7) rural residential homes within the boundaries of the WLC Specific Plan. The revised DA is included as an attachment to this report (Attachment 11).

**Public Benefits:** Exhibit No. A-3 was included in the DA to clearly identify the full list of Public Benefits that will result with approval of the DA.

#### **Recommendation:**

The Planning Commission and staff recommend that the City Council approve the proposed Development Agreement.

#### **Environmental Impact Report (P12-016)**

##### Description

Based on scope of the project, a Program Environmental Impact Report (EIR) was prepared. Due to the large project size and expansive land area, proposed phasing of the future development of industrial buildings has been considered, in which subsequent individual project applications for development will occur. Therefore a programmatic EIR rather than a project EIR has been prepared. Allowances within the California Environmental Quality Act (CEQA) Guidelines will allow the subsequent development project level environmental review to tier off of this program level document when those subsequent development proposals are submitted.

##### Analysis

The City has adhered to the CEQA Guidelines in the environmental review of this project. Notice of completion and availability for public review of the draft environmental



impact report (DEIR) document was circulated on February 5, 2013, with the comment period ending on April 8, 2013. This offered more than a 60-day review period, which exceeded the 45 day review period required by CEQA for a DEIR. In fact, the City accepted comments well past the 60-day review period for the project and those comments have been considered and included with the Final EIR (FEIR).

The DEIR document was sent to numerous state and local agencies, adjacent property owners and other interested parties. Staff received approximately 144 comment letters and over 1,000 individual comments in relation to the public review period of the DEIR. Subsequent to DEIR process and public comments, the project area was reduced by approximately 100 acres and 1 million square feet of development intensity.

All interested parties and responsible agencies were provided the opportunity to review responses to comments in the FEIR which was publically available May 1, 2015, to all parties providing comment letters and other interested parties. This was 41 days in advance of the first public hearing session by the Planning Commission, and was more than 100 days in advance of the City Council public hearing. This period far exceeds the 10 day review period required by CEQA Guidelines. As was the case with the DEIR, the FEIR in its final form was provided for the public's review at City Hall, the public library and electronically on the City's website.

In briefly summarizing the key points of the document, analysis presented in the DEIR indicates that the proposed project will have certain significant environmental impacts to, Aesthetics, Air Quality, Land Use, Noise, and Traffic/Circulation as described in detail in both the DEIR and FEIR that cannot be reduced to less than significant levels even with proposed mitigation in place. As identified in the document, cumulative impacts for the noted items above are considered to be significant and unavoidable for these five items. The EIR presented mitigation measures, which, to the extent feasible, will reduce project-specific and cumulative impacts for each of these items; however in some instances this did not reduce impacts below significant thresholds. All other environmental effects evaluated in the DEIR have been determined to be less-than-significant, or can be successfully mitigated below significant thresholds. All mitigation measures are included in the Mitigation Monitoring and Reporting Program established by the FEIR (Attachment 3).

As presented, the five (5) environmental impacts of aesthetics, air quality, land use, noise and traffic/circulation evaluated in the DEIR and FEIR remain significant and unavoidable and a cumulative impact even with mitigation measures provided. For aesthetics, Mitigation Measures (MM) 4.1.6.1 A through D have been included that provide plans prior to project development for maintaining a 250 foot setback area measured from the city zoning boundary line to any building or truck parking area, the inclusion of visual plans demonstrating screening of the project from existing residents and MM 4.1.6.2, 4.1.6.3 and 4.1.6.4 which include view protection of Mount Russell and light and glare restrictions/analysis of proposed solar panels for any future development. Mitigation measures for air quality include MM 4.3.6.2A through 4.3.6.2D, 4.3.6.3A, through 4.3.6.3E, and 4.3.6.4A which include measures such as the required inclusion of Tier 4 construction equipment, restriction of trucks that fall below 2010 engine emissions standards from entering project areas and limitation of truck idling to three (3)

minutes all in an effort to reduce air pollutant emissions. For Noise, mitigation measures have been added for short-term construction noise levels as provided in MM 4.12.6.1 A through J to include the requirement of a Noise Reduction Compliance Plan, restrictions on grading during nighttime hours, potential sound barriers, as well as measures for long term traffic and operation noise to include MM 4.12.6.2A through 4.12.6.4A for the requirement of building specific noise studies, the potential for sound walls and maintenance of buffer areas. The WLC Specific Plan also has been designed to direct truck traffic away from residential areas. Traffic/circulation measures include MM 4.15.7.4A through 4.15.7.4G which includes a traffic impact analysis, dedication of right of way consistent with the Subdivision Map Act for frontage street improvements and payment of Transportation Uniform Mitigation (TUMF) fees. Land use/Planning remains a significant and unavoidable project impact with no feasible mitigation measures available in regards to future development affecting seven single-family residential homes and the fact that the WLC Specific Plan cannot accommodate these residences within logistics warehousing areas.

Alternatives to the proposed project were analyzed in the FEIR include:

- **No Project/No Development** – Site would be void from development and remain in dry farming with some rural residential uses
- **No Project/Existing General Plan Alternative** - Includes land uses currently included on the City's General Plan (i.e. MHSP land uses).
- **Alternative 1: Reduced Density** – Site would include development of approximately 29 million square feet of logistics warehousing uses on the 2,610 acre WLC Specific Plan site.
- **Alternative 2 Mixed Use A Alternative** - Would result in 1,410 acres or 22 million square feet designated for logistics warehousing, 1,000 acres or 20 million square feet of light manufacturing, assembly or business park, 50 acres or 500,000 square feet of retail commercial, 100 acres or 1 million square feet of professional/medical offices and 150 acres of open space.
- **Alternative 3 Mixed Use B alternative** - Would be similar to the no project/existing General Plan Alternative, but with 10 million square feet of logistics warehousing on the 603 acres proposed for business, retail, institutional and other uses under the MHSP.

Alternative sites for the project are also evaluated in the FEIR. Due to the size and nature of the project, no feasible alternative sites were found in any of the eleven (11) jurisdictions evaluated. From the analysis of the five project alternatives, the environmentally superior alternative was Alternative 1 (Reduced Density), which is the only alternative that reduces traffic, air quality and related impacts by reducing the total square footage of warehousing by 30 percent. As stated in the FEIR, it was determined that Alternative 1 does not achieve the objectives to the degree of the proposed project and particularly does not meet most of the major project goals primarily because the project's industrial square footage is reduced by 30 percent.

Although impacts to aesthetics, air quality, land use, noise, and traffic/circulation cannot be reduced to less than significant levels, CEQA allows for a Statement of Overriding

Considerations and findings to be prepared and considered. CEQA requires the decision making agency to balance the economic, legal, social, technological or other benefits of a proposed project against its unavoidable environmental risks when determining whether to approve the proposed project. This would include project benefits such as the potential creation of jobs, reduction of the jobs housing imbalance, increase in City revenue or other project benefiting aspects including the furthering of General Plan goals and objectives that can be weighed against project environmental impacts that cannot be mitigated to less than significant levels. If the benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered "acceptable" as allowed for under CEQA. The Statement of Overriding Consideration and corresponding findings are attached to the report as Attachment 3 for review and consideration.

### Recommendation

With all required mitigation measures included in the Mitigation Monitoring and Reporting Program, and with inclusion of the Statement of Overriding Considerations which weighs benefits of the project against the potential project environmental impacts, certification of the FEIR by the City Council is recommended by staff and the Planning Commission.

### KEY PROJECT CONSIDERATIONS

The following is a discussion of the project area and how the proposed Specific Plan has been developed in a considerate fashion in light of the opportunities and constraints presented by the project environs, with both local and regional focus.

### Site

The project area is predominately vacant, undeveloped, and marginal agricultural land. There are seven occupied residential single-family homes with associated ranch/farm buildings in various locations in the project area, but are not all contiguous properties. Established single-family development and subdivisions are located west of the project area just west of Merwin Street and south of Bay, and along the west side of Redlands Boulevard between Bay Street and Dracaea. The Skechers high-cube warehouse facility is located west of Theodore and north of Eucalyptus immediately outside of the project area.

The 3,038-acre Moreno Highlands Specific Pan (MHSP) is currently in place and constitutes the land use and development regulations for the majority of the project area. Land use and development regulations for those properties within the project area but outside of the MHSP are established in Title 9 of the City Municipal Code. The MHSP is a master planned, mixed-use community concept consisting of up to 7,763 residential dwelling units on approximately 2,435 acres and approximately 603 acres of business, retail/commercial, institutional, and other uses. Development within the MHSP area has been essentially non-existent since the MHSP was approved in 1992. The development agreement approved with the MHSP expired in 2012.

## **Surrounding Area**

Surrounding developed industrial properties in the vicinity of the proposed project include the 1.8 million square foot Skechers and 800,430 square foot Aldi warehousing logistics and distribution centers located south of State Route 60, west of Theodore Street and west of Redlands Boulevard respectively. Several residential neighborhoods have developed along Redlands Boulevard to the west and south of the western boundary of the proposed WLC Specific Plan. An area of the City known as "Old Moreno" is situated near the southwest portion of the project site, around the intersection of Redlands and Alessandro Boulevards. The major roadways that provide access to the project area are SR-60 to the north, Redlands Boulevard to the west, Alessandro Boulevard which traverses the site east-west, Gilman Springs Road to the east, and Theodore Street which traverses the site north-south. Redlands Boulevard and Theodore Street are north-south arterial roadways that intersect with SR-60. The Moreno Valley Ranch residential community and Golf Club is located approximately one mile southwest of the project area.

Limited development has occurred adjacent to the eastern and southern boundaries of the project, which include the "Badlands" to the east and the San Jacinto Wildlife Area to the south. Gilman Springs Road serves as the eastern City boundary and areas on the east side of the road are within the City's sphere of influence. There are approximately ten (10) large custom single-family homes in the area east of Gilman Springs Road near the project site. The Badlands Sanitary Landfill, operated by the County of Riverside Waste Management Department, is located approximately 1.5 miles northeast of the project area.

Immediately south of the proposed project is the San Jacinto Wildlife Area (SJWA), Mystic Lake, and the Lake Perris State Recreation Area. These lands are state-owned and access is restricted. The SJWA is owned and operated by the California Department of Fish and Wildlife (CDFW) and contains approximately 20,000 acres of restored wetland and ponds. The Lake Perris State Recreation Area is owned and operated by the California State Parks Department and contains approximately 6,000 acres of open space land, which is used both for recreation and preservation.

The closest large-scale commercial/retail developments are located south of State Route 60 at Moreno Beach Drive, approximately 1.25 miles to the west of the proposed project, and south of State Route 60 at Nason, approximately 1.5 miles to the west of the proposed project area. These shopping complexes include the Moreno Valley Auto Center, Walmart, Target and the Stonegate Center along with a variety of restaurants and ancillary commercial and service uses.

## **Access/Parking**

The revised General Plan Circulation Element and the Specific Plan's Circulation Plan provide a framework for the movement of vehicles in and around the World Logistics Center project area. The Specific Plan document provides details on the road/street designations, right-of-way design, and road improvement thresholds. Access and

parking for future developments on the individual parcels would be reviewed and approved against these regulations under their respective separate plot plan reviews.

Access to the WLC Specific Plan area is expected to be through the Theodore Street/SR-60 interchange, Eucalyptus Avenue (between Redlands Boulevard and Theodore Street), Gilman Springs Road at Alessandro Boulevard, and through the proposed extension of Cactus Avenue to Alessandro. It is noted that truck access would be restricted on Cactus Avenue so ONLY passenger vehicles would use Cactus Avenue. Within the WLC Specific Plan area the circulation system is essentially a loop system off of the Theodore Street backbone. The interior arterials will connect through three roundabouts to control traffic flow. The circulation system is intended to direct truck traffic access to Theodore Street from Highway 60 and to a lesser degree Alessandro from Gilman Springs Road. Again truck access via Cactus Avenue would not be allowed. The interior street network is also expected to accommodate bus access, pedestrian infrastructure and bicycle infrastructure.

Due to the anticipated truck traffic within the proposed WLC Specific Plan, the Master Plan multi-use trails have been laid out to avoid the interior loop roads by routing from Redlands Boulevard around Eucalyptus, Street B, Street F, Alessandro Boulevard, to Cactus and back to Redlands Boulevard. The WLC Specific Plan proposes a trail connection around the Old Moreno neighborhood along Bay Avenue and Merwin Street. The proposed Cactus Avenue trail would continue east at the base of the hills to connect to Davis Street and the San Jacinto Wildlife Area.

As included in the WLC Specific Plan, all future truck loading and parking areas for individual buildings and uses will be screened from public view and buffered by walls and dense landscape areas. In addition, vines shall be placed near walls along all designated truck loading/parking areas.

### **Design/Landscaping**

Site design and architecture guidelines are included within the WLC Specific Plan and would be applicable to individual projects and plot plans submitted for subsequent development review and permitting. The design standards provide for compatible contemporary and sustainable designs that minimize resource and energy consumption. The WLC Specific Plan establishes building height limitations throughout the project as described on Exhibit 5-3 Building Height Plan of the WLC Specific Plan, with limits of 60 feet in areas designated as Area A and limits of 80 feet in Area B.

All buildings in the WLC that are 500,000 square feet or greater shall be designed to meet or exceed LEED Certified Building Standards. Building design under LEED would assist in reducing energy consumption by incorporating sustainable design features to further reduce the project's environmental footprint such as the inclusion of recycled building materials and the use of roof-mounted solar systems.

The WLC Specific Plan includes landscape design standards for the project site that will ensure reduced consumption of water compared to conventional landscaping concepts. These regulations will meet goals of the Moreno Valley drought tolerant landscape

ordinance. The WLC Specific Plan contains an extensive palette of drought tolerant plants and requires individual development projects to install this drought tolerant landscaping and to utilize onsite runoff to irrigate landscaped areas. The WLC Specific Plan calls for a substantial landscape treatment along the project area western boundary to provide an aesthetic buffer between the existing and future residential development and the planned warehouse buildings and truck activity areas. For areas not located along the western boundary, landscaped areas would be grouped by water needs and only utilize drip irrigation systems along Theodore and the perimeter of the project. The future design of the project will direct runoff to landscaped areas and employ techniques to promote percolation and water capture.

As part of the master plan design Section 4.2.4 of the WLC Specific Plan identifies Special Edge Treatment Areas and Design Criteria. A 250 foot landscape edge treatment area will be established along the west and southwest portions of the project adjacent to existing and planned residential land uses. An additional setback is included in the southwestern portion of the area and along Gilman Springs Road. Land use restrictions within these areas would exclude items such as buildings, truck loading areas, truck circulation areas or truck/trailer storage uses. Items such as employee/visitor parking, emergency access and property maintenance for hardscape and landscape areas would be allowed in the buffer area. The San Jacinto Wildlife area edge is located on the southern portion of the project site currently adjacent to wildlife uses and will include an additional setback in addition to the 250 foot buffer area between the conservation area and buildings so that the minimum distance will be 400 feet.

### **Infrastructure Improvements**

Development within the WLC Specific Plan will require various infrastructure improvements. Local roadways and intersections necessitate by and/or impacted by project traffic will be constructed and/or improved. Mitigation measures are included in the mitigation monitoring program, consistent with the findings of the traffic study, to address the project responsibilities towards both local and regional transportation infrastructure. Electrical service would need to be extended from the Moreno Beach substation to the project area. Electric power lines along Gilman Springs Road would be relocated when that road is widened. Providing potable water to the site will require the construction of three new reservoirs, one north of SR-60 off of Theodore Street, one east of Gilman Springs Road near the northeast corner of the site, and one west of the project site off of Cottonwood Avenue. Gas and sewer lines will also be extended to the project site. The existing County drainage channel near the southwest corner of the site will be improved to handle increased flows from project runoff.

### **Public Comments since May 1<sup>st</sup>**

In addition to public comments generated on the DEIR in early 2013 and through other prior public outreach, the City received approximately 700 letters and/or e-mails from various agencies, environmental groups and the general public since the release of the FEIR on May 1, 2015. All correspondence received through June was provided to the

Planning Commission, on a rolling basis, at their meetings of June 11<sup>th</sup>, 25<sup>th</sup> or 30<sup>th</sup>. These comments, and all additional comments that have been received after the June 30<sup>th</sup> Planning Commission hearing are included with this report for City Council consideration. The written correspondences submitted are included in Attachments 26 and 27 to this staff report.

All comment letters were reviewed by City staff and LSA Associates Inc., the consultant who prepared the DEIR and FEIR. It is staff's understanding that most, if not all, of the correspondence received has also been reviewed by the project applicant's team. LSA prepared individual memorandums to city staff for consideration that reflect the consideration and input of technical experts and environmental professionals who considered the various comments received. LSA, where appropriate grouped together a consensus response to similar topics, comments and content reflected in the comment letters and e-mail correspondence.

The key topics noted were particularly related to:

- Air Quality and Greenhouse Gas analysis;
- Health Risk Assessment analysis, particularly with regard to diesel emissions and cancer risk, and application of findings of the Health Effects Institute (HEI) study (*Note: It is noted for City Council information, given the expressed public and other agency concerns, that the City's Planning Official contact Dr. Dan Greenbaum, President of HEI directly in June to discuss the stepped methodology used in the FEIR analysis that included using proper EMFAC (emission factor model) data, following CARB adopted OEHHA Guidance, and then consideration of the HEI ACES study, and Dr. Greenbaum noted that the multiple step process employed was proper*);
- Traffic impacts and assurances for fair-share contributions to regional roadways;
- Requests for recirculation of the FEIR;
- Scale of the warehouse development and limitations on land use mix and types of jobs created

Staff and the environmental consultant team will be prepared to answer any additional questions the City Council may have on these topics and/or the response memorandums.

In addition to the letters of concern with the project, over 500 handwritten letters were also received in support of the project. It is noted for City Council information that these same letters were copied to the Riverside County Board of Supervisors, and city staff was notified directly that the County Supervisor whose jurisdiction includes the project area did confirm receipt of the letters.

Approximately sixteen (16) comment letters were received from public agencies. A few of the agencies sent more than one comment letter. As follow-up, the City contacted the following agencies to schedule one-on-one meetings to discuss their comments: California Air Resources Board (CARB), South Coast Air Quality Management District (SCAQMD), the Riverside County Transportation Commission (RCTC), Riverside County Transportation and Land Management Agency (TLMA), California Department of Transportation (Caltrans) and the City of Riverside. As of the date of preparation of this report meetings have been held with each of the agencies, except for the City of Riverside which meeting is scheduled for August 11, 2015.

The City also met with two individual land owners who own property within the project area. The purpose of the meetings was to discuss interests of the property owners with regard to future land use, roadway configuration, and utility development on or near their property. This included one property owner adjacent to the proposed reconfigured Cactus Avenue located outside and to the west of the WLC Specific Plan, and a second property owner (Pauw property) located adjacent to Eucalyptus Avenue just east of Theodore Street within the boundaries of the WLC Specific Plan.

As is also discussed below with respect to the Planning Commission consideration, it is noted that all of the new comments received have been considered carefully by the staff, the environmental consultant, and are made available to the City Council for its consideration. However, Section 21092.5(c) of the CEQA guidelines specifically states:

“Nothing in this section requires the lead agency to respond to comments not received within the comment periods specified in this division, to reopen comment periods, or to delay acting on a negative declaration or environmental impact report.”

Section 15204(a) further provides that:

“CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters.”

Notwithstanding the above, staff is continuing to consider the interests of the agencies and private parties we have met with and provided verbal updates and/or written recommendations if it was determined that modifications are needed.

### **Advisory Body Recommendation**

The Planning Commission conducted a public hearing for the project that extended over multiple days including June 11<sup>th</sup>, June 25<sup>th</sup> and June 30<sup>th</sup> of 2015. At the June 30, 2015 meeting, the Planning Commission by a vote of 6 to 1 recommended that the City Council approve the project.

Over the three days of meetings, the Planning Commission considered the detailed staff report, a comprehensive staff presentation, the presentation by the project applicant,



public comments all covering the primary components of the project including the FEIR, General Plan Amendment, Change of Zone, Pre-Zoning/Annexation, Specific Plan, Tentative Parcel Map No. 36457, and the DA. A total of 74 speakers spoke at the three public meetings, with 37 in support of the project, 33 opposed and 4 with no expressed position on the proposed project. Those in support noted the quality of the project concept, the significant investment made by the developer, potential for employment and job growth, and positive economic benefits to the City including contribution to education and training. Those in opposition argued principally that the project would create unacceptable traffic, air quality and health risks and questioned the environmental analysis in these regard, and they raised concern with a predominance of warehousing land use and concern with the applicant's ability to carry out the project.

In addition, to the public speakers, over 100 comment letters and e-mails were submitted to the Planning Commission from outside agencies, Moreno Valley residents, interested groups and entities, and other general public from outside of Moreno Valley. The written comments generally focused on those same areas of project benefits and project concerns expressed by the public speakers during the hearing as noted above.

All of the new comments received were considered by staff, the environmental consultant, and were made available to the Planning Commission for its consideration. Some public have expressed an interest to see written responses to written comments. However, Section 21092.5(c) of the CEQA guidelines specifically states:

"Nothing in this section requires the lead agency to respond to comments not received within the comment periods specified in this division, to reopen comment periods, or to delay acting on a negative declaration or environmental impact report."

Section 15204(a) further provides that:

"CEQA does not require a lead agency to conduct every test or perform all research, study, and experimentation recommended or demanded by commenters."

The established public comment period for review of the DEIR for the WLC project was between February 5, 2013 and April 8, 2013. All letters and correspondence received during that 60 day review were considered in accordance with CEQA and detailed responses to comments were included in the FEIR that is before the City Council.

Notwithstanding the above, the project environmental consultant team, under staff's review and direction, during the course of the Planning Commission consideration performed analysis and prepared responses to many of the comments received for further staff's consideration. Collective responses were prepared for those similar comments raised in letters and the various e-mails, and some individual responses to agency and interest group comments such as the California Air Resources Board (CARB), City of Riverside, Inland Empire Waterkeepers and the Riverside County Transportation Commission (RCTC) were assembled and available for staff use as necessary to respond to Planning Commission questions.

At the conclusion of their deliberations, in the motion to recommend approval of the Project to the City Council, the Planning Commission modified three (3) items:

1) Tentative Parcel Map Condition of Approval P8 was modified to provide clarification that prior to the recordation of Parcel 26 of the map, only that property shall need to be annexed into the City and that the annexation of Parcel 26 property does not hold up recordation of any other property; and

2) Mitigation Monitoring Program and Mitigation Measure 4.3.6.3B was modified to expand the revocation provision for CUP "Conditional Use Permit" under the Sanctions for Non-Compliance with to include "any related entitlement", and

3) Development Agreement Article 4, Section 4.14 was modified to require the developer to include air filtration systems for all seven (7) rural residential homes included within the World Logistics Center Specific Plan boundary.

All changes requested by the Planning Commission are included in the related attachments.

As explained in the responses to the various comments received that are included as Attachment 27 of the staff report, staff's determination during consideration of the project by the Planning Commission was that the FEIR as prepared is consistent with the requirements of CEQA and no evidence presented in the volume of new agency and/or public comments triggered the requirements for recirculation of the DEIR as outlined in Section 15088.5 of the CEQA Guidelines.

Further, in consideration of those comments provided requesting that the project be conditioned to require zero emission trucks, such zero-emission on-road heavy-duty trucks are not widely commercially available, nor can it be determined when such zero emissions trucks would be widely commercially available, and it was not possible to identify other warehouse/industrial/logistics projects that have such a requirement. The mitigation measures for air quality imposed on the project include restriction of use of trucks falling below 2010 engine emission standards from entering project areas, off-road diesel powered construction equipment to be Tier 4, limitation of truck idling to three (3) minutes, are more stringent than current industry practices.

## **ALTERNATIVES**

1. Certify the Environmental Impact Report and approve the World Logistics Center project including a General Plan Amendment, Development Agreement, Change of Zone, Specific Plan, Pre-Zoning/Annexation, and Tentative Parcel Map.
2. Certify the Environmental Impact Report and approve the World Logistics Center project including a General Plan Amendment, Change of Zone, Specific Plan, Pre-Zoning/Annexation, and Tentative Parcel Map, but without a Development Agreement.

3. Deny the World Logistics Center project.
4. Certify the Environmental Impact Report and approve the World Logistics Center project including a General Plan Amendment, Development Agreement, Change of Zone, Specific Plan, Pre-Zoning/Annexation, and Tentative Parcel Map, with any modifications specified by the City Council.

### **FISCAL IMPACT**

Entitlement processing costs for the project have been entirely borne by the project applicant through establishment of development deposit accounts. The proposed general plan and zoning changes from the existing Moreno Highlands Specific Plan to the World Logistic Center Plan is expected to result in a positive economic impact to the City given non-residential land uses typically have more positive revenue to cost impact ratio given less demand for public services. Approval of the Development Agreement includes positive economic interests to the City.

### **NOTIFICATION**

All responsible agencies, interested parties and property owners of record within at least 300 foot radius of the project area and proposed reconfiguration of Cactus Avenue were provided a notice of the City Council public hearing. The public hearing notice for this project was posted on the project site in seven (7) separate prominent locations with an additional notice posted on Cactus Avenue, east of Redlands Boulevard and outside of the WLC Specific Plan boundary. A ¼ page ad for the public hearing notice was published in the county-wide version of the local newspaper on August 3, 2015.

### **PREPARATION OF STAFF REPORT**

Prepared By:  
Mark Gross  
Senior Planner

Department Head Approval:  
Richard J. Sandzimier  
Planning Official

Concurred By:  
Allen Brock  
Community Development Director

### **CITY COUNCIL GOALS**

None

### **ATTACHMENTS**

1. Notice of Special Public Hearing 08/17/15 and Environmental Determination
2. Resolution No. 2015-56
3. Exhibits A and B Fact, Findings and Statement of Overriding Considerations Regarding the Environmental Effects and the Approval of the World Logistics Center Specific Plan
4. Resolution No. 2015-57

5. Exhibits A-M WLC - Proposed Text Amendments to the General Plan
6. Ordinance No. 900
7. Exhibits A, B, C Proposed Zoning Map
8. Resolution No. 2015-58
9. Exhibits A, B Conditions of Approval for Tentative Parcel Map Case No. PA12-0015 APN Various Properties on File
10. Ordinance No. 901
11. Exhibit A Development Agreement
12. Resolution No. 2015-59
13. Exhibit A World Logistics Center Pre-Zoning/Annexation Map
14. Resolution No. CSD 2015-29
15. Exhibit A World Logistics Center Pre-Zoning/Annexation Map
16. FEIR and Appendices Click on the FEIR Documents Tab Above
17. Proposed World Logistics Center Project Map
18. World Logistics Center Project Aerial Map
19. Land Use Plan
20. Highland Fairview Property Owners Map
21. Letter to Mr. Iddo Benzeevi From City Manager Henry Garcia
22. Report to City Council from Barry Foster
23. Planning Commission Staff Report 06/11/15 Without Attachments
24. Planning Commission Staff Report 06/25/15 Without Attachments
25. Planning Commission - Public Comments
26. City Council - Public Comments
27. Responses to Public Comments

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	8/07/15 1:07 PM
City Attorney Approval	<u>✓ Approved</u>	8/10/15 4:01 PM
City Manager Approval	<u>✓ Approved</u>	8/10/15 4:59 PM

<b>RESULT:</b>	<b>CONTINUED [UNANIMOUS]</b>	<b>Next: 8/19/2015 5:00 PM</b>
<b>MOVER:</b>	George E. Price, Council Member	
<b>SECONDER:</b>	Jeffrey J. Giba, Council Member	
<b>AYES:</b>	Molina, Gutierrez, Giba, Jempson, Price	

HISTORY:  
 08/17/15 City Council CONTINUED  
 Next: 08/18/15

Public testimony was given by the following individuals:

Attachment: Development Agreement (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD HOC COMMITTEE REGARDING

Christopher Baca (supports)  
Regina L. Brockmueller (supports)  
Leo Gonzalez (supports)  
Gary Potts (supports)  
Charles Seek (supports)  
John W. Peikert (supports)  
Owen L. Christian (supports)  
Elsa Coulter (supports)  
John Husing (supports)  
Robert Harris (supports)  
Ms. Miller (opposes)  
Dr. Keri Then (opposes)  
Evan Morgan (supports)  
James Leis (statement)  
Rafael Brugueras (supports)  
Susan Billinger (opposes)  
Deanna Reeder (opposes)  
Russell Williams (statement)  
Frank Wright (supports)  
Gideon Kracov (oppose)  
Santiago Hernandez (supports)  
Marvin Niles (supports)  
Sandra Murphy (supports)  
Paul Moreno (statement)  
Tom Thornsley (opposes)  
David Consani (supports)  
Jeff Clayton (supports)  
Raul Mark Yarbrough (supports)  
Gabriel Colangelo (supports)

The special meeting was adjourned to the next day (August 18, 2015) at 5:00 p.m. in the Conference and Recreation Center, carry over the public testimony period and allow every public speaker that had signed up and to allow those speakers that left early the opportunity to speak.

## RESOLUTION NO. 2015-66

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, ESTABLISHING A SUPPLY CHAIN AND LOGISTICS INDUSTRY TRAINING / EDUCATION AD HOC COMMITTEE OF THE CITY COUNCIL

WHEREAS, on August 25, 2015 the City Council approved the World Logistics Center Project; and

WHEREAS, the City Council has adopted Ordinance 901, which approved the Development Agreement between the City of Moreno Valley and HF Properties, Sunnymead Properties, Theodore Properties Partners, 13451 Theodore, LLC, and HL Properties (collectively, the "Property Owners"); and

WHEREAS, the Development Agreement contains provisions for local hiring and funding to support workforce development; and

WHEREAS, the World Logistics Center is estimated to create 20,000 jobs at build-out; and

WHEREAS, in order to prepare the Moreno Valley workforce to take advantage of future jobs and establish a meaningful career in the logistics industry, well-planned and synergistic strategies must be established; and

WHEREAS, the City Council of the City of Moreno Valley will work with community stakeholders to guide the development of those strategies.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE THAT A LOGISTICS INDUSTRY TRAINING / EDUCATION AD HOC COMMITTEE IS ESTABLISHED WITH THE FOLLOWING SCOPE AND CHARACTERISTICS:

Section 1. Specific Tasks and Objectives

Specific tasks and objectives of the Ad Hoc Committee shall and include, and be limited to, the following:

1. Solicit select community stakeholder participation;
2. Identify existing regional and local logistics training and education opportunities;
3. Identify deficiencies in regional and local logistics training and education opportunities;

1  
Resolution No. 2015- 66  
Date Adopted: October 13, 2015

4. Propose measures to mitigate deficiencies in regional and local logistics training and education opportunities;
5. Solicit resident input;
6. Provide periodic progress reports to the City Council; and
7. Make specific logistics training and education funding recommendations to the City Council.

Section 2. Term

The Committee shall serve for a term of one (1) year commencing on October 13, 2015, unless such term is extended by resolution of the City Council.

Section 3. Committee Type and Composition:

1. The Committee shall be a temporary Ad Hoc Committee.
2. The Committee shall consist of two members of the City Council as selected by motion of the City Council.

Section 4. Support to the Committee:

Staff support shall be initially provided to the Committee by the City Council Office staff with the provision that other department staff may be utilized for expertise as needed.

Section 4. Meetings:

The Committee shall meet on a date and time selected by members of the Committee. Meetings shall not be subject to the Ralph M. Brown Act.

APPROVED AND ADOPTED this 13<sup>TH</sup> day of October, 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley

ATTEST:

2  
Resolution No. 2015-66  
Date Adopted: October 13, 2015

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

Resolution No. 2015-66<sup>3</sup>  
Date Adopted: October 13, 2015

Attachment: Logistics Training Ad Hoc Committee Resolution [Revision 5] (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD



**RESOLUTION JURAT**

STATE OF CALIFORNIA        )  
COUNTY OF RIVERSIDE       ) ss.  
CITY OF MORENO VALLEY     )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 2015-66 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13<sup>th</sup> day of October, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)

4  
Resolution No. 2015-66  
Date Adopted: October 13, 2015

Attachment: Logistics Training Ad Hoc Committee Resolution [Revision 5] (1710 : APPROVE RESOLUTION NO. 2015-66 ESTABLISHING AN AD



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 2015-68 CONFIRMING CONSIDERATION OF THE ADOPTED PROGRAM ENVIRONMENTAL IMPACT REPORT AND ITS ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM

---

### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Adopt Resolution No. 2015-67, a Resolution of the City Council of the City of Moreno Valley, California, adopting the Moreno Master Drainage Plan (Revision No. 2).
2. Adopt Resolution No. 2015-68, a Resolution of the City Council of the City of Moreno Valley, California, to consider as a Responsible Agency the Certified Program Environmental Impact Report for the Moreno Master Drainage Plan (Revision No. 2) and its associated Mitigation Monitoring and Reporting Program.

### **SUMMARY**

This report recommends adoption of the Moreno Master Drainage Plan Revision No. 2; consideration of the Program Environmental Impact Report and its associated Mitigation Monitoring and Reporting Program as adopted by the Riverside County Flood Control and Water Conservation District.

### **DISCUSSION**

The Moreno watershed is located within a portion of the City of Moreno Valley and in unincorporated areas of Riverside County to the north of the City boundary. It is

bounded by Lasselle Street on the west, Theodore Street on the east, the Badlands to the north and the City boundary to the south. The Master Drainage Plan within this watershed is called the Moreno Master Drainage Plan (“Moreno MDP”). It was adopted for the Moreno watershed in 1980, prior to the incorporation of the City of Moreno Valley. It was later revised and adopted in 1991 (Revision No. 1) due to development within the watershed being at a higher density than originally anticipated. Since then, the City of Moreno Valley has updated its General Plan, and approved zone changes. As a result, this prompted the Riverside County Flood Control and Water Conservation District (“RCFCD”) to do a second revision to the Moreno MDP (Revision No. 2) to address these changes.

RCFCD is Lead Agency in governing the regional network of drainage facilities. RCFCD, working with the City of Moreno Valley, has conducted various studies and analyses of the watershed leading to the Moreno MDP Revision No. 2. The Moreno MDP (Revision No. 2) modifies the current Moreno MDP’s (Revision No.1) drainage facilities’ size, type and conceptual locations. It also includes the incorporation of detention basins and debris basins to ensure a functional network of drainage facilities. The Moreno MDP (Revision No.2) would also provide adequate protection from the 100-year flood when implemented.

The Board of Supervisors adopted the Moreno MDP (Revision No. 2), Final Program Environmental Impact Report which studies the physical environmental impacts related to the Moreno MDP Revision and the Mitigation Monitoring and Reporting Program at its meeting on April 14, 2015.

The City has reviewed and considered the Final Program Environmental Impact Report and Mitigation Monitoring and Reporting Program. The City has determined that any environmental impacts related to the implementation of the Moreno MDP (Revision No. 2) within the City have been addressed by the certified Final Program Environmental Impact Report and the Mitigation Monitoring and Reporting Program as provided for in the California Environmental Quality Act (“CEQA”) based on the Findings included in the applicable Resolution.

## **ALTERNATIVES**

1. Approve and authorize the recommended actions as presented in this staff report. *This alternative will allow the Moreno MDP (Revision No.2) to serve as a guide for the design of storm drain systems, improving flood protection for both existing users and future development within the Moreno watershed.*
2. Do not approve and authorize the recommended actions as presented in this staff report. *The current Moreno MDP (Revision No.1) would continue to be used, which has outdated information for design of storm drain systems and would provide less flood protection compared to Moreno MDP (Revision No.2).*

## **FISCAL IMPACT**

The RCFCD’s Board of Supervisors approval of the Moreno MDP in April 2015 did not increase the current Area Drainage Plan (ADP) fee. Future development within the Moreno Master Drainage Plan will be conditioned to construct storm drain infrastructure or pay the Area Drainage Plan (ADP) fee accordingly. The estimated total cost is approximately \$160 million.

**CITY COUNCIL GOALS**

**PUBLIC FACILITIES AND CAPITAL PROJECTS:**

Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

**NOTIFICATION**

Public meeting regarding adoption of the Moreno MDP (Revision No. 2) is scheduled for October 13, 2015, at the City of Moreno Valley City Council Chamber from 2:00 PM to 3:00 PM. Notice of Public Meeting is posted at the City’s facilities followed with Publication of City Council Meeting Agenda.

**PREPARATION OF STAFF REPORT**

Prepared By:  
Hoang Nguyen  
Associate Engineer

Department Head Approval:  
Ahmad R. Ansari, P.E.  
Public Works Director/City Engineer

Concurred By:  
Henry Ngo, P.E.  
Interim Engineering Division Manager

Concurred By:  
Rick Sandzimier  
Planning Official

**CITY COUNCIL GOALS**

None

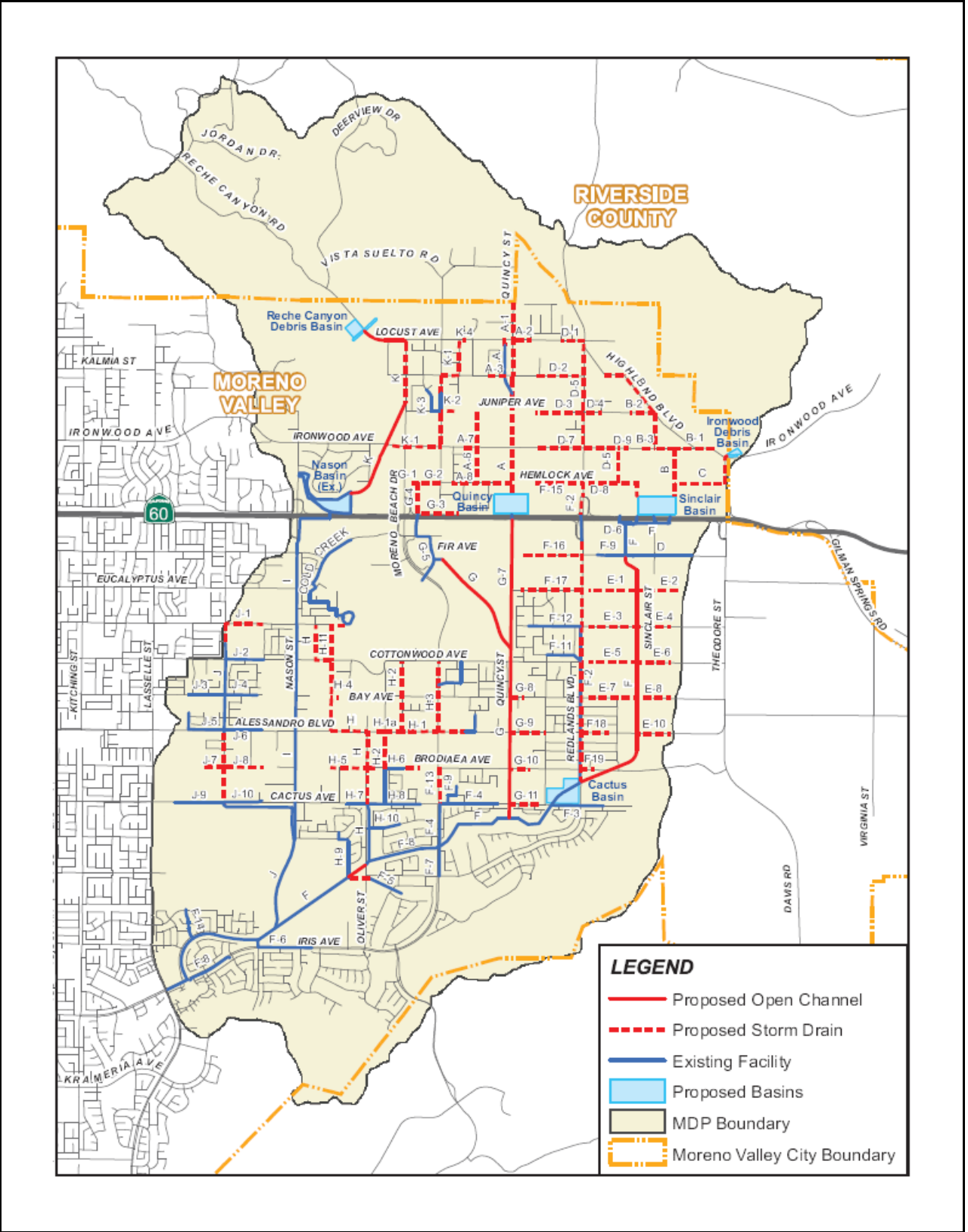
**ATTACHMENTS**

1. MoVal MDP - Vicinity Map
2. Resolution 2015-67 - Master Drainage Plan
3. Exhibit A - MDP Resolution
4. Resolution 2015-68 - CEQA EIR MMRP
5. Exhibit A to CEQA EIR MMRP Resolution
6. Exhibit B to CEQA EIR MMRP Resolution

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/07/15 11:48 AM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 1:53 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 5:44 PM





**CITY OF MORENO VALLEY  
PUBLIC WORKS DEPARTMENT - LAND DEVELOPMENT**

**MORENO MDP AND ADP  
AREAS**

## RESOLUTION NO. 2015-67

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF  
 MORENO VALLEY, CALIFORNIA, ADOPTING THE  
 MORENO MASTER DRAINAGE PLAN (REVISION NO. 2)

WHEREAS, in order to address drainage issues within the City of Moreno Valley ("City"), including, but not limited to, increased water run-off and potential for flood hazards, which have been exacerbated by continued growth and new development in the City, the City has worked with Riverside County Flood Control & Water Conservation District and Albert A. Webb Associates on the development of the Moreno Master Drainage Plan (Revision No. 2) (the "Plans"). The facilities described in the Plans ("Drainage Improvements") are necessary in order to mitigate the growth impact on the City's existing drainage facilities and to avoid conditions that affect the health, safety and welfare of City residents; and

WHEREAS, it is the intent of the City that the Plans, once adopted, shall replace and supersede the existing Moreno Master Drainage Plan (Revision No. 1); and

WHEREAS, detailed descriptions of each of the Drainage Improvements, their approximate location, size, approximate time of availability and their estimated costs are set forth in the Plans; and

WHEREAS, the Drainage Improvements are consistent with the City's General Plan; and

WHEREAS, copies of the Plans are on file in the City Clerk's office and have been made available for public review in accordance with state law, as more fully described below; and

WHEREAS, the City Council has duly noticed and conducted a public meeting on October 13, 2015, at which time the public was invited to make oral and written presentations as part of the regularly scheduled meeting prior to the adoption of this Resolution; and

WHEREAS, the City published notice of the public hearing as described above in accordance with Government Code Sections 6062(a) and 66018;

WHEREAS, adoption of the Plans is subject to the California Environmental Quality Act ("CEQA"). The Riverside Flood Control & Water Conservation District prepared an Environmental Impact Report ("EIR") in compliance with the requirements of CEQA in order to consider all potential adverse environmental impacts associated with implementation of the Plans. The City has, concurrently with its consideration of this Resolution, considered a resolution approving the EIR.

NOW, THEREFORE, the City Council of the City of Moreno Valley does hereby resolve as follows:

- Section 1. The City Council hereby finds that the Drainage Improvements as shown on the Plans shall exist in addition to existing facilities serving the City at this time, and hereby adopts the Plans in the form on file at the office of the City Clerk. The boundaries of the area included within the Plans are depicted in Exhibit "A" attached hereto and incorporated by reference herein.
- Section 2. The City hereby rescinds the existing Moreno Master Drainage Plan, dated April 1991.
- Section 3. The provisions of this Resolution are hereby expressly made severable. If any provision(s) of the Resolution or this resolution's application to any person, material, place or circumstance is held to be invalid, that invalidity shall not affect other provisions or application of this resolution that can be given effect without the invalid provision or application.
- Section 4. This Resolution shall become effective on October 13, 2015.

APPROVED AND ADOPTED this 13<sup>th</sup> day of October 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

2  
Resolution No. 2015-67  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-67 - Master Drainage Plan [Revision 2] (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER



**RESOLUTION JURAT**

STATE OF CALIFORNIA            )  
COUNTY OF RIVERSIDE        ) ss.  
CITY OF MORENO VALLEY        )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 2015-67 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13<sup>th</sup> day of October 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)

Resolution No. 2015-67<sup>3</sup>  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-67 - Master Drainage Plan [Revision 2] (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER

Exhibit A

RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT  
Riverside, California

**MORENO**  
**MASTER DRAINAGE PLAN**

ZONE FOUR

Original Plan – September 1980  
Revision No. 2 – April 2015

WARREN D. WILLIAMS  
General Manager-Chief Engineer

Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO.

# MORENO MASTER DRAINAGE PLAN (Revision No. 2)

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## APPENDIX

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EXHIBIT 2A - Alternative 2A.....	APPENDIX B
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EXHIBIT 3 - Alternative 3 .....	APPENDIX B
EXHIBIT 4 - Alternative 4 .....	APPENDIX B

## MAP

Master Drainage Plan.....	INSIDE BACK COVER
---------------------------	-------------------

Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO.

## SECTION I - PURPOSE

The purpose of this report is to identify the network of drainage facilities needed to alleviate currently known and anticipated drainage problems within the eastern portion of the City of Moreno Valley. A Master Drainage Plan (MDP) was originally adopted for the Moreno watershed in 1980 and was later revised in 1991 due to the development of the watershed at a higher density than anticipated. Since the 1991 revision, the City of Moreno Valley has updated its general plan, approved zone changes, and continued to grow significantly; prompting the District to once again revise the Moreno MDP to address these changes. In addition, this new revision seeks to address changes in regulation that favor the incorporation of flood control facilities which encourage infiltration.

Readers should bear in mind that the drainage network presented herein is conceptual in nature. Simply stated, the MDP provides a conceptual solution that addresses the known and anticipated drainage problems in the Moreno area based on various engineering, environmental, and economic considerations. By no means does the proposed MDP represent the only feasible solution.

The alignment and location of the facilities proposed in this MDP are approximate. Precise locations will be dictated by site specific conditions and other factors existing at the time of detailed design. Similarly, the facility sizing information shown on the enclosed map is preliminary. More detailed analysis performed at the facility design stage will determine the final facility sizing.

## SECTION II - SCOPE

Tasks involved in the development of this master plan include:

1. Determination of the points of concentration and quantity of storm water runoff produced at various locations.
2. Determination of the quantity of debris produced by major canyons in the watershed.
3. Determination of the location and size of the proposed drainage facilities.
4. Investigation of alternative routes and conveyance methods as a basis for selecting the most economical, environmental, and soundly engineered plan.
5. Preparation of a drainage facility map.
6. Preparation of preliminary plan and profile sheets.
7. Preparation of individual facility cost estimates.

### SECTION III – GENERAL DISCUSSION

The Moreno MDP encompasses a portion of the City of Moreno Valley and surrounding Riverside County lands. The watershed is generally bounded by Lasselle Street on the west, Theodore Street on the east, the Badlands on the north, and the city boundary on the south.

The proposed drainage plan involves the construction of detention basins, debris basins, open channels, and a network of underground storm drains. The drainage system will collect local urban runoff and transport the flows through this developing community to an outlet at the upper terminus of the Kitching Street Channel.

The revision presented here is a re-evaluation and expansion of the 1991 Moreno MDP Revision (Adopted MDP). The proposed plan shall supersede all past plans and reports. The plan presented herein will provide flood protection from the 100-year flood to the community when implemented, serve as a guide for the long term construction scheduling of the primary drainage facilities, and serve the basis for revising the existing Moreno Area Drainage Plan (ADP). The plan will also act as a planning guide for the location and sizing of local drainage facilities to be constructed by developers and others within the area.

### SECTION IV – MASTER DRAINAGE PLAN OBJECTIVES

The following objectives were established for the Moreno Master Drainage Plan Revision:

1. Revise the Moreno MDP to provide a drainage plan which supports the existing and proposed land use as set forth in the “Riverside County General Plan” updated in 2008, “City of Moreno Valley General Plan” updated in July 2006, and any proposed amendments thereto.
2. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of MDP facilities to protect existing and future development.
4. Identify the most economical combination of facilities considering right-of-way acquisition, construction, and maintenance costs.
5. Develop a plan which, when implemented, will result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Moreno MDP.
6. Revise the Moreno MDP to minimize major diversions and perpetuate the natural drainage pattern of the area to the maximum extent practicable.
7. Where feasible, incorporate facilities which encourage infiltration.
8. Minimize environmental impacts to the maximum extent practicable.

## SECTION V – HYDROLOGY

### Revision Studies:

This section outlines methodology, assumptions, and rainfall values used for new studies within the drainage area boundary for this MDP revision. The areas restudied were those tributary to Line F north of Cactus Avenue, areas tributary to Quincy Channel (Line G), and areas north of California State Route 60 (SR 60) not tributary to Nason Basin. New studies for the western portion of the plan (west of the Line G system) were not performed during the revision since many of the facilities here have already been constructed and were designed based on the Adopted MDP flow rates and alignments (see Previous Studies section below for additional information).

Two methods were used to develop the hydrology for this MDP revision: the Rational Method and the Synthetic Unit Hydrograph Method. The Rational Method was used to determine the peak discharges (cubic feet per second) generated from smaller watersheds less than 300 to 500 acres in size. For watersheds larger than 500 acres, the Synthetic Unit Hydrograph Method was used. To account for the attenuating effects of channel and basin storage, the Convex Routing Method and Modified Puls Methods were used, respectively. Methodology and supportive data for both the Rational and Synthetic Unit Hydrograph Methods may be found in the *Riverside County Flood Control and Water Conservation District Hydrology Manual*, dated April 1978 (District Hydrology Manual).

Future land use assumptions were based on the following:

- "The City of Moreno Valley General Plan," updated July 2006
- "The Riverside County General Plan," updated December 2008
- Potential changes to areas currently zoned under the "Moreno Highlands Specific Plan," adopted in 1992.

NOAA Atlas 14 Version 4 rainfall values were used in the hydrology calculations performed for this MDP revision. The rainfall frequencies examined were the 2-year (50% annual chance) and the 100-year (1% annual chance) recurrence intervals with 1, 3, 6 and 24 hour durations. The calculated slope of the intensity-duration curve is 0.577. Table 1 highlights the NOAA Atlas 14 Version 4 area weighted point rainfall values used to develop the revision studies:

**TABLE 1 – NOAA Atlas 14 Point Rainfall Values**

Storm Frequency and Duration	Area Weighted Point Rainfall (Inches)
2 Year – 1 Hour	0.52
2 Year – 3 Hour	0.90
2 Year – 6 Hour	1.29
2 Year – 24 Hour	2.29
100 Year – 1 Hour	1.57
100 Year – 3 Hour	2.42
100 Year – 6 Hour	3.38
100 Year – 24 Hour	6.43

Previous Studies:

Line K System – The flow rates for the Line K system have remained the same as in the Adopted Plan. No changes were proposed to the alignment and no major changes in land use have occurred. Hydrology backup calculations for this line are from studies performed for the Adopted MDP. Line K was sized in these studies using NOAA Atlas 2 rainfall values.

Line H System – Hydrology for this system comes from the approved hydrology study for Tract 31128 and 31129 performed by PHB & Associates, Inc. This study reflects changes to the Adopted MDP alignment. This study uses NOAA Atlas 2 rainfall values.

**SECTION VI – EXISTING FACILITIES**

In preparing this master drainage plan revision an inventory of known existing facilities was made and is summarized in Table 2. Those facilities serving as part of revised Moreno MDP drainage system are shown on the updated Moreno MDP map.

**TABLE 2 – Existing Facilities**

<b>Facility</b>	<b>Drawing Number</b>	<b>Maintenance</b>
Line A	4-473	RCFC
Line D	4-1007	RCFC
Line D-5	4-1007	RCFC
Line D-6	4-1007	RCFC
Line F	4-502,4-5271 4-1007, 4-912(Future RCFC)	RCFC
Line F-2	4-491,4-847	RCFC
Line F-3	4-501, 4-506	RCFC
Line F-4	4-501	RCFC
Line F-5	4-570	RCFC
Line F-6	4-528	RCFC
Line F-7	4-501	RCFC
Line F-8	4-509	RCFC
Line F-9	-	MV
Line F-9	4-1007	RCFC
Line F-11	4-847	RCFC
Line F-12	4-847	RCFC
Line F-14	4-719	RCFC
Line G	4-526, 4-886	RCFC
Line G-5 (Auto Mall Dr Lateral)	4-526	MV
Line G-7	4-879	RCFC
Line H-1	4-885	RCFC
Line H-2	4-875	RCFC
Line H-3	-	MV

Facility	Drawing Number	Maintenance
Line H-6	4-875	RCFC
Line H-7	4-867	RCFC
Line H-8	4-875	RCFC
Line H-9	4-834	RCFC
Line I	4-583, 4-647, 4-738, 7-405, 4-904, 4-905	RCFC
Line J	4-858, (4-955 Future RCFC)	RCFC
Line J-2	4-858	RCFC
Line J-3	4-858	RCFC
Line J-4	4-858	RCFC
Line J-5	4-858	MV
Line J-6	4-858	RCFC
Line J-9	4-1027	(Future RCFC)
Line J-10	4-646, 4-647	RCFC
Line K-1	-	MV
Line K-3	-	MV
Moreno Cold Creek SD - Line A	4-929	RCFC

## SECTION VII – FACILITY SIZING CRITERIA

### Underground Storm Drains

The underground facilities proposed in this MDP are located within existing or assumed future right-of-way, whenever possible, and consists of reinforced concrete pipe (RCP) ranging in size from 27 inches to 108 inches in diameter and reinforced concrete boxes (RCB) ranging in dimensions from 7'W x 7'D to 10'W x 8'D. Underground storm drain facilities were sized based on their full flow capacity.

### Open Channels

The open channel facilities proposed are generally located along existing drainage ditches, washes, and where the proposed construction of the channel would have minimal impacts on adjacent properties. The open channels serve as flow conveyors and provide outlets for underground facilities proposed in the plan. Two types of open channels are proposed in this MDP, concrete lined channels and earthen bottomed channels with rock lined side slopes (unlined). The hydraulic sizing of open channels is based on normal depth calculations. The right-of-way requirements for both lined and unlined facilities include the full channel width, maintenance access roads, as well as a 5 foot buffer on either side for anticipated cut and fill. Channels with top widths of less than 20 feet require one 15 foot maintenance access road; where the top width exceeds 20 feet, two maintenance access roads are necessary.

### Detention Basins

The detention basins proposed in this MDP are located upstream existing facilities with limited hydraulic capacity (e.g. freeway culverts, Line F). The purpose of the detention basin is to attenuate peak flow rates to match the capacity of downstream existing facilities through the use of temporary detention storage. It should be noted that the detention basins proposed in this plan are sized for the 1% annual chance ("100-year" storm) event. Flows exceeding the design capacity of the basin would pass over an emergency spillway in flow patterns approximating present conditions.

### Debris Basins



Debris basins are proposed in watersheds where significant amount of debris would be expected and are generally located upstream of the proposed facilities to capture the debris before it enters the downstream conveyance system. The proposed debris basins were sized using the Tatum Method by the U.S. Army Corps of Engineers Los Angeles District, dated 1963.

### SECTION VIII – PROPOSED IMPROVEMENTS

The improvements proposed in this MDP are shown on the enclosed map found at the back of this report. Supporting data for proposed facilities is available at the Riverside County Flood Control and Water Conservation District's Office.

The design engineer should be aware that a detailed utility search was not completed. This means that, while the major known facilities were considered during the development of this MDP, a more thorough search may reveal additional or newly placed utilities that may necessitate minor alignment and size changes, or utility relocations during final design.

**Line A** – Line A begins approximately 300 feet west of the intersection of Locust Avenue and Quincy Street as a 4.5 foot deep concrete lined trapezoidal channel with side slopes of 1.5:1 and a base width of 6 feet. The channel extends southerly and connects to an existing section of Line A which continues southerly and southeasterly to a confluence point with the proposed Line A-1 just south of Kalmia Street. At the confluence point Line A transitions into a 8'W x 7'D RCB and continues southerly. The RCB then transitions into a 9'W x 7'D and continues southerly to an outlet into the proposed Sinclair Basin just north of California State Route 60 (SR 60).

**Line A-1** – Line A-1 begins at a point approximately 1,315 feet north and 235 feet east of the intersection of Locust Avenue and Quincy Street as a 72-inch RCP. The 72-inch RCP extends westerly to Quincy Street and southerly in Quincy Street. At Kalmia Avenue, the 72-inch RCP transitions into a 78-inch RCP until the confluence with Line A.

**Line A-2** – Line A-2 begins approximately 650 feet east of the intersection of Locust Avenue and Quincy Street as a 42-inch RCP. The 42-inch RCP extends westerly until the confluence with the proposed Line A-1.

**Line A-3** – Line A-3 begins at the intersection of Edmonson Avenue and Kalmia Avenue as a 42-inch RCP. The 42-inch RCP extends easterly in Kalmia Avenue until the confluence with an existing portion of Line A.

**Line A-6** – Line A-6 begins at a point approximately 1,300 feet west and 1,300 feet north of the intersection of Quincy Street and Ironwood Avenue as a 36-inch RCP. The 36-inch RCP extends southerly and transitions into a 42-inch and then a 48-inch RCP. At Hemlock Avenue the 48-inch RCP continues easterly and transitions into a 78-inch RCP, then into a 84-inch RCP, and finally into a 7'W x 7'D RCB until the confluence with Line A.

**Line A-7** – The upstream origin of Line A-7 begins approximately 850 feet east of the intersection of Petit Street and Ironwood Avenue as a 42-inch RCP. The 42-inch RCP extends to the westerly until the confluence with line A-6.

**Line A-8** – Line A-8 begins approximately at the intersection of Hinson Street and Hemlock Avenue as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 54-inch RCP until the confluence with Line A-6.

**Line B** – Line B begins approximately 1,200 feet southeast of the intersection of Redlands Boulevard and Highland Boulevard as a 66-inch RCP. The 66-inch RCP extends easterly for 720 feet and then transitions into an 8'W x 7'D RCB following Highland Boulevard southeasterly for 1850 feet. The facility then extends southerly to Ironwood Avenue. From here the facility transitions into an 8'W x 8'D RCB extending easterly for approximately 740 feet before heading southerly for 1,310 feet to the confluence with Line C. At the confluence, the facility transitions into a 10'W x 8'D RCB which continues southerly to an outlet into the proposed Sinclair Basin just North of SR 60.

**Line B-1** – Line B-1 begins approximately 730 feet west of the intersection of Theodore Street and Ironwood Avenue along Ironwood Avenue Street as a 78-inch RCP. The 78-inch RCP extends westerly along Ironwood Avenue until the confluence with Line B.

**Line B-2** – Line B-2 begins approximately 850 feet west of the intersection of Juniper Avenue and Highland Boulevard as a 54-inch RCP. The 54-inch RCP extends easterly in Juniper Avenue until the confluence with Line B.

**Line B-3** – Line B-3 begins approximately 2,110 feet east of the intersection of Redlands Boulevard and Ironwood Avenue as a 42-inch RCP. The 42-inch RCP extends easterly in Ironwood Avenue until the confluence with Line B.

**Line C** – The upstream origin of Line C begins at the outlet of the proposed Ironwood Debris Basin as a 66-inch RCP. The 66-inch RCP extends southerly in Theodore Street for 930 feet before transitioning into a 78-inch RCP and heading easterly until the confluence with Line B.

**Line D-1** – Line D-1 begins approximately 820 feet west of the intersection of Locust Avenue and Redlands Boulevard as a 42-inch RCP. The 42-inch RCP extends easterly in Locust Avenue and transitions into a 48-inch RCP until the confluence with Redlands Boulevard.

**Line D-2** – Line D-2 begins approximately 1,750 feet west of the intersection of Kalmia Avenue and Redlands Boulevard as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 48-inch RCP, to a 60-inch RCP, and finally to a 66-inch RCP until the confluence with Line D-5.

**Line D-3** – Line D-3 begins approximately 1,750 feet west of the intersection of Juniper Avenue and Redlands Boulevard as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 48-inch RCP, to a 60-inch RCP, and finally to a 66-inch RCP until the confluence with Line D-5.

**Line D-4** – Line D-4 begins approximately 670 feet east of the intersection of Juniper Avenue and Redlands Boulevard as a 42-inch RCP. The 42-inch RCP extends westerly until the confluence with Line D-5.

**Line D-5** – Line D-5 begins at the intersection of Locust Avenue and Redlands Boulevard as a 48-inch RCP. The 48-inch RCP extends southerly in Redlands Boulevard, transitioning into a 66-inch RCP until Ironwood Avenue where the 66-inch RCP transitions into a 90-inch RCP and turns easterly for approximately 1,310 feet. At this point the 90-inch RCP turns southerly for 1,300 feet, easterly for 690 feet, and finally southerly for 530 feet to an outlet into the proposed Sinclair Basin just north of SR 60.

**Line D-7** – Line D-7 begins approximately 1,750 feet west of the intersection of Ironwood Avenue and Redlands Boulevard as a 36-inch RCP. The 36-inch RCP extends easterly and transitions into a 48-inch RCP, to a 60-inch RCP, and finally to a 66-inch RCP until the confluence with Line D-5.

**Line D-8** – The upstream origin of Line D-8 begins at a point approximately 1,300 feet south and 240 feet

east of the intersection of Ironwood Avenue and Redlands Boulevard as a 42-inch RCP. From there the 42-inch RCP extends easterly and transitions into a 54-inch RCP until the confluence with Line D-5.

**Line D-9** – Line D-9 begins at a point approximately 1,640 feet east of the intersection of Redlands Boulevard and Ironwood Avenue as a 36-inch RCP. The 36-inch RCP extends westerly until the confluence with Line D-5.

**Line E-1** – Line E-1 begins at a point approximately 2,600 feet south of State Route 60 and 250 feet east of Redlands Boulevard as a 36-inch RCP. The 36-inch pipe extends easterly and transitions into a 54-inch RCP and then to a 66-inch RCP until the confluence with Line F.

**Line E-2** – Line E-2 begins at a point approximately 2,600 feet south of State Route 60 and 1,750 feet west of the Theodore Street as a 36-inch RCP. The 36-inch RCP extends westerly and transitions into a 54-inch RCP, to a 60-inch RCP, and then finally to a 66-inch RCP until the confluence with Line F.

**Line E-3** – Line E-3 begins at a point approximately 250 feet east of the intersection of Redlands Boulevard and Dracaea Avenue as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 54-inch RCP, to a 66-inch RCP, and finally into a 72-inch RCP until the confluence with Line F.

**Line E-4** – Line E-4 begins at a point approximately 2,000 feet west of the intersection of Theodore Street and Dracaea Avenue as a 48-inch RCP. The 48-inch RCP extends westerly and transitions into a 60-inch RCP and finally to a 66-inch RCP until the confluence with Line F.

**Line E-5** – Line E-5 begins at a point approximately 250 feet east of the intersection of Redlands Boulevard and Cottonwood Avenue as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 48-inch RCP, to a 66-inch RCP, and finally to a 72-inch RCP until the confluence with Line F.

**Line E-6** – Line E-6 begins at a point approximately 1,975 feet west of the intersection of Theodore Street and Cottonwood Avenue as a 48-inch RCP. The 48-inch RCP extends westerly and transitions into a 60-inch RCP and finally into a 66-inch RCP until the confluence with Line F.

**Line E-7** – Line E-7 begins at a point approximately 275 feet east of the intersection of Redlands Boulevard and Bay Avenue as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 60-inch RCP, to a 66-inch RCP, and finally to a 72-inch RCP until the confluence with Line F.

**Line E-8** – Line E-8 begins at a point approximately 1,975 feet west of the intersection of Theodore Street and Bay Avenue as a 48-inch RCP. The 48-inch RCP extends westerly and transitions into a 54-inch RCP and finally into a 66-inch RCP until the confluence with Line F.

**Line E-10** – Line E-10 begins at a point approximately 1,975 feet east of the intersection of Merwin Street and Alessandro Boulevard as a 36-inch RCP. The 36-inch RCP transitions into a 54-inch RCP and finally into a 60-inch RCP until the confluence with Line F.

**Line F** – Line F begins approximately 1,350 feet south of SR 60 and 1,600 feet east of Redlands Boulevard as an earthen bottom trapezoidal channel with rock-lined side slopes. The earthen channel runs southerly to Alessandro Boulevard and southwesterly from below Alessandro Boulevard to Redlands Boulevard where it connects to an existing box culvert in Redlands Boulevard. Typical channel sections in this reach have a depth of 8 feet, base widths of 6 to 38 feet, and side slopes of 2:1. There is another proposed section of Line F which begins approximately 500 feet north of the intersection of Oliver Street and John F. Kennedy Drive running southwesterly for 850 feet before connecting to existing Line F.

**Line F-2** – Line F-2 begins at the intersection of Ironwood Ave. and Redlands Boulevard as a 54-inch RCP and connects to Line F-15. The 54-inch RCP extends southerly to an existing 60-inch Caltrans culvert which extends the pipe to the south side of the State Route 60 Redlands Boulevard off ramp. Line F-2 resumes from the downstream terminus of the existing culvert as a 66-inch RCP which continues southerly transitioning to a 72-inch RCP, to a 78-inch RCP, to a 84-inch RCP, to a 90-inch RCP, to a 96-inch RCP, and finally into a 108-inch RCP until an outlet into the proposed Cactus Basin.

**Line F-5** – Line F-5 begins approximately 100 feet south of the intersection of Oliver Street and John F. Kennedy Drive at the downstream terminus of an existing portion of Line F-5 as a double 8'W x 4'D RCB. The RCB extends westerly for 700 feet to the confluence with existing Line F.

**Line F-13** – Line F-13 begins at a point approximately 1,330 feet north of the intersection of Moreno Beach Drive and Cactus Boulevard as a 33-inch RCP. The 33-inch RCP extends southerly and transitions into a 39-inch RCP until the confluence with existing Line F-4.

**Line F-15** – Line F-15 begins at a point approximately 1,310 feet south and 1,750 feet west of the intersection of Redlands Boulevard and Ironwood Avenue as a 36-inch RCP. The 36-inch RCP extends easterly and transitions into a 48-inch RCP and then to a 54-inch RCP until the confluence with Line F-2 at Redlands Boulevard.

**Line F-16** – Line F-16 begins at a point approximately 1,350 feet south of SR 60 and 2,250 feet west of the Redlands Boulevard as a 42-inch RCP. The 42-inch RCP extends easterly and transitions into a 48-inch RCP, to a 54-inch RCP and finally to a 72-inch RCP until the confluence with Line F-2.

**Line F-17** – Line F-17 begins at a point approximately 2,630 feet south of SR 60 and 2,250 feet west of the Redlands Boulevard as a 42-inch RCP. From there the 42-inch RCP extends easterly and transitions into a 48-inch RCP, to a 54-inch RCP, and finally to a 60-inch RCP until the confluence with Line F-2.

**Line F-18** – Line F-18 begins at a point approximately 1,000 feet east of the intersection of Redlands Boulevard and Alessandro Boulevard as a 48-inch RCP. The 48-inch RCP extends westerly and transitions into a 60-inch RCP until the confluence with Line F-2.

**Line F-19** – Line F-19 begins at a point approximately 500 feet east of the intersection of Redlands Boulevard and Brodiaea Avenue as a 60-inch RCP. The 60-inch RCP extends westerly until the confluence with Line F-2.

**Line G** – Line G begins approximately 850 feet south and 450 feet east of the intersection of Eucalyptus Avenue and Auto Mall Drive as an earthen bottom trapezoidal channel with rock-lined side slopes. The earthen channel runs southeasterly until a confluence with proposed Line G-7, approximately 400 feet north of the intersection of Cottonwood Avenue and Quincy Street. Line G continues southerly, parallel to Quincy Street, until an outlet into existing Line F. Typical channel sections in this reach have depths of 6 to 8 feet, base widths of 6 to 16 feet, and side slopes of 2:1.

**Line G-1** – Line G-1 begins at a point approximately 1,200 feet north of SR 60 and 250 feet east of the Moreno Beach Drive as a 42-inch RCP. The 42-inch RCP extends easterly until the confluence with Line G-4.

**Line G-2** – Line G-2 begins at the intersection of Hemlock Avenue and Petit Street as a 42-inch RCP. The 42-inch RCP extends westerly and transitions into a 54-inch RCP until the confluence with Line G-4.

**Line G-3** – Line G-3 begins at a point approximately 1,975 feet east of Moreno Beach Drive immediately north of SR 60 as a concrete lined rectangular channel. The channel extends westerly until the confluence with Line G-4. Typical sections for this channel have a depth of 6.5 feet and a base width of 10 feet.

**Line G-4** – Line G-4 begins at a point approximately 1,200 feet north of SR 60 and 500 feet east of Moreno Beach Drive as a 54-inch RCP. The 54-inch RCP extends southerly until it transitions and connects with the existing Caltrans culvert crossing under SR 60.

**Line G-7** – Line G-7 begins at a point approximately 2,600 feet west of Redlands Boulevard, just south of SR 60, as an earthen bottom trapezoidal channel with rock-lined side slopes. The channel extends southerly until the confluence with Line G approximately 400 feet north of the intersection of Quincy Street and Cottonwood Avenue. Typical sections for this channel have a depth of 5 feet, base widths of 5 feet, and side slopes of 2:1.

**Line G-8** – Line G-8 begins at a point approximately 500 feet east of the intersection of Quincy Street and Bay Avenue as a 48-inch RCP. The 48-inch RCP extends westerly until the confluence with Line G.

**Line G-9** – Line G-9 begins at a point approximately 1,300 feet east of the intersection of Quincy Street and Alessandro Avenue as a 48-inch RCP. The 48-inch RCP extends westerly and transitions to a 54-inch RCP and then to a 60-inch RCP until the confluence with Line G.

**Line G-10** – Line G-10 begins at a point approximately 750 feet east of the intersection of Quincy Street and Brodiaea Avenue as a 48-inch RCP. The 48-inch RCP extends easterly and transitions into a 54-inch RCP until the confluence with Line G.

**Line G-11** – Line G-11 begins at a point approximately 1,250 feet east of the intersection of Quincy Street and Cactus Avenue as a 36-inch RCP. From there the 36-inch RCP extends easterly and transitions into a 48-inch RCP and then to a 54-inch RCP until the confluence with Line G.

**Line H** – Line H begins at the intersection of Mill Creek Road and Dracaea Avenue as a 42-inch RCP. The 42-inch RCP extends southerly to Cottonwood Avenue and then transitions to an 8.25'W x 5'D RCB which extends easterly in Cottonwood Avenue for 610 feet. Here the line runs southerly, transitions to a 75-inch RCP, to a 87-inch RCP, and continues southerly until Alessandro Boulevard. The 87-inch RCP then runs easterly in Alessandro Boulevard to Oliver Street, southerly in Oliver Street to Brodiaea Avenue, transitions to a 90-inch RCP, and continues southerly until the confluence with existing Line H at Cactus Avenue.

**Line H-1** – Line H-1 begins at a point approximately 1,020 feet east of the intersection of Moreno Beach Drive and Alessandro Boulevard at the downstream terminus of an existing portion of Line H-1 as a 48-inch RCP. The 48-inch RCP extends westerly and transitions into a 63-inch RCP and then to a 75-inch RCP until the confluence with Line H-2 and H-1a approximately 650 feet east of Pearl Lane.

**Line H-1a** – Line H-1a begins at a point approximately 370 feet east of the intersection of Pearl Lane and Alessandro Boulevard as a 36-inch RCP. The 36-inch RCP extends easterly for 280 feet until the confluence with Line H-1 and H-2.

**Line H-2** – Line H-2 begins at the intersection of Bethany Road and Cottonwood Avenue as a 33-inch RCP. The 33-inch RCP extends southerly and transitions into a 39-inch RCP, to a 42-inch RCP, and finally to a 54-inch RCP until the confluence with Line H-1 at Alessandro Boulevard. Line H-2 then resumes from the confluence with Line H-1 and Line H-1a approximately 650 feet east of Pearl Lane on Alessandro Boulevard as an 84-inch RCP. The 84-inch RCP extends southerly until the confluence with an existing portion of Line H-2 at Brodiaea Avenue.

**Line H-3** – Line H-3 begins at the intersection of Moreno Beach Drive and Cottonwood Avenue as a 42-inch RCP. The 42-inch RCP extends southerly and transitions into a 45-inch RCP until the confluence with Line H-1 at Alessandro Boulevard.

**Line H-4** – Line H-4 begins at a point approximately 1,550 feet east of the intersection of Nason Street and Bay Avenue as a 30-inch RCP. The 30-inch RCP extends westerly until the confluence with a Line H.

**Line H-5** – Line H-5 begins at a point approximately 1,350 feet west of the intersection of Olive Street and Brodiaea Avenue as a 30-inch RCP. The 30-inch RCP extends easterly and transitions into a 33-inch RCP until the confluence with Line H.

**Line H-5a** – Line H-5a begins at a point approximately 290 feet east of the intersection of Olive Street and Brodiaea Avenue as a 36-inch RCP and extends westerly until the confluence with Line H.

**Line H-6** – Line H-6 begins at a point approximately 1,130 feet east of the intersection of Landon Road and Brodiaea Ave as a 36-inch RCP. From there the 36-inch extends westerly until the confluence with the existing portion of Line H-6 approximately 500 feet east of the intersection of Landon Road and Brodiaea Avenue.

**Line H-11** – Line H-11 begins at a point approximately 1,050 feet east of the intersection of Mill Creek Road and Dracaea Avenue at the terminus of Cold Creek Court Storm Drain Line A as a 60-inch RCP. The 60-inch RCP extends westerly for approximately 430 feet and then southerly until the confluence with line H at Cottonwood Avenue.

**Line J** – Line J begins at the intersection of Morrison Street and Dracaea Avenue at the confluence with Line J-1 as a 48-inch RCP. The 48-inch RCP extends southerly until connecting to the existing portion of Line J at the intersection of Morrison Street and Rockport Drive. Line J then resumes at the intersection of Morrison Street and Alessandro Boulevard at the terminus of the existing underground Line J facility as a 78-inch RCP. The 78-inch RCP extends southerly and transitions into a 84-inch RCP until Cactus Avenue where it connects with an existing portion of Line J.

**Line J-1** – Line J-1 begins at a point approximately 1400 feet east of the intersection of Morrison Street and Dracaea Avenue as a 27-inch RCP. The 27-inch RCP extends westerly and transitions into a 39-inch RCP until the confluence with Line J at the intersection of Morrison Street and Dracaea Avenue.

**Line J-7** – Line J-7 begins at a point approximately 1350 feet south and 810 feet west of the intersection of Morrison Street and Alessandro Boulevard as a 24-inch RCP. The 24-inch RCP extends easterly until the confluence with Line J.

**Line J-8** – Line J-8 begins at a point approximately 1350 feet south and 1450 feet east of the intersection of Morrison Street and Alessandro Boulevard as a 39-inch RCP. The 39-inch RCP extends westerly and transitions into a 42-inch RCP until the confluence with Line J.

**Line K** – Line K begins at the outlet of the proposed Reche Canyon Debris Basin, approximately 1500 feet east and 350 feet north of the intersection of Moreno Beach Drive and Locust Drive, as a concrete lined trapezoidal channel located on the southerly side of Reche Canyon Road. The channel extends southeasterly along Reche Canyon Road and easterly on Locust Avenue until the intersection with Moreno Beach Drive.

Typical channel sections for this reach have a depth of 7 feet, base widths of 10 feet, and side slopes of 1.5:1. From the intersection the channel transitions into a 14'W x 7'D RCB for 160 feet as it turns southerly along Moreno Beach Drive. The 14'W x 7'D RCB then transitions to a 9.5'W x 7'D RCB and continues southerly until a point approximately 300 feet north of Juniper Avenue. At this point Line K extends southeasterly, transitions to an earthen channel with rock-lined side slopes and continues past Ironwood Avenue until an outlet into the existing Nason Basin. Typical channel sections for this reach have a depth of 6 feet, bottom widths of 25 to 30 feet, and side slopes of 2:1.

**Line K-1** – Line K-1 begins at the intersection of Locust Avenue and Carrie Lane as a 42-inch RCP. The 42-inch RCP extends southerly to Kalmia Avenue, transitions to a 51-inch RCP as it extends westerly along Kalmia Avenue to Petit Street, and then southerly along Petit Street to the existing portion of Line K-1 approximately 665 feet north of the intersection of Petit Street and Juniper Avenue. Line K-1 then resumes at the downstream terminus of the existing Line K-1 facility at the intersection of Petit Street and Juniper Avenue as a 63-inch RCP. The 63-inch RCP extends southerly to Ironwood Avenue and then transitions to a 90-inch RCP as it extends westerly until the confluence with Line K.

**Line K-2** – Line K-2 begins at a point approximately 640 feet east of the intersection of Petit Street and Juniper Avenue as a 33-inch RCP. The 33-inch RCP extends westerly until the confluence with Line K-1.

**Line K-4** – Line K-4 begins at a point approximately 240 feet east of the intersection of Carrie Lane and Locust Avenue and extends westerly until the confluence with Line K-1.

**Reche Canyon Debris Basin** – The Reche Canyon Debris Basin is located at a point approximately 1500 feet east and 350 feet north of the intersection of Locust Avenue and Moreno Beach Drive, just upstream of proposed Line K. The debris basin will require approximately 7.5 acres of right-of-way.

**Ironwood Debris Basin** – The Ironwood Debris Basin is located just north of the intersection of Theodore Street Ironwood Avenue. The basin will require approximately 2.3 acres of right-of-way.

**Quincy Basin** – The proposed Quincy Basin is located approximately 2600 feet west of Redlands Boulevard just north of SR 60. The basin has a right-of-way footprint of approximately 22.5 acres, a storage volume of 150 ac-ft, and an embankment height of approximately 12.5 feet. The basin outlet is proposed as one 60-inch RCP which will connect to an existing 60-inch CMP culvert crossing under SR 60.

**Cactus Basin** – The proposed Cactus Basin is located between Redlands Boulevard and Wilmot Street just north of Cactus Avenue. The basin has a right-of-way footprint of approximately 21.7 acres, a storage volume of 100 ac-ft, and an embankment height of approximately 8 feet. The basin outlet utilizes the existing quadruple 8'W x 6'D RCB culverts under Cactus Avenue.

**Sinclair Basin** – The proposed Sinclair Basin is located approximately 2600 feet east of Theodore Street just north of SR 60. The basin has a right-of-way footprint of approximately 25 acres, a storage volume of 170 acre-ft, and an embankment height of approximately 12.5 feet. The basin outlet is proposed as two 60-inch RCPs which connect to two existing 72-inch CMP culverts crossing under SR 60.

## SECTION IX – ALTERNATIVES

Given that this Master Drainage Plan (MDP) update is essentially a refinement of the adopted Moreno MDP, a relatively narrow range of alternatives was considered. Nonetheless, several alternatives were developed and evaluated against the project objectives established by the District and the City of Moreno Valley. The following section provides a brief summary of each alternative and indicates the preferred alternative. For the full alternative analysis and discussion, see appendix A.

### Alternatives Overview

The following paragraphs describe the major components of each alternative developed during the MDP revision. Each description is supplemented with an exhibit in the appendix which displays the layout of facilities and basin locations. It should also be noted that, while the MDP update was being developed, the District and City mutually agreed that the existing Line F-2 storm drain facility, which is currently sized as a 10-year facility, would be reconstructed to provide 100-year flood capacity. Thus, the proposed reconstruction of Line F-2 was assumed to be a part of each alternative considered for the Moreno MDP Revision.

**Alternative 1:** This alternative consists of the same types of facilities and alignments as in the Adopted MDP. Two detention basins are proposed along the Line F channel alignment: 1) Sinclair Basin just north of SR 60; and 2) Bay Avenue Basin located on the north side of Bay Avenue. In addition, Reche Canyon Debris Basin has been added to capture debris upstream of Line K. It should be noted that, similar to the Adopted MDP, this alternative proposes 1) concrete lining for all channel segments; and 2) makes use of the existing highway drainage culverts located under SR 60. See Exhibit 1 in the appendix for further detail.

**Alternative 2a and 2b:** The principal difference between these two alternatives and Alternative 1 is the realignment of proposed facilities upstream of SR 60 in an effort to maintain the current natural drainage patterns within the upper watershed. This was accomplished by realigning the mainline facilities, specifically Line A, to convey flows from the foothills southerly to the existing culverts at SR 60 instead of diverting flows into the proposed Sinclair Basin. Both of these alternatives propose Lines F, G, and K as earthen channels with rock-lined side slopes (unlined channels) in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture debris upstream of Line K. Alternatives 2a and 2b differ from each other primarily in the size, number, and location of proposed detention basins. See Exhibit 2A and 2B for further detail.

**Alternative 3:** This alternative retains the major realignment of Line A, as proposed in Alternatives 2a and 2b, but proposes three detention basins downstream of SR 60 in place of the various basins proposed in Alternatives 2a and 2b. This option would require the upsizing the existing highway drainage culverts under SR 60 to convey the 100-year flows to the proposed basin locations. The three detention basins proposed in Alternative 3 are: 1) Brodiaea Basin along Line G just north of Brodiaea Avenue; 2) Fir Basin just south of SR 60 along Line G-7; and 3) Cactus Basin at the downstream end of proposed Line F. This alternative also proposes Lines F, G, and K as earthen channels with rock-lined side slopes in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture debris upstream of Line K. See Exhibit 3 for further detail.

**Alternative 4 – Preferred Alternative:** Similar to Alternatives 2a, 2b and 3, this alternative also calls for the realignment of proposed facilities upstream of SR 60 in an effort to maintain the current natural drainage patterns of the area. Alternative 4 proposes the implementation of three detention basins: 1) Quincy Basin located along Line A just north of the freeway; 2) Sinclair Basin located just north of SR 60 at the upstream end of Line F; and 3) Cactus Basin located at the confluence of Line F and Line F-2 just north of Cactus



Avenue. Similar to Alternative 2a, 2b, and 3, this alternative also proposes Lines F, G and K as earthen channels with rock-lined side slopes in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture the expected debris upstream of Line K, as well as Ironwood Debris Basin to capture expected debris upstream of Line C. See Exhibit 4 for further detail.

### SECTION X – ESTIMATED COST

A cost summary for the MDP facilities is shown in Table 3. Cost estimates were based on 2013 Planning Unit Cost Sheets and include construction, right-of-way, and 40% for engineering, administration, and environmental mitigation and contingencies.

The costs estimates for the proposed facilities include the cost of manholes, catch basins and pipe installations. Manholes are located as necessary with a maximum spacing of 500 feet. Catch basins are not specifically located but the total number of lineal feet is included in the cost estimate. The cost for the open channel facilities includes the cost of access roads and right-of-way requirements. Channel access roads are assumed to be 15 feet wide and two (2) access roads were included where channel top widths exceed 20 feet. An additional 5 foot buffer has been included on either side of channel access roads for anticipated cut and fill. Detention basin costs include the cost of a 20 foot wide access road around the perimeter.

**TABLE 3  
MORENO MASTER DRAINAGE PLAN REVISION 2  
COST SUMMARY**

<u>Facility</u>	<u>Construction Cost</u>	<u>Right-of-Way Cost</u>	<u>Total Cost</u>
Line A	\$4,941,000	\$10,000	\$4,951,000
Line A-1	\$2,658,000	-	\$2,658,000
Line A-2	\$302,000	-	\$302,000
Line A-3	\$297,000	-	\$297,000
Line A-6	\$2,366,000	-	\$2,366,000
Line A-7	\$224,000	-	\$224,000
Line A-8	\$447,000	-	\$447,000
Line B	\$7,967,000	-	\$7,967,000
Line B-1	\$1,269,000	-	\$1,269,000
Line B-2	\$482,000	-	\$482,000
Line B-3	\$263,000	-	\$263,000
Line C	\$2,091,000	-	\$2,091,000
Line D-1	\$404,000	-	\$404,000
Line D-2	\$973,000	-	\$973,000
Line D-3	\$973,000	-	\$973,000
Line D-4	\$310,000	-	\$310,000
Line D-5	\$6,014,000	-	\$6,014,000

<u>Facility</u>	<u>Construction Cost</u>	<u>Right-of-Way Cost</u>	<u>Total Cost</u>
Line D-7	\$951,000	-	\$951,000
Line D-8	\$538,000	-	\$538,000
Line D-9	\$145,000	-	\$145,000
Line F	\$13,675,000	\$1,055,000	\$14,730,000
Line F-2	\$8,804,000	-	\$8,804,000
Line F-5	\$1,430,000	-	\$1,430,000
Line F-13	\$613,000	-	\$613,000
Line F-15	\$886,000	-	\$886,000
Line F-16	\$1,401,000	-	\$1,401,000
Line F-17	\$1,149,000	-	\$1,149,000
Line F-18	\$588,000	-	\$588,000
Line F-19	\$347,000	-	\$347,000
Line E-1	\$885,000	-	\$885,000
Line E-2	\$885,000	-	\$885,000
Line E-3	\$1,092,000	-	\$1,092,000
Line E-4	\$801,000	-	\$801,000
Line E-5	\$1,052,000	-	\$1,052,000
Line E-6	\$788,000	-	\$788,000
Line E-7	\$1,109,000	-	\$1,109,000
Line E-8	\$745,000	-	\$745,000
Line E-10	\$624,000	-	\$624,000
Line G	\$10,121,000	\$935,000	\$11,056,000
Line G-1	\$129,000	-	\$129,000
Line G-2	\$431,000	-	\$431,000
Line G-3	\$1,664,000	\$50,000	\$1,714,000
Line G-4	\$617,000	-	\$617,000
Line G-7	\$2,913,000	\$305,000	\$3,218,000
Line G-8	\$264,000	-	\$264,000
Line G-9	\$735,000	-	\$735,000
Line G-10	\$420,000	-	\$420,000
Line G-11	\$647,000	-	\$647,000
Line H	\$7,367,000	-	\$7,367,000
Line H-1	\$1,841,000	-	\$1,841,000
Line H-1a	\$115,000	-	\$115,000
Line H-2	\$2,507,000	-	\$2,507,000
Line H-3	\$1,251,000	-	\$1,251,000
Line H-4	\$177,000	-	\$177,000
Line H-5	\$525,000	-	\$525,000

<u>Facility</u>	<u>Construction Cost</u>	<u>Right-of-Way Cost</u>	<u>Total Cost</u>
Line H-5a	\$132,000	-	\$132,000
Line H-6	\$278,000	-	\$278,000
Line H-11	\$981,000	-	\$981,000
Line J	\$11,776,000	-	\$11,776,000
Line J-1	\$591,000	-	\$591,000
Line J-7	\$258,000	-	\$258,000
Line J-8	\$682,000	-	\$682,000
Line K	\$9,816,000	\$570,000	\$10,386,000
Line K-1	\$4,240,000	-	\$4,240,000
Line K-2	\$283,000	-	\$283,000
Line K-4	\$138,000	-	\$138,000
Cactus Basin	\$5,047,000	\$3,300,000	\$8,347,000
Sinclair Basin	\$6,014,000	\$2,400,000	\$8,414,000
Quincy Basin	\$5,174,000	\$2,150,000	\$7,324,000
Reche Canyon Debris Basin	\$706,000	\$713,000	\$1,419,000
Ironwood Debris Basin	\$197,000	\$219,000	\$416,000
<b>Total</b>	<b>\$148,526,000</b>	<b>\$11,707,000</b>	<b>\$160,233,000</b>

NOTE: Total Costs include 40% for Engineering, Administration, MSHCP Fee and Contingencies.

Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO.

## SECTION XI - CONCLUSIONS

Based on the studies and investigations made for this report, it is concluded that:

1. The Moreno Valley area has experienced serious flooding problems in the past. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.
2. The proposed plan addresses the denser development anticipated in the Moreno Valley area and provides network of drainage facilities which, when implemented, will provide adequate flood protection to the community as development continues.
3. The proposed MDP lends itself to a staged construction as funds become available.
4. The total cost of the recommended improvements, including right-of-way, engineering, environmental mitigation, administration, and contingencies is estimated to be \$160,233,000.

## SECTION XII - RECOMMENDATIONS

It is recommended that:

1. The Moreno Master Drainage Plan revision, as set forth herein, be adopted by the City of Moreno Valley and the District's Board of Supervisors.
2. The revisions to the Moreno Master Drainage Plan, as set forth herein, replace the Master Drainage Plan adopted in April 1991.
3. The revision to the Moreno Master Drainage Plan, as set forth herein, be used as a guide for all the future developments in the study area and that such developments be required to conform to the Plan insofar as possible.
4. Right-of-way necessary for the implementation of the MDP be protected from encroachment.

**APPENDIX A**

## ALTERNATIVES ANALYSIS

### Alternatives Overview

Given that this Master Drainage Plan (MDP) update is essentially a refinement of the adopted Moreno MDP, a relatively narrow range of alternatives was considered. Nonetheless, several alternatives were developed and evaluated against the project objectives established by the District and the City of Moreno Valley. This section provides a brief description of the major components of each alternative and indicates preferred alternative.

Each description is supplemented with an exhibit in the appendix which displays the layout of facilities and basin locations.

It should also be noted that, while the MDP update was being developed, the District and City mutually agreed that the existing Line F-2 storm drain facility, which is currently sized as a 10-year facility, would be reconstructed to provide 100-year flood capacity. Thus, the proposed reconstruction of Line F-2 was assumed to be a part of each alternative considered for the Moreno MDP Revision.

**Alternative 1:** This alternative consists of the same types of facilities and alignments as in the currently adopted Moreno MDP (Adopted MDP). Two detention basins are proposed along the Line F channel alignment: 1) Sinclair Basin just north of California State Route 60 (SR 60); and 2) Bay Avenue Basin located on the north side of Bay Avenue. In addition, Reche Canyon Debris Basin has been added to capture debris upstream of Line K. It should be noted that, similar to the Adopted MDP, this alternative proposes 1) concrete lining for all channel segments; and 2) makes use of the existing highway drainage culverts located under SR 60. See Exhibit 1 in the appendix for further detail.

**Alternative 2a and 2b:** The principal difference between these two alternatives and Alternative 1 is the realignment of proposed facilities upstream of SR 60 in an effort to maintain the current natural drainage patterns within the upper watershed. This was accomplished by realigning the mainline facilities, specifically Line A, to convey flows from the foothills southerly to the existing culverts at SR 60 instead of diverting flows into the proposed Sinclair Basin. Both of these alternatives propose Lines F, G, and K as earthen channels with rock-lined side slopes (unlined channels) in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture debris upstream of Line K. Alternatives 2a and 2b differ from each other primarily in the size, number, and location of proposed detention basins. See Exhibit 2A and 2B for further detail.

**Alternative 3:** This alternative retains the major realignment of Line A, as proposed in Alternatives 2a and 2b, but proposes three detention basins downstream of SR 60 in place of the various basins proposed in Alternatives 2a and 2b. This option would require the upsizing the existing highway drainage culverts under SR 60 to convey the 100-year flows to the proposed basin locations. The three detention basins proposed in Alternative 3 are: 1) Brodiaea Basin along Line G just north of Brodiaea Avenue; 2) Fir Basin just south of SR 60 along Line G-7; and 3) Cactus Basin at the downstream end of proposed Line F. This alternative also proposes Lines F, G, and K as earthen channels with rock-lined side slopes in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture debris upstream of Line K. See Exhibit 3 for further detail.

**Alternative 4 – Preferred Alternative:** Similar to Alternatives 2a, 2b and 3, this alternative also calls for the realignment of proposed facilities upstream of SR 60 in an effort to maintain the current natural drainage patterns of the area. Alternative 4 proposes the implementation of three detention basins: 1) Quincy Basin located along Line A just north of the freeway; 2) Sinclair Basin located just north of SR 60 at the upstream

end of Line F; and 3) Cactus Basin located at the confluence of Line F and Line F-2 just north of Cactus Avenue. Similar to Alternative 2a, 2b, and 3, this alternative also proposes Lines F, G and K as earthen channels with rock-lined side slopes in place of the concrete lined channels proposed in Alternative 1. Reche Canyon Debris Basin has been included to capture the expected debris upstream of Line K, as well as Ironwood Debris Basin to capture expected debris upstream of Line C. See Exhibit 4 for further detail.

### **Comparing Alternatives: Total Project Footprint**

Given that this MDP update is essentially a refinement of an adopted MDP, a relatively narrow range of alternatives was considered. One way of analyzing the potential for impacts or expected plan benefits is by comparing the overall project footprint of each alternative. In order to do so the following observations and assumptions were made:

- 1) Each of the four conceptual alternatives has the same drainage boundary and provides a similar level of flood protection.
- 2) The overall footprint of proposed lateral facilities is similar between the four alternatives.
- 3) In comparison to concrete lined channels, unlined channels provide greater infiltration potential.
- 4) In comparison to concrete lined channels, unlined channels will have larger footprints.
- 5) The principal difference between the four alternatives is the size, number, and location of proposed detention and debris basins.
- 6) The relative differences in project footprint for the detention and debris basins may be used to develop comparative rankings of the alternatives against the project objectives.

A summary of the approximate total basin footprints is shown in Table 4.

TABLE 4: Alternatives: Basin Footprint Summary

Moreno MDP Revision Alternatives: Approximate Basin Footprint Summary		
Alternative	Proposed Basin	Basin Footprints (Detention and Debris) in acres
1	Sinclair Basin*	28.5
	Bay Basin*	36.8
	Reche Canyon Debris Basin*	10.0
	<b>Total</b>	<b>75.3</b>
2a	Sinclair Basin*	14.0
	Bay Basin*	17.4
	Redlands Basin*	6.0
	Quincy Basin*	13.2
	Brodiaea Basin*	11.3
	Reche Canyon Debris Basin*	10.0
<b>Total</b>	<b>71.9</b>	
2b	Highland Basin*	14.4
	Bay Basin*	30.5
	Ironwood Basin*	13.6
	Eucalyptus Basin*	6.4
	Reche Canyon Debris Basin*	10.0
<b>Total</b>	<b>74.9</b>	
3	Brodiaea Basin*	10.5
	Fir Basin*	28.3
	Cactus Basin*	29.5
	Reche Canyon Debris Basin*	10.0
<b>Total</b>	<b>78.3</b>	
4	Sinclair Basin	25.0
	Cactus Basin	21.7
	Quincy Basin	22.5
	Reche Canyon Debris Basin*	10.0
	Ironwood Debris Basin*	3.1
<b>Total</b>	<b>82.3</b>	
<p><i>*Note: These basin footprint acreages have been adjusted by a factor 1.33 to account for additional right-of-way requirements (e.g., access road right-of-way, embankment slopes, property boundaries, basin grading, existing topography, spillway requirements, etc.) that were included in the more detailed footprint estimations developed for the Alternative 4 detention basins. The factor was based on comparisons of basin modeling methodologies for Alternative 4 and engineering judgment.</i></p>		



### Alternative Analysis

A decision matrix was developed in order to evaluate the alternatives against the project objectives established by the District and the City of Moreno Valley. Criteria for the matrix were selected to represent aspects of the project objectives which could be qualitatively evaluated between the alternatives. The matrix is shown in Table 5.

#### Criteria Descriptions:

- 1) **Provide 100 Year Flood Protection:** This criterion represents the ability of an alternative to provide 100 year flood protection in conjunction with ultimate street improvements.
- 2) **Removal of FEMA mapped Special Flood Hazard Areas:** This criterion represents the ability of an alternative to remove FEMA mapped Special Flood Hazard Areas within the drainage boundary.
- 3) **Potential for Infiltration:** This criterion represents the extent to which an alternative is able to promote infiltration of runoff back into the ground through the presence of basins and earthen bottomed channels.
- 4) **Perpetuating Natural Drainage Course:** This criterion represents the extent to which an alternative reduces the major diversion upstream of SR 60 proposed in the Adopted MDP.
- 5) **Providing Noise Buffer for the Community:** The basins located adjacent to SR 60 have the potential to serve as buffer zones for the noise generated by traffic on SR 60. This criterion represents the extent to which an alternative incorporates this benefit into its proposed basin locations.
- 6) **Minimizing Potential Disturbances (Project Footprint):** Alternatives with larger footprints were viewed as having a higher potential of environmental impacts during construction (e.g. air quality, disturbing natural habitats, cultural resources, etc...). This criterion represents the relative potential for such disturbances based upon a comparison of anticipated project footprints for each alternative.
- 7) **Sediment/Debris Reduction:** This criterion represents how well each alternative achieves the reduction of debris from watersheds with high debris producing potential. The prevention of debris and sediment at its source will remove the need to use bulking factors for design flow rates of downstream facilities and reduce the final size of the mainline facilities as well as improve water quality.
- 8) **Ease of Maintenance:** This criterion represents the relative amount of maintenance which can be expected of each alternative in regards to logistics and routine/non-routine maintenance.

Scoring:

Each alternative was scored against the criteria according to the following schematic:

- Alternatives were compared and assigned a score of 2 if their ability to satisfy a criterion is reasonably comparable to any other alternative.
- Alternatives which satisfy a criterion more than those alternatives assigned a score of 2 were be assigned a score of 3.
- Alternatives which satisfy a criterion less than those alternatives assigned a score of 2 were be assigned a score of 1.
- All criteria was given a weight of 1.
- The total sum of the criteria scores for each alternative represents the overall ability of each alternative to satisfy the objectives of the MDP revision.
- Criteria for “Providing 100-year Flood Protection” and “Removal of FEMA Mapped Special Flood Hazard Areas” were included solely as reminders of key project objectives and were not scored according to the schematic described above.

**TABLE 5: Decision Matrix**

Name	1) Provide 100 Year Flood Protection	2) Removal of FEMA Mapped Special Flood Hazard Areas	3) Potential for Infiltration	4) Perpetuating the Natural Drainage Course	5) Providing Noise Buffer for the Community	6) Project Footprint (Potential Disturbances)	7) Sediment/Debris Reduction	8) Ease of Maintenance	Totals
Score Range	N/A	N/A	More = 3 Comparable = 2 Less = 1	More = 3 Comparable = 2 Less = 1	More = 3 Comparable = 2 Less = 1	More = 3 Comparable = 2 Less = 1	More = 3 Comparable = 2 Less = 1	More = 3 Comparable = 2 Less = 1	MAX 18
Alternative 1	YES	YES	1	1	2	2	2	3	11
Alternative 2a	YES	YES	2	3	2	3	2	1	13
Alternative 2b	YES	YES	2	2	1	2	2	1	10
Alternative 3	YES	YES	3	2	2	1	2	2	12
Alternative 4*	YES	YES	3	2	3	1	3	2	14

\*Alternative 4 was selected as the preferred alternative and has received concurrence from the City of Moreno Valley.

### Criteria Scoring Discussion

#### 1) Provide 100 Year Flood Protection:

- Each alternative was developed to provide the same level of flood protection in conjunction with ultimate street improvements.

#### 2) Removal of FEMA mapped Special Flood Hazard Areas:

- Each alternative was developed to reduce flooding and allow the removal FEMA mapped Special Flood Hazard Areas within the drainage boundary.

#### 3) Potential for Infiltration:

- It was assumed that larger basin footprints and earthen channels in lieu of concrete channels would better facilitate the infiltration of runoff.
- Alternatives were scored for this criterion based upon the estimated total basin footprint required for the full implementation of each alternative with the exception of Alternative 1 which automatically received a lower score (see next point for further details).
- Alternative 1, 2a and 2b all have comparable basin footprints; however, Alternative 1 proposes concrete lined channels (as in the Adopted MDP) and Alternatives 2a and 2b propose earthen bottom channels. Alternative 1 therefore has a lower potential for infiltration and received a score of 1. Alternatives 2a and 2b both received a score of 2.
- Alternatives 3 and 4 both received a score of 3 for having larger total basin footprints than Alternative 2a and 2b. Alternatives 3 and 4 also proposed earthen bottom channels.

#### 4) Perpetuating Natural Drainage Course:

- Alternatives 2b, 3, and 4 all include the realignment of facilities to reduce the major Line A diversion proposed in the Adopted MDP; however, all alternatives still include minor diversions primarily related to their proposed Line D alignments. Alternatives 2b, 3 and 4 received a score of 2.
- Alternative 1 received a score of 1 because it would maintain the Line A diversion proposed in the Adopted MDP.
- Alternative 2a received a score of 3 because it most effectively removes the Line A diversion proposed in the Adopted MDP and minimizes diversions within the drainage area better than all other alternatives.

#### 5) Providing Noise Buffer for the Community:

- Alternatives 1, 2a, and 3 received a score of 2 because they all propose one basin to be located immediately adjacent to SR 60 and would provide the community with some buffer from the noise generated by the freeway.
- Alternative 2b received a score of 1 because it proposes no basins immediately next to SR 60 and would not provide any noise buffer.

- Alternative 4 received a score of 3 because it proposes 2 basins to be located immediately next to SR 60 and would provide the most buffer area for the future residential communities.

6) Minimizing Potential Disturbances (Project Footprint):

- Each alternative was scored based upon the relative differences between their anticipated project footprints.
- The relative anticipated project footprints for each alternative were compared using approximate total basin footprint acreages (see previous Comparing Alternatives section).
- The largest difference between the largest and the smallest total basin footprint is approximately 15% (71.9 Ac. vs. 82.3 Ac.).
- Alternative 1, 2a and 2b all have comparable basin footprints; however, Alternative 1 proposes concrete lined channels (as in the Adopted MDP) and Alternatives 2a and 2b propose earthen bottom channels. Alternative 1 therefore has a smaller anticipated project footprint, less potential for environmental impacts during construction, and received a score of 3. Alternatives 2a and 2b both received a score of 2.
- Alternatives 3 and 4 both received a score of 1 for having the largest anticipated project footprints.

7) Sediment/Debris Reduction:

- Alternatives 1, 2a, 2b, and 3 received a score of 2 because they propose Reche Canyon Debris Basin to capture debris and sediment from the watershed with the most debris producing potential.
- Alternative 4 received a score of 3 because it proposes Reche Canyon Debris Basin and Ironwood Debris basin to capture debris from the two watersheds with the most debris producing potential.

8) Ease of Maintenance:

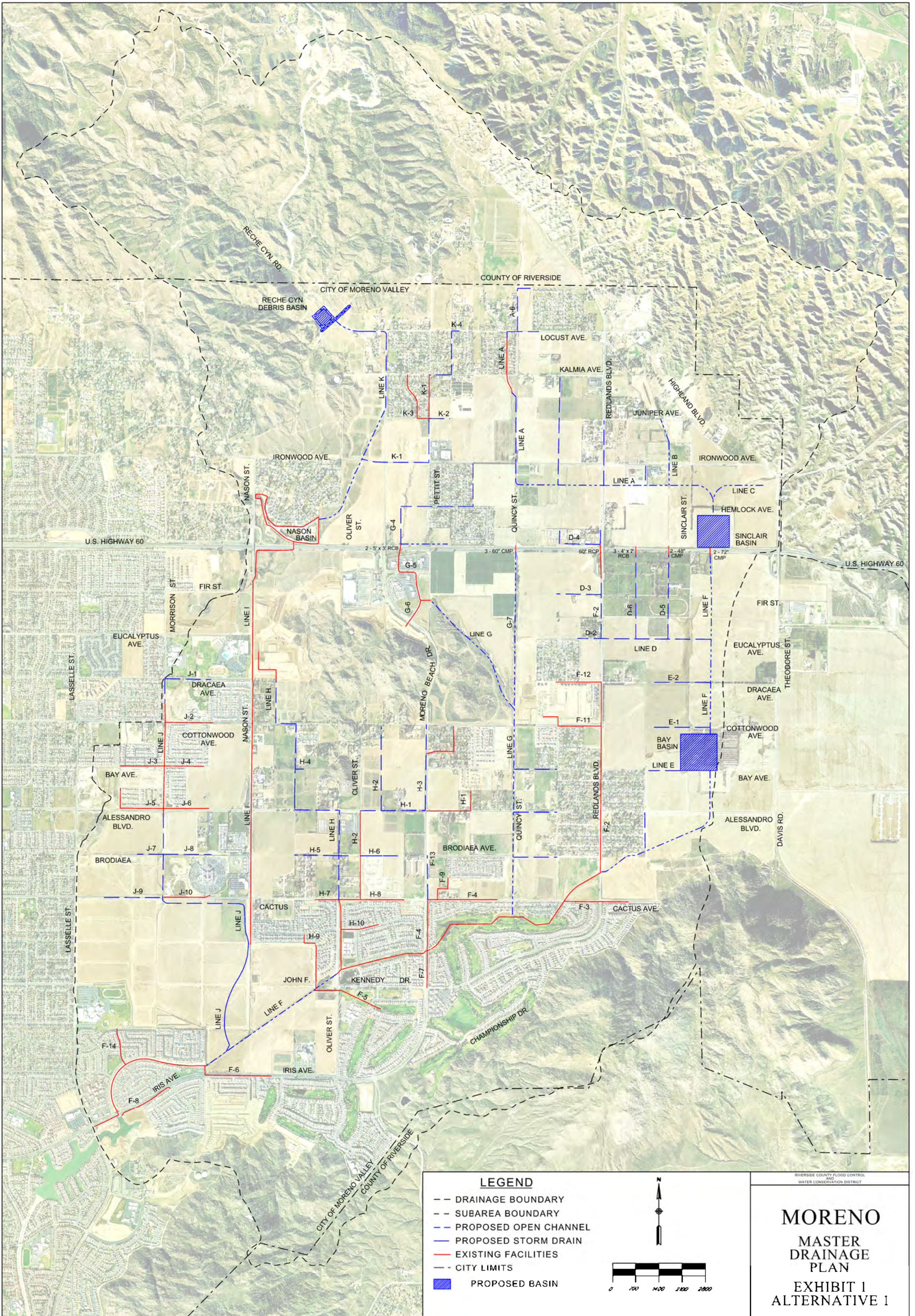
- Detention basins were assumed to require routine maintenance for mowing/weed abatement and erosion control.
- Debris basins were assumed to require routine maintenance for sediment removal from the basins themselves while reducing the amount of sediment deposited in underground facilities.
- Earthen channels were assumed require routine maintenance for mowing/weed abatement.
- The complexity of scheduling for maintenance activities was expected to increase with the number of basins proposed in an alternative.
- Alternative 1 received a score of 3 because it proposed the fewest basins which, when coupled with the proposed concrete lined channels, would require the least amount of routine maintenance of all four alternatives.
- Alternatives 3 and 4 were viewed as comparable and received a score of 2 under this criterion. Alternative 3 proposes 3 detention basins and 1 debris basin while Alternative 4 proposes 3 detention basins and 2 debris basins. While an additional debris basin in Alternative 4 may require additional maintenance on the basin itself it reduces the potential for downstream facilities to clog and require maintenance.

- Alternatives 2a and 2b received scores of 1 for proposing the largest number of basins. Alternative 2a proposes 5 detention basins and 1 debris basin and Alternative 2b proposes 4 detention basins and 1 debris basin.

#### Preferred Alternative

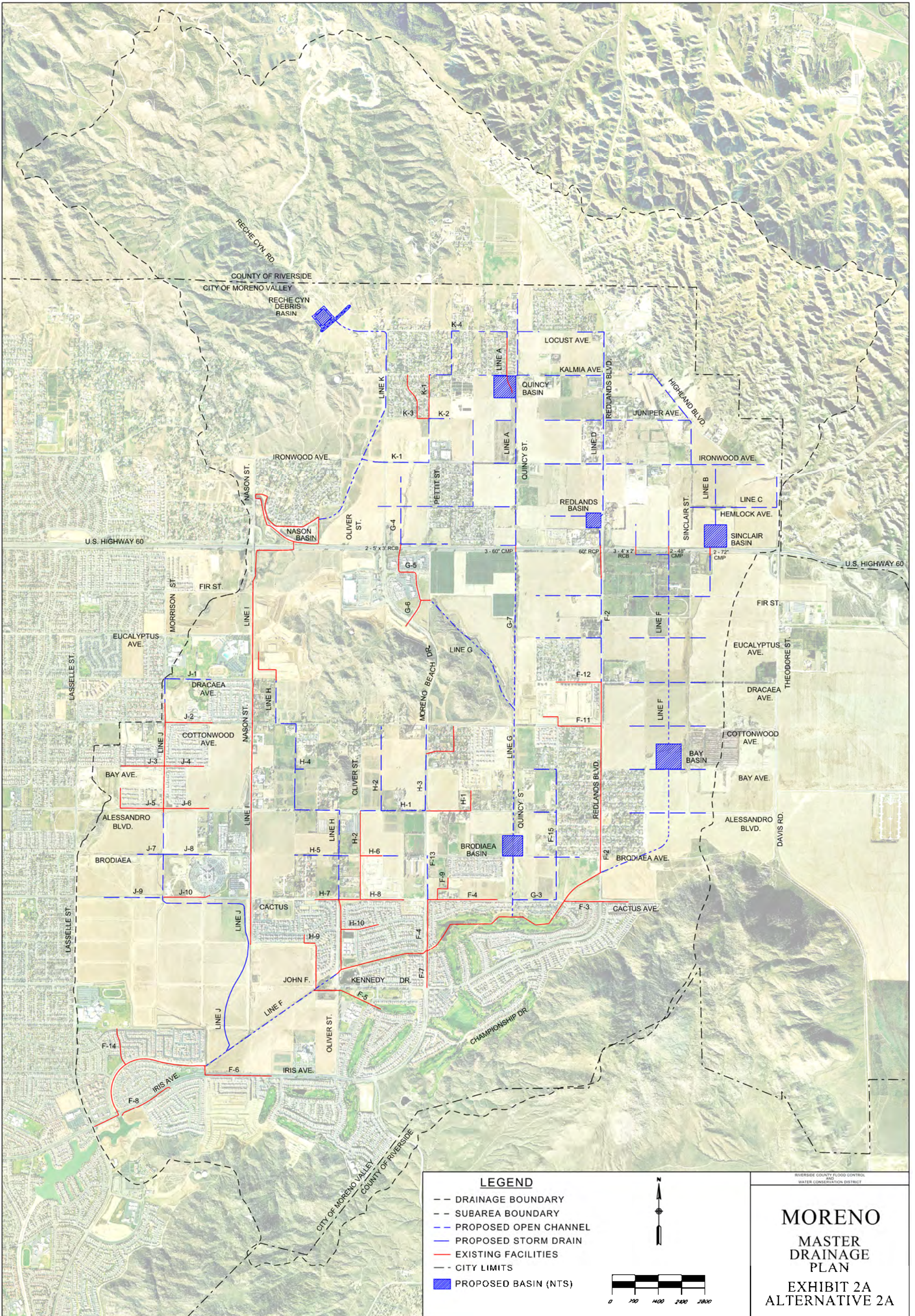
Table 5 shows the completed matrix with the total scores for each alternative. Based upon the evaluation, and as highlighted by the matrix, Alternative 4 best fits the objectives set forth for the project and was selected as the Preferred Alternative. Although the anticipated project footprint for Alternative 4 is slightly larger than the other alternatives, Alternative 4 would provide more opportunities for infiltration of runoff; it would provide a noise buffer for the surrounding community; and would reduce the amount of sediment and debris in the drainage system by capturing it at its source. Alternative 4 was discussed with City of Moreno Valley staff and they provided their concurrence with its selection as the Preferred Alternative.

**APPENDIX B**

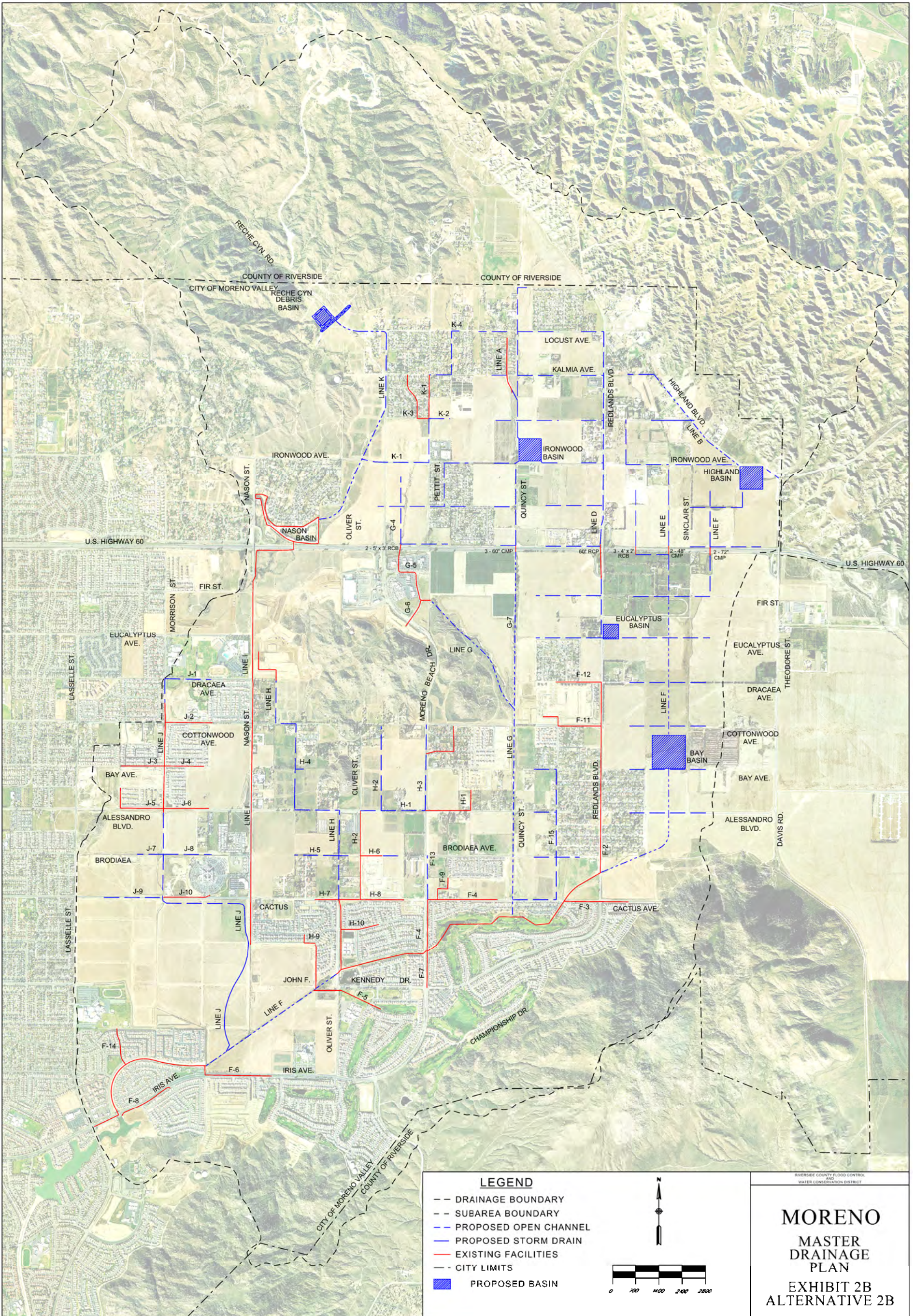


Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 20)

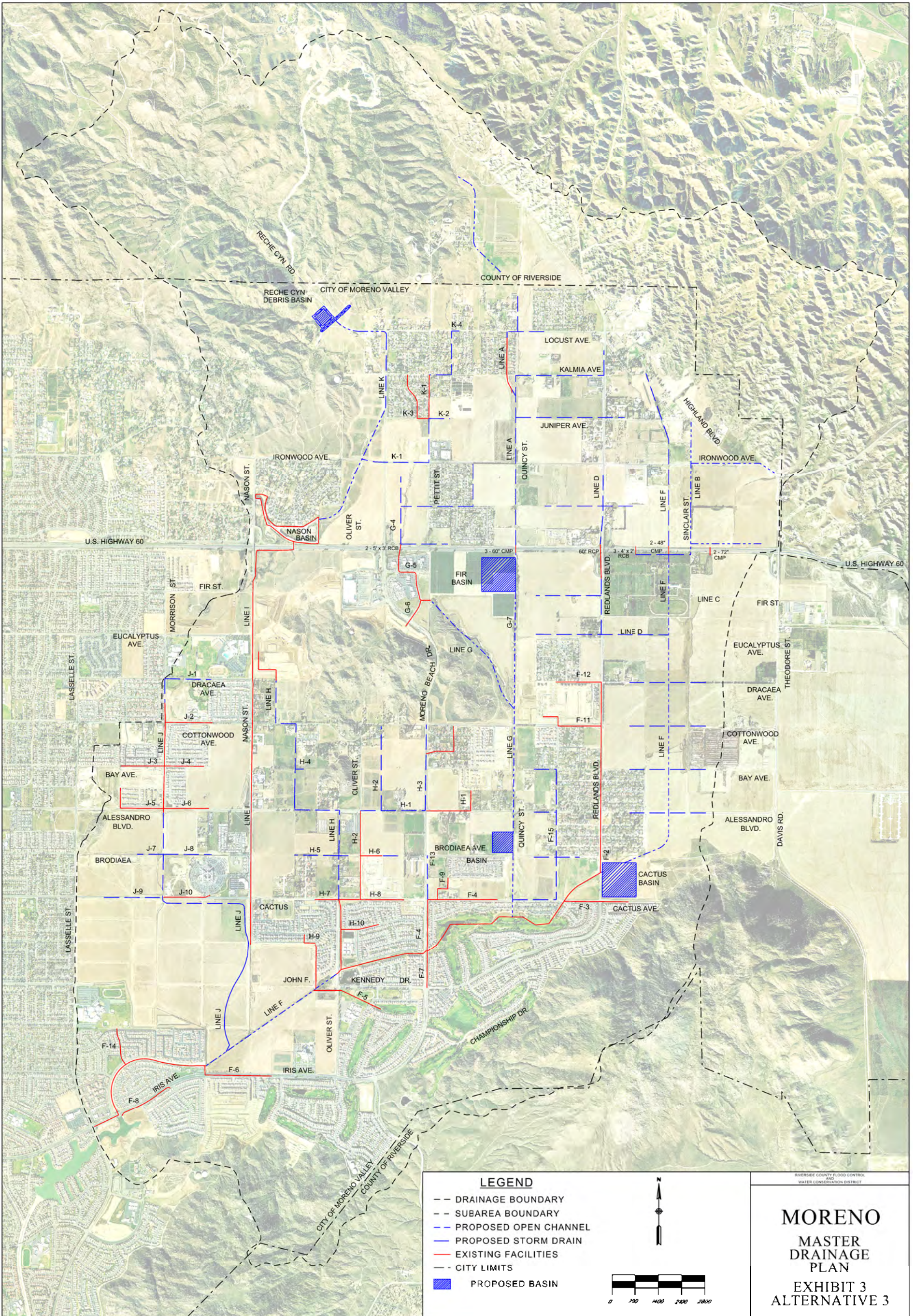




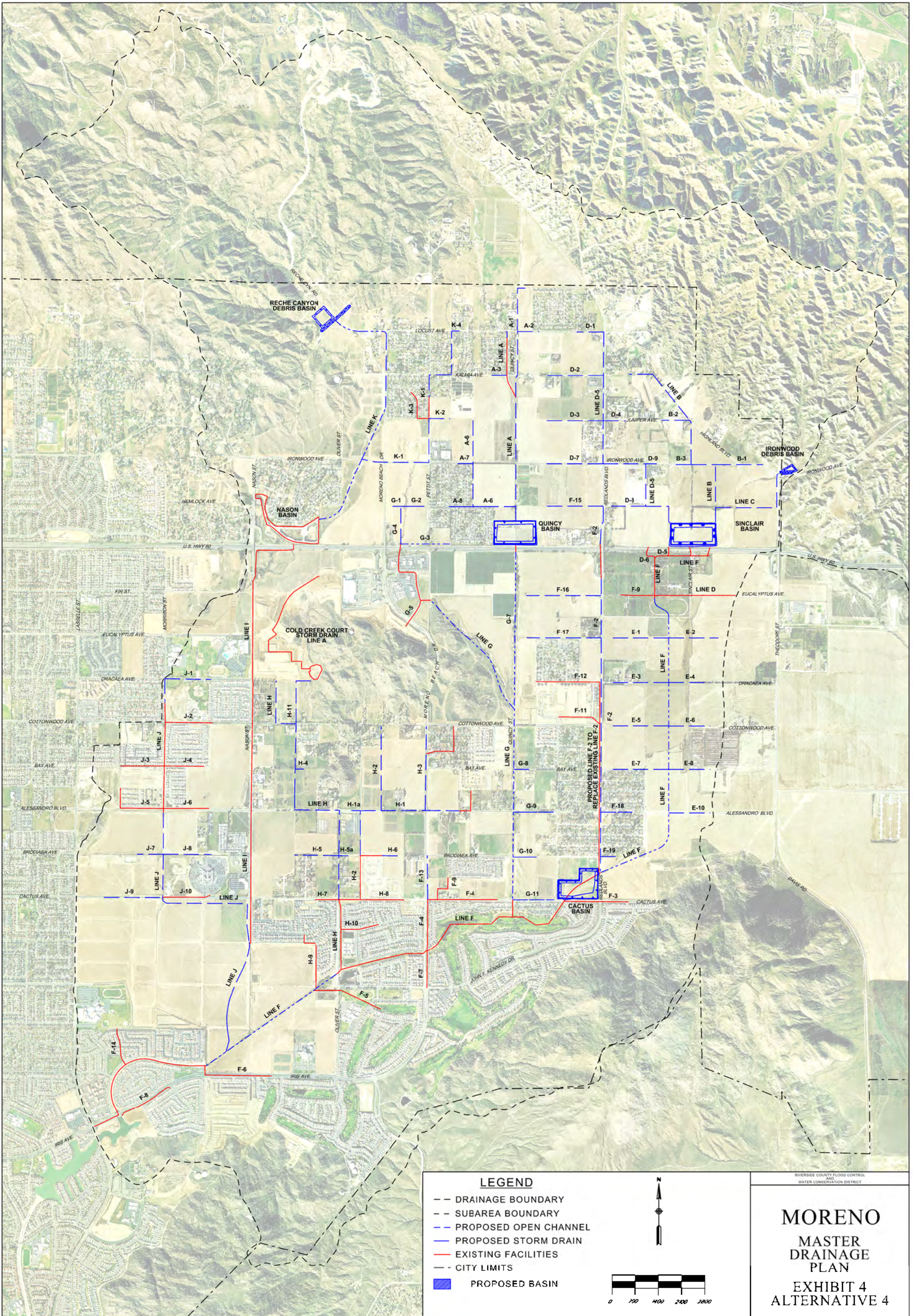
Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 20)



Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 20)



Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 20)



Attachment: Exhibit A - MDP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN (REVISION NO. 2); RESOLUTION NO. 20)

## RESOLUTION NO. 2015-68

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, TO CONSIDER AS A RESPONSIBLE AGENCY THE CERTIFIED PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE MORENO MASTER DRAINAGE PLAN (REVISION NO. 2) AND ITS ASSOCIATED MITIGATION MONITORING AND REPORTING PROGRAM

WHEREAS, the Riverside County Flood Control & Water Conservation District approved the Moreno Master Drainage Plan (Revision No. 2) on April 14, 2015, and in conjunction therewith certified the Program Environmental Impact Report (Exhibit "A"); and

WHEREAS, the Riverside County Flood Control & Water Conservation District adopted the Mitigation Monitoring and Reporting Program ("MMRP")( Exhibit "B") on April 14, 2015; and

WHEREAS, based on the Riverside County Flood Control and Water Conservation District's actions, the City of Moreno Valley has proposed to revise the existing Moreno Master Drainage Plan (Revision No. 1) per Resolution 2015-67; and

WHEREAS, the City is a Responsible Agency under the California Environmental Quality Act ("CEQA") as provided for in CEQA Guidelines Section 15381 in that the City is a public agency which proposes to carry out or approve a project for which the Lead Agency, Riverside County Flood Control & Water Conservation District, prepared a Final Program Environmental Impact Report ("Final Program EIR"); and

WHEREAS, CEQA Guidelines Section 15096 identifies that the Responsible Agency must consider the Final Program EIR prepared by the Lead Agency and reach its own conclusions on whether or how to approve the project involved, and further identifies that the City's role as a Responsible Agency is limited as provided for therein; and

WHEREAS, the City, as a Responsible Agency under CEQA, considered the previously certified Final Program EIR and MMRP; and

WHEREAS, the City as a Responsible Agency is required to make findings required by Section 15091 for each significant effect of the project and shall make the findings in Section 15093, if necessary.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, DOES HEREBY RESOLVE AS FOLLOWS:

1  
Resolution No. 2015-68  
Date Adopted: October 13, 2015

Section 1. The City of Moreno Valley as a Responsible Agency under CEQA hereby considers and approves the Program EIR by the Riverside County Flood Control & Water Conservation District based on the following findings:

I. Consideration of the Final Program EIR

The City of Moreno Valley has considered the Final Program EIR for the Moreno Master Drainage Plan prepared and approved by Riverside County Flood Control and Water Conservation District (SCH 2012041013) for the lead agency, the Riverside County Flood Control & Water Conservation District, and has reached its own conclusions on whether and how to approve the project. Further, the City certifies that it has reviewed and considered the Final Program EIR, and its appendices prior to approving this proposal. In addition, the City Council has reviewed and considered testimony and additional information presented at or prior to the public meeting on October 13, 2015.

II. Findings that Mitigation of Certain Impacts is within the Responsibility and Jurisdiction of another Public Agency

The Final Program EIR has been certified by the Riverside County Flood Control & Water Conservation District for a larger project that includes unincorporated areas within the County of Riverside. The Final Program EIR identifies one or more significant environmental effects for the larger project. Changes or alterations that would avoid or substantially lessen the significant environmental effects as identified in the Final Program EIR are within the responsibility and jurisdiction of Riverside County Flood Control & Water Conservation District and not within the jurisdiction of the City of Moreno Valley. The City as a Responsible Agency only has responsibility for mitigating or avoiding the direct or indirect environmental effects of those parts of the Program which it decides to carry out, finance or approve (CEQA Guidelines Section 15096(g)(1))

III. Findings Regarding Significant Adverse Environmental Impacts

There are no identified direct significant environmental impacts of the City's proposed action to approve the Final Program EIR and MMRP. Therefore, no findings are required under Section 15096(h) for direct impacts.

As discussed above, the City finds its ability to mitigate the indirect impacts of the project is limited because the City will only be carrying out and approving a limited number of activities within the Final Program EIR. The City will be responsible for, and only responsible for, implementing those mitigation measures applicable to activities the City undertakes within the Final Program EIR. Therefore, it is not necessary for the City to make findings for each significant effect of the project as provided for in Section 15091 of CEQA.

With regard to the MMRP, the City will evaluate each specific activity within the

MMRP, and evaluate it for applicable mitigation measures. The City will approve the applicable mitigation measures for each implementing activity within MMRP.

IV. Findings Regarding Project Alternatives

A Final Program EIR was prepared for a larger project within the jurisdiction of the Riverside County Flood Control & Water Conservation District. The Final Program EIR identified and analyzed alternatives. The impacts will be mitigated if mitigation measures are implemented as provided for in the Final Program EIR. The City finds pursuant to Section 15096(g)(1) that it only has responsibility for mitigating or avoiding only the direct or indirect parts of the project which it approves and which it can feasibly require mitigation. Therefore, the City does not have any authority over any actions pertaining to the alternatives.

V. Statement of Overriding Considerations

The City finds that the City's approval of the Moreno Master Drainage Plan (Revision No. 2) will not cause any adverse environmental effects. Therefore, the City is not required to engage in the balancing of the benefits of the project against adverse effects under CEQA Guideline Section 15093.

Section 2. The City of Moreno Valley hereby considers and approves the MMRP prepared by the Riverside County Flood Control & Water Conservation District.

APPROVED AND ADOPTED this 13<sup>th</sup> day of October 2015.

\_\_\_\_\_  
Mayor of the City of Moreno Valley

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

3  
Resolution No. 2015-68  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-68 - CEQA EIR MMRP [Revision 4] (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE

**RESOLUTION JURAT**

STATE OF CALIFORNIA            )  
COUNTY OF RIVERSIDE        ) ss.  
CITY OF MORENO VALLEY        )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Resolution No. 2015-68 was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13<sup>th</sup> day of October 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)

4  
Resolution No. 2015-68  
Date Adopted: October 13, 2015

Attachment: Resolution 2015-68 - CEQA EIR MMRP [Revision 4] (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE



**FINAL PROGRAM**  
**ENVIRONMENTAL IMPACT REPORT**  
**Moreno Master Drainage Plan Revision**



*Prepared for*

**Riverside County Flood Control  
& Water Conservation District**

January 2015



Resolution No. 20  
Date Adopted: October

**Packet Pg. 577**

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678) : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

# Moreno Master Drainage Plan Revision

## FINAL PROGRAM ENVIRONMENTAL IMPACT REPORT

SCH No. 2012041013

*Prepared for:*

Riverside County Flood Control and Water Conservation District  
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**January 2015**



This document constitutes the Final Program Environmental Impact Report (PEIR) for the Moreno Master Drainage Plan (MDP) Revision.

The Final PEIR includes the following:

- Sections 1–8 Draft PEIR (with final edits incorporated based on public review and comments)
- Section 9 Final PEIR Background
- Section 10 Comments and Responses on the Draft PEIR
- Section 11 Mitigation Monitoring and Reporting Program (MMRP)

The following Table of Contents has been amended to include all sections of the Final PEIR.



# TABLE OF CONTENTS AND ACRONYMS

The Table of Contents for the Final PEIR including the list of tables, figures, and appendices is presented below. The acronyms, units of measurement, and chemical symbols used throughout the Final PEIR are identified immediately following the Table of Contents.

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## Acronyms, Units of Measurement, Chemical Symbols

Acronyms, units of measurement and chemical symbols used throughout the Draft EIR are identified in this section.

### Acronyms

AAQS	Ambient air quality standards
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
ADP	Area Drainage Plan
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
CAA	Clean Air Act
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CAPSSA	Critical Area Plant Species Survey Area
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CRHR	California Register of Historic Resources
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DEIR	Draft Environmental Impact Report
DTSC	Department of Toxic Substance Control
EDR	Environmental Data Resources, Inc.
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
GHG	Greenhouse gas
HCP	Habitat Conservation Plan
LAPM	Los Angeles pocket mouse
LQG	Large Quantity Generators
LST	Localized significance thresholds
MBTA	Migratory Bird Treaty Act
MDP	Master Drainage Plan
MMTCO <sub>2</sub> e	Million metric tonnes of carbon dioxide equivalent

**Acronyms**

mph	Miles per hour
MPO	Metropolitan Planning Organization
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Communities Conservation Plan
NEPSSA	Narrow Endemic Plants Species Survey Area
NOP	Notice of Preparation
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
OSHA	Occupational Safety and Health Administration
PRC	Public Resources Code
RCB	Reinforced concrete box
RCIP	Riverside County Integrated Plan
RCP	Reinforced concrete pipe
ROW	Right-of-way or rights-of-way
RST	Regional significance threshold
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCH	State Clearinghouse
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SKR	Stephen's kangaroo rat
SRA	Source receptor area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
USFWS	U.S. Fish and Wildlife Service
UST	Underground storage tank
VMT	Vehicle miles traveled
WQMP	Water Quality Management Plan

**Units of Measurement and Chemical Symbols**

>	Greater than
CFC	Chloroflourocarbons
CH <sub>4</sub>	Methane
CO	Carbon monoxide

### Units of Measurement and Chemical Symbols

CO <sub>2</sub>	Carbon dioxide
HC	Hydrocarbons
HFC	Hydroflourocarbons
LST	Localized Significance Threshold
Mt	Metric tonne
N <sub>2</sub> O	Nitrous oxide
NO	Nitric oxide
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Oxides of nitrogen
O <sub>3</sub>	Ozone
PM-10	Particulate matter 2.5 to 10 microns in diameter
PM-2.5	Particulate matter 2.5 microns or less in diameter
ROG	Reactive organic gases
SF <sub>6</sub>	Sulfur hexaflouride
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Oxides of sulfur
SRA	Source Receptor Area
TCA	1,1,1-trichloroethane or methyl chloroform
VOC	Volatile organic compounds

## Section 1 – Executive Summary

### 1.1 Introduction

The purpose of this Draft Program Environmental Impact Report (Draft PEIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the proposed Moreno Master Drainage Plan Revision (hereinafter referred to as either the “Project” or “Moreno MDP”) as further described below and in Section 3 of this Draft PEIR.

### 1.2 Document Purpose

This Draft PEIR has been prepared by the Riverside County Flood Control and Water Conservation District (RCFCWCD or “District”) as Lead Agency and the City of Moreno Valley (Moreno Valley), as a Responsible Agency, to inform decision-makers and the public of the potential significant environmental effects associated with the proposed Project. This Draft EIR has been prepared in accordance with the California Environmental Quality Act of 1970 (CEQA, Public Resources Code, Section 21000 et seq.) and the *Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines)* published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Section 15000 et seq).

This Draft PEIR provides a programmatic level analysis for the Project as described in Section 3.0 of this Draft PEIR. Pursuant to Section 15168 of the CEQA Guidelines, a programmatic-level environmental analysis is appropriate for conceptual planning documents. The PEIR is a disclosure document that examines the overall environmental impacts of the proposed Project and provides an opportunity for the public and any Responsible Agencies to review and comment on the validity of the environmental analyses. Ultimately, the PEIR will be used by the decisions makers, which in this case is the RCFCWCD Board of Supervisors, whether or not to certify the PEIR and approve the Project.

If the PEIR is certified and the Project is approved by the Board of Supervisors, as future individual MDP Facilities are proposed, the District or any other jurisdiction having discretionary approval related to the MDP Facility (i.e., City of Moreno Valley or County of Riverside), will be required to examine each Facility on its own merits pursuant to CEQA. Potential Facility-specific CEQA documents include an initial study (IS) leading to a negative declaration or mitigated negative declaration (MND); supplemental environmental impact report (EIR); or subsequent EIR. However, pursuant to Section 15168(c)(2) of the CEQA Guidelines, if the District or any other jurisdiction having discretionary approval related to the MDP facility finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the Lead or Responsible Agency can approve the activity as being within the scope of the Project covered by the PEIR, and no new environmental document would be required. In addition, since many of the MDP facilities may be designed and/or constructed as part of private development projects processed by Moreno Valley, the Facility-specific analysis may be included as part of the environmental documentation and CEQA process for a development project, provided it includes adequate CEQA analysis on any related MDP Facilities.



### 1.3 Project Location

The drainage boundary of the Moreno MDP (the Moreno Watershed or MDP Watershed) is drawn to include all of the watershed area that contributes to the drainage problems in the community. Therefore, the boundaries of the Moreno MDP are coterminous with the Moreno Watershed. Because the boundaries of the Moreno MDP and Moreno Watershed are coterminous, the terms Moreno MDP, Moreno Watershed, and Project Watershed are used interchangeably throughout the Draft PEIR.<sup>1</sup>

The Moreno MDP is primarily located in the city of Moreno Valley, California (City or Moreno Valley); only one proposed facility within the Moreno MDP is located outside of City limits within unincorporated Riverside County, the Ironwood Debris Basin. Although outside of the City limits, the Ironwood Debris Basin is within the City's sphere of influence. The Moreno Watershed encompasses all or a portion of: Sections 30 and 31, Township 2 South, Range 2 West; Sections 21 through 23, 25 through 29, 33 through 36, Township 2 South, Range 3 West; Sections 1 through 4, 9 through 16, 21 through 24, 27, and 28, Township 3 South, Range 3 West, San Bernardino Base and Meridian. Longitude/Latitude for the Project is 117 degrees, 11 minutes, 58 seconds north and 33 degrees, 56 minutes, 57 seconds west.

The Project is designed to capture storm water from the Moreno Watershed. The Moreno Watershed encompasses approximately 21 square miles<sup>2</sup> and is generally bounded by Lasselle Street to the west, Theodore Street to the east, Reche Canyon and San Timoteo Badlands foothills to the north, and Mount Russell foothills to the south (**Figure 1-1 – Vicinity Map and Figure 1-2 – Proposed Project**).

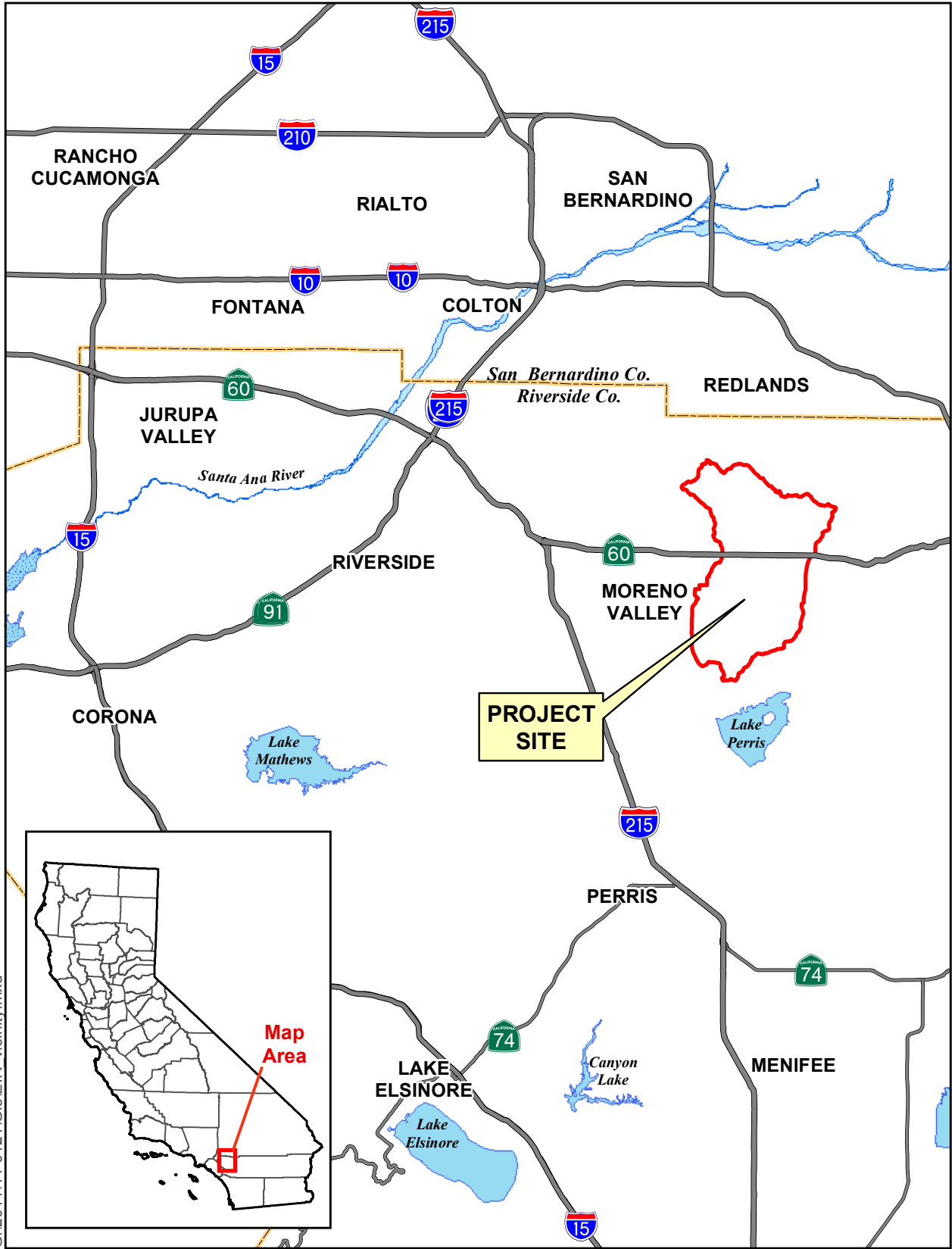
### 1.4 Project Description

#### 1.4.1 Background

Master drainage plans are conceptual planning documents that address the current and future drainage needs of a given community. The boundary of master drainage plans usually follows regional watershed limits. Proposed drainage facilities may include channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within a master drainage plan watershed. A master drainage plan also includes an estimate of facility capacity, sizes, and costs.

<sup>1</sup> As used in this Draft PEIR, the terms: Moreno MDP Facilities (or Moreno MDP Facility), MDP Facilities (or MDP Facility), Project Facilities (or Project Facility), and Facility (or Facilities) refer to the storm drains, channels, and/or basins identified in the Moreno MDP.

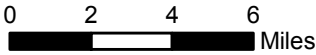
<sup>2</sup> This is not the acreage associated with the footprints of the MDP Facilities.



G:\2011\11-0121\GIS\EIR\_vicinity.mxd

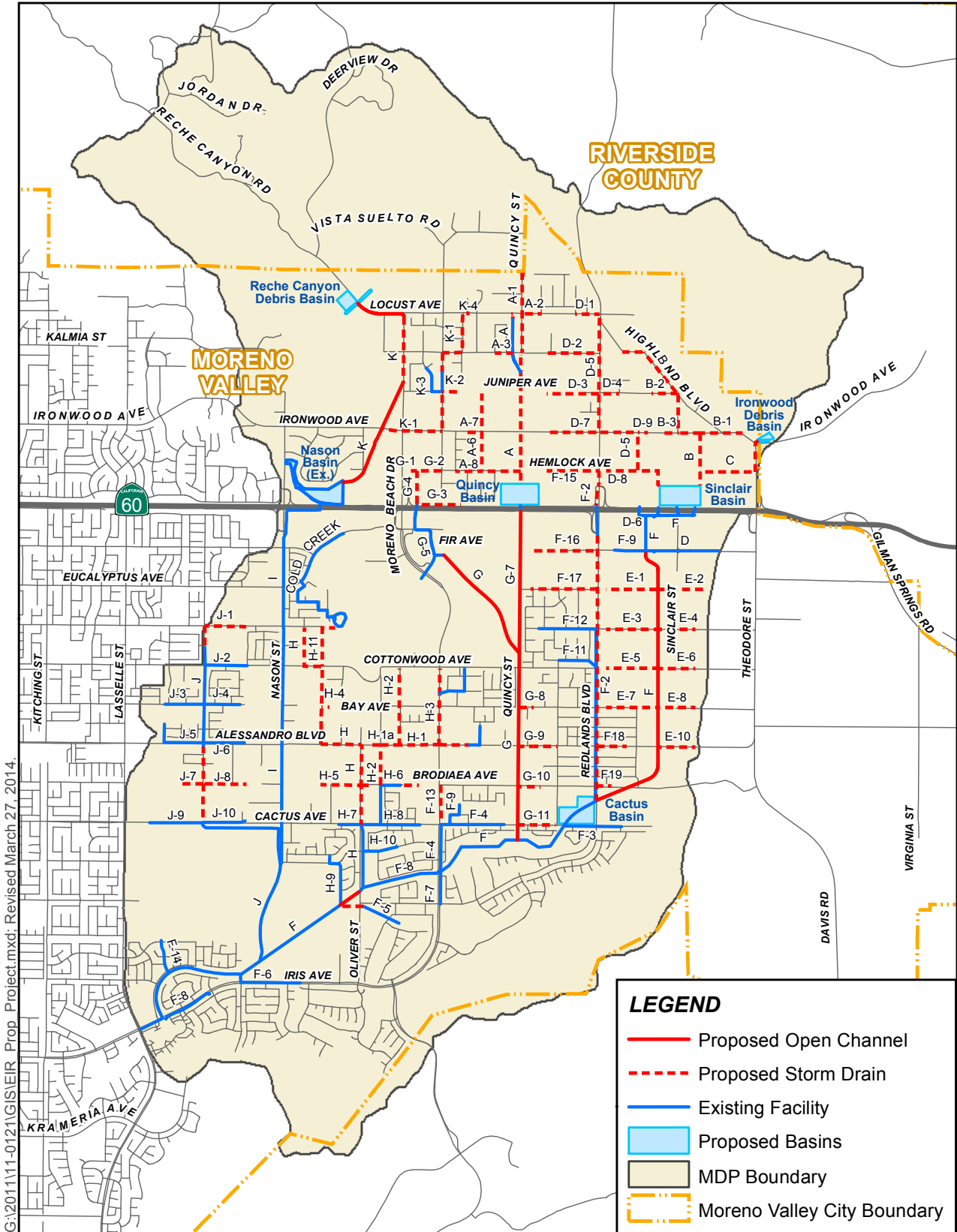
Figure 1-1. Vicinity Map

Moreno Master Drainage Plan Revision



Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





G:\201111-0121\GIS\ER Prop. Project.mxd; Revised March 27, 2014.

Source: County of Riverside GIS, 2014; RCFC&WCD, 2014.

0 0.5 1 1.5 Miles



Figure 1-2. Proposed Project  
Moreno Master Drainage Plan Revision

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



Proposed drainage facilities were originally described in the Moreno MDP dated October 1980 and was later revised in April 1991. The Moreno MDP Revision (the Project evaluated in this Draft PEIR) proposes revisions that are the result of the re-evaluation of the original plans. If adopted, the Project will supersede the 1991 Moreno MDP. The preliminary estimated total cost of the revised Moreno MDP is approximately \$160 million.<sup>3</sup>

## 1.4.2 Moreno Master Drainage Plan

CEQA analysis of a master drainage plan is more complex than the typical project because master drainage plans have a variety of components that are generally implemented over time; in fact, some parts of the plan could be implemented many years in the future, in a different alignment/configuration, or not at all. Therefore, due to the Facility variations that could occur at Project build-out, a Program Environmental Impact Report (PEIR) was determined to be the appropriate CEQA document for the proposed Project. The proposed Project consists of revisions to the previously adopted Moreno MDP and identifies a comprehensive conceptual plan for the future installation of drainage Facilities in response to the existing and planned land use within the MDP Watershed.

The Draft PEIR for the Moreno MDP evaluates the “reasonably foreseeable impacts” of three separate Project components: (1) Administration of the MDP; (2) Right-of-way acquisition and Construction of the MDP Facilities and; (3) Operations and Maintenance of the MDP Facilities.

The Project proposes a system of open channels, underground storm drains, and five new basins (three detention basins and two debris basins), the conceptual location of which is presented on **Figure 1-2 – Proposed Project**. A list of all existing and proposed Project facilities is presented in **Table 3.2-B – Project Update Facilities Overview**.

### Administration

The first component of the Moreno MDP being analyzed in this Draft PEIR is the reasonably foreseeable impacts resulting from preparation and, ultimately, the adoption of the Moreno MDP as a long-range planning document. The Moreno MDP will be a guide for the alignment, type, size, and cost estimate of major proposed facilities (MDP Facilities, Project Facilities, or Facilities) within the Moreno Watershed to address the current and future drainage needs of Moreno Valley and the surrounding area. The MDP Facilities along with street improvements would contain the 100-year flood discharge.

The Moreno MDP will be relied upon by Moreno Valley and Riverside County as these agencies review and approve development in the MDP Watershed. New development may be required to construct MDP Facilities or set aside right-of-way for future MDP Facilities, or otherwise provide adequate drainage facilities that would attenuate and/or contain storm flows projected in the MDP Revision. The local jurisdictions can also use the Moreno MDP to identify Project Facilities and cost estimates for inclusion in capital improvement programs. Finally, the local jurisdictions can use the Moreno MDP for long-range planning of other public infrastructure projects like roads or utility pipelines.

<sup>3</sup>Includes construction, right-of-way costs, engineering, administration, Western Riverside County Multiple Species Habitat Conservation fees, and contingencies.

**Construction**

The second component of the Project being analyzed in this Draft PEIR is the reasonably foreseeable impacts resulting from the acquisition of right-of-way and construction of the MDP Facilities. The MDP identifies the approximate location, size, and type of Project Facilities needed in order to attenuate flooding within the MDP Watershed. The Moreno MDP proposes the construction of approximately 30 miles of storm drains and channels, and approximately 82 acres of detention and debris basins. The alignments and type of facility depicted in the Moreno MDP can change as more detailed information becomes available during the design process. For example, the locations of underground utilities, new development patterns, right-of-way availability, hazardous materials sites, or the results of subsequent focused archaeological, biological, hazardous materials, or paleontological surveys may necessitate a shift in alignment or change in facility type. To add to that uncertainty, the construction of the Project Facilities will be accomplished in discrete phases over a number of decades, which is always a challenge for long-term planning.

Despite this future environment of uncertainty and potential Project Facility variations, the Draft PEIR still must identify the general types of construction activities anticipated and the associated impacts. Subsequent CEQA analysis would be required as the individual Project Facilities are designed and proposed for construction, but those future construction projects could tier from this PEIR. The general types of construction activities evaluated in the Draft PEIR include, but are not limited to:

- Basin/channel excavation;
- Channel/storm drain installation; and
- Asphalt replacement

**Operations and Maintenance of the Moreno MDP Facilities**

The final component of the Project to be analyzed in this Draft PEIR is the reasonably foreseeable impacts of future operation and maintenance activities. Once an MDP Facility is constructed it will require maintenance in order to retain function and flood control capacity. It is expected that the District will operate and maintain all of the MDP Facilities.

The District periodically inspects its facilities. The maintenance of the concrete-lined channels and storm drains typically is less intensive and less costly than maintaining earthen channels and basins. Maintenance of storm drains and concrete channels typically consists of keeping these facilities and their side drains clear of debris and sediment, as well as repairs to access roads and fences, and removing graffiti. On rare occasions, major repairs may be required following damaging storm events. Thus, major grading will not routinely occur while maintaining the underground storm drains and open concrete channels. To maintain the constructed facilities, the District will occasionally use equipment similar to the types used to construct the proposed facilities.

The routine maintenance of earthen channels and basins typically require the following activities: the removal of deposition, repair of eroded slopes, and reduction of fire hazards by annually mowing, and application of herbicides as well as the maintenance activities described in the previous paragraph.

Vegetation must be removed or mowed, as necessary, to provide the designed hydraulic capacity. Any vegetation that may pose a fire hazard to adjacent structures must also be maintained. The design capacity of the facility and the frequency, duration, and velocity of runoff usually dictate the frequency of vegetation maintenance. Most facilities require some annual vegetation control.

Maintenance of the earthen facilities will also include occasional erosion repair and sediment removal. The frequency of these activities is a function of storm flows, and is difficult to estimate. The proposed earthen facilities are also more likely to be damaged by high velocity peak flows and more frequent storm events. While major repairs are expected to be relatively infrequent, the District will occasionally need to substantially grade and repair the earthen facilities.

### 1.4.3 Project Objectives

A clear statement of Project objectives allows for the analysis of reasonable alternatives to the proposed Project. The Project objectives are as follows:

1. Revise the Moreno MDP to provide a drainage plan which supports the existing and proposed land use as set forth in the "Riverside County General Plan" updated in 2008, "City of Moreno Valley General Plan" updated in July 2006, and any proposed amendments thereto.
2. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of MDP facilities to protect existing and future development.
4. Identify the most economical combination of facilities considering right-of-way acquisition, construction, and maintenance costs.
5. Develop a plan which, when implemented, will result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Moreno MDP.
6. Revise the Moreno MDP to minimize major diversions and perpetuate the natural drainage pattern of the area to the maximum extent practicable.
7. Where feasible, incorporate facilities which encourage infiltration.
8. Minimize environmental impacts to the maximum extent practicable.

### 1.4.4 Required Actions and Approvals

Implementation of the Project may require permits or other forms of approval from public agencies or other entities prior to construction of the proposed Moreno MDP Facilities.

- **Riverside County Flood Control and Water Conservation District**  
The District owns and operates storm drains, channels, and basins within the Moreno MDP Watershed. To the extent that flood control improvements are proposed that affect the District's facilities; coordination and approval from the District, would be necessary.



Moreover, all new facilities constructed by developers, Moreno Valley, or Riverside County, that require maintenance by the District, would require the District execution of a cooperative agreement and approval of plans and specifications.

- **U.S. Army Corps of Engineers**

A Clean Water Act Section 404 permit will be required if the construction or maintenance of the proposed Project Facilities involves the discharge of dredged or fill material within “waters of the United States” or adjacent wetlands.

- **Regional Water Quality Control Board, Santa Ana Region (RWQCB)**

National Pollutant Discharge Elimination System (NPDES) General Construction Permits will be required for grading activities of one acre or larger.

If a 404 Permit is required, then a Section 401 Water Quality Certification will be required.

A Waste Discharge Permit will be required if ground dewatering is necessary during tunneling activities or if waste is discharged into “waters of the State.”

- **California Department of Fish and Wildlife <sup>4</sup>**

A Fish and Game Code Section 1600 Streambed Alteration Agreement will be required if a jurisdictional streambed or stream banks will be altered.

- **California Department of Transportation**

Encroachment permits, plus Water Pollution Control Plans, as applicable, will be required if any work associated with proposed Project Facilities is required within the right-of-way of State Route 60.

- **County of Riverside, City of Moreno Valley**

Encroachment permits will be required to construct Project Facilities within road rights-of-way.

## 1.5 Summary of Environmental Impacts and Mitigation Measures

The following table, **Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**, provides a summary of impacts related to the Project pursuant to State *CEQA Guidelines* Section 15123(b)(1). The table identifies any significant environmental impacts resulting from the Project along with applicable mitigation measures required to reduce impacts to a less than significant level, where possible. Note that the updated Mitigation Monitoring and Reporting Program is contained in its final form in **Table 11-A** in Section 11 of this document.

<sup>4</sup> Effective January 1, 2013, the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW), although its services and purpose have not changed. Because of this recent agency name change, some references contained within this DPEIR and/or technical appendices may use the terms CDFG and CDFW interchangeably. For example, this document includes several references to the *Fish and Game Code*, which has not yet been updated to reflect the agency name change to CDFW.

**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
Air Quality and Greenhouse Gas Emissions	Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	<p><b>MM Air 1:</b> For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers’ specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency <u>or by means of another form of documentation as approved by the Lead Agency</u> (i.e., Moreno Valley, Riverside County, or District).</p> <p><b>MM Air 2:</b> For channel and basin Facilities, to reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail, safe detours to prevent traffic congestion to the best of the project’s ability, and provide temporary traffic control measures during construction activities that will ensure smooth traffic flows. Pursuant to CCR Title 13 §2449(d)(3), construction equipment and truck idling times shall be prohibited in excess of five minutes on site. To reduce traffic congestion, and therefore NO<sub>x</sub>, the plan shall include, as necessary, appropriate, and practicable, the following: dedicated turn lanes for movement of construction trucks and equipment on and off site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow. This measure applies to all projects, unless the Lead Agency determines that a traffic control plan is not warranted or feasible due to no impact on local roadways.</p> <p><b>MM Air 3:</b> For channel and basin Facilities, to minimize impacts related to particulate matter (PM-10 and PM-2.5) generation from construction activities, consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site. The contractor shall be required to comply with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that may include watering, stabilized construction access to reduce</p>	Significant and unavoidable impacts

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**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p>tracking of mud or dirt onto public roads, covering trucks hauling loose materials off-site<sup>5</sup>, and street sweeping.</p> <p><b>MM Air 4:</b> For channel and basin Facilities, to reduce construction vehicle emissions contractor specification packages for Facility construction phases shall require construction equipment to meet EPA standards according to the following, unless a Facility (or Facilities)-specific air quality analysis is conducted at the time are actually designed and proposed for construction that determines impacts would be less than significant by adhering to the most current federal, state and local (e.g., SCAQMD) regulations, and the District’s standard regulatory practices:</p> <ul style="list-style-type: none"> <li>• The contracting company’s fleet of off-road diesel-powered construction equipment greater than 100 horsepower shall meet Tier 3 off-road emissions standards or better.</li> <li>• Any emissions control device used by the contractor shall achieve Level 3 emissions reductions of no less than 85 percent for particulate matter, as specified by CARB regulations.</li> <li>• A copy of the fleet’s tier compliance documentation, and CARB or AQMD operating permit shall be available to the Lead Agency for such Facility (i.e., Moreno Valley, Riverside County, or District) at the time of mobilization of each applicable unit of equipment.</li> </ul>	
	Exposure of sensitive receptors to substantial pollutant concentrations.	<b>MM Air 1</b> through <b>MM Air 4</b> (see above)	Significant and unavoidable impacts
Biological Resources	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California	<b>MM BIO 1:</b> Prior to construction of any individual MDP Facility, a Facility-specific general biological resources assessment shall be conducted by a qualified biologist. The general biological resource assessments shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, an identification of: sensitive plant or animal species that occur or may occur on site, other protected natural resources including sensitive vegetation communities, streams, rivers, vernal pools, and wetlands. The	Less than significant

<sup>5</sup> Covering trucks hauling loose materials achieves a 91 percent reduction in PM-10 per SCAQMD Mitigation Measures and Control Efficiencies for Fugitive Dust – Table XI-A: Construction & Demolition, available at [http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM\\_fugitive.html](http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html).

**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
	<p>Department of Fish and Game or U.S. Fish and Wildlife Service.</p>	<p>assessments shall include recommendations for subsequent surveys and mitigation measures, if needed. Since the Project is located within the Western Riverside County MSHCP Plan Area, the general biological assessments shall also include a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP. For MDP Facilities located within a Criteria Cell, the assessments may be included as part of the Joint Project Review application. If an MDP Facility is being constructed as part of a private development project, the general biological resource assessment prepared for the development project may be utilized, at the discretion of Moreno Valley and the District, in lieu of preparing a separate document specifically for the MDP Facility.</p> <p><b>MM BIO 2:</b> In order to avoid impacts to burrowing owls and to comply with the MSHCP, burrowing owl habitat assessments for individual MDP Facilities will be conducted by a qualified biologist following the MSHCP Burrowing Owl Survey Instructions. The burrowing owl habitat assessment may be conducted as part of the general biological resources assessment in <b>MM BIO 1</b>. If the result of the habitat assessment indicates that suitable habitat is present, including suitable burrows, focused burrowing owl surveys shall be conducted for those areas with suitable habitat pursuant to Step II, Part B of the MSHCP Survey Instructions. If owls are found in the impact area of an MDP Facility, Species Objective 5 from the MSHCP shall be implemented. If avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.</p> <p><b>MM BIO 3:</b> All future MDP facilities within the mapped survey area for Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities. If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. Take of active nests shall be avoided. The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service.</p>	

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**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p><b>MM BIO 4:</b> Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP. In conjunction with a delineation of jurisdictional waters (see <b>MM BIO 8</b>), MSHCP riparian/ riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in <b>MM BIO 1</b>. For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities’ footprint. If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.</p> <p><b>MM BIO 5:</b> Within areas of suitable riparian habitat, a qualified biologist shall conduct protocol presence/absence surveys for the least Bell’s vireo following USFWS protocols.</p> <p>If least Bell’s vireos are detected, then 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo, if feasible. If conservation is infeasible, then the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p> <p><b>MM BIO 6:</b> A qualified biologist will assess individual project sites for habitat with the potential to support listed fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions. This assessment may be conducted as part of the general biological resources assessment in <b>MM BIO 1</b>. If potentially suitable habitat is identified, a qualified biologist will conduct presence/absence surveys for listed fairy shrimp following accepted protocols.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of vernal pools and listed fairy shrimp habitat. If listed fairy shrimp are detected and avoidance is not feasible, then (1) long-term conservation shall be implemented pursuant to Appendix E of the MSHCP if feasible; or (2) the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p>	

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Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p><b>MM BIO 7:</b> A qualified biologist will conduct a habitat assessment for individual projects located within the MSHCP Los Angeles pocket mouse survey area. This assessment may be conducted as part of the general biological resources assessment in <b>MM BIO 1</b>. If suitable habitat is present, the biologist will conduct a presence/absence trapping study.</p> <p>If a Los Angeles pocket mouse (LAPM) is detected, then 90 percent of those portions of the Facility footprint that provide for long-term conservation value for LAPM shall be avoided until it is demonstrated that the MSHCP conversation goals for LAPM have been met. If avoidance is not feasible the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options. DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period.</p>	
	<p>The proposed project would adversely affect any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.</p>	<p><b>MM BIO 4</b> (see above)</p> <p><b>MM BIO 8:</b> Prior to construction, individual projects shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Project-specific delineations may be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction. These delineations may be conducted as part of the general biological resources assessment in <b>MM BIO 1</b>. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency. Authorizations may include, but are not limited to, a Section 404 permit from the ACOE, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW.</p> <p>Project-specific impacts to jurisdictional waters shall be mitigated at the Facility level through the permitting process in a manner approved by the ACOE, CDFW, and the RWQCB, where applicable.</p>	<p>Less than significant</p>
	<p>Interfere substantially with the movement of any native resident</p>	<p><b>MM BIO 9:</b> In order to comply with the MBTA and/or California Fish and Game Code, site-preparation activities (removal of trees and vegetation) shall be</p>	<p>Less than significant</p>

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Impact Category	Impact	Mitigation Measure	Impact After Mitigation
	<p>or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites</p>	<p>avoided, to the greatest extent possible, during the native and migratory bird species nesting season (generally February 1 through August 31).</p> <p>If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to disturbance. Surveys shall be conducted no more than thirty (30) days prior to scheduled removals, and repeated if necessary. If active nests are identified, the biologist will recommend buffers around the vegetation containing the active nests. The vegetation containing the active nest shall not be removed, and no grading shall occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within thirty (30) days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.</p>	
	<p>Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan</p>	<p><b>MM BIO 1</b> through <b>MM BIO 8</b> (see above)</p>	<p>Less than significant</p>
<p>Cultural Resources</p>	<p>Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.</p>	<p><b>MM CR 1:</b> <del>Before</del> <u>At the project level, prior to the issuance of a Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources, for which there is a change in the location or size of disturbance area from what was evaluated in the The Lead Agency shall consider applicable data and analyses, such as the Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California (CRM TECH, January 31, 2012), Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources.</u> <del>the District, Riverside County, or Moreno Valley Public Works Department shall require the proponent of such MDP Facility to prepare or cause to be prepared a Facility specific assessment of the potential for archaeological</del></p>	<p>Less than significant</p>

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Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p>and cultural resources in order to determine the presence or extent of any such resources and evaluate the significance of such resources (if present). This assessment shall include, at minimum a Native American Heritage Commission Sacred Lands File search, a records search at the Eastern Information Center at the University of California Riverside, a walkover survey, and preparation of a written report containing the results of the assessment. The archaeological evaluations shall be completed prior to the commencement of any ground disturbing activities.</p>	
	<p>Create a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.</p>	<p><b>MM CR 1</b> (see above)</p> <p><b>MM CR 2:</b> Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State <i>CEQA Guidelines</i>), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Any artifacts collected or recovered shall be cleaned, identified, catalogued, analyzed, and prepared for curation at an appropriate repository with permanent retrievable storage to allow for additional research in the future. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. <u>Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.</u></p> <p><b>MM CR 3:</b> If the Facility-specific assessment required by <b>MM CR 1</b> determines <u>there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a building grading permit, or Notice to Proceed with</u> <del>or</del> construction of that proposed MDP Facility, the proponent for that Facility shall <del>notify local Native American tribes</del> <u>the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing activities.</u> With permission of the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor, <del>at such tribe's sole cost and expense, all</del> grading, excavation, and ground disturbing activities associated with that MDP</p>	<p>Less than significant</p>

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**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		Facility, including further surveys. <u>Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.</u>	
	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<p><b>MM CR 4:</b> Before the issuance of a Notice to Proceed with construction of any proposed MDP Facility, the proponent of the specific MDP Facility shall either:</p> <ul style="list-style-type: none"> <li>a) Establish to the satisfaction of the Lead Agency for the specific MDP Facility (i.e., the District, Moreno Valley, or Riverside County), that no excavation or earth-moving activities shall take place within soils that are identified as Pleistocene-age or older alluvium; or</li> <li>b) Retain the services of a qualified paleontologist to review construction and grading plans and develop a paleontological monitoring plan, if necessary. Any monitoring shall be restricted to undisturbed older alluvium, which might be present below the surface. To avoid construction delays, the monitor shall be prepared to quickly salvage fossils, as they are unearthed. The monitor shall remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have the authority to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens. If the paleontologist determines that monitoring is not necessary, the paleontologist shall prepare a memo documenting such to the satisfaction of the Lead Agency.</li> </ul> <p><b>MM CR 5:</b> A qualified paleontologist shall be retained to evaluate any recovered paleontological specimens. If the qualified paleontologist deems recovered resources as rare, substantial, or otherwise unique, the resources shall be prepared and stabilized for formal identification and permanent preservation.</p> <p><b>MM CR 6:</b> Identification and curation of recovered paleontological specimens into an established accredited museum repository with permanent retrievable paleontological storage shall be required for recovered resources identified by the by the qualified paleontologist (retained via <b>MM CR 5</b>) as rare, substantial, or otherwise unique.</p> <p><b>MM CR 7:</b> Preparation of a report of findings with an appended itemized inventory of paleontological specimens shall be required. The submittal of the report to the applicable Lead Agency (i.e., District, Moreno Valley, Riverside County) and the curation of the specimens identified by the qualified</p>	Less than significant

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**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		paleontologist (retained via <b>MM CR 5</b> ) as rare, substantial, or otherwise unique into an established, accredited museum repository would signify the completion of the mitigation program.	
Hydrology and Water Quality	Violate any water quality standards or waste discharge requirements	<b>MM HYD 1:</b> Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion. The erosion control plan may be prepared by the Construction Contractor or designee. The erosion control plan shall be retained at the construction site and available for inspection upon request.	Less than significant
	Result in substantial discharges of typical storm water pollutants (e.g., sediment from construction activities, hydrocarbons, and metals from motor vehicles, nutrients and pesticides from landscape maintenance activities, metals of other pollutants from industrial operation) or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity.	<b>MM HYD 1</b> (see above)	Less than significant
	Substantial alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.	<b>MM HYD 2:</b> Prior to approval of any Moreno MDP Facility, the design and plans shall demonstrate storm flows and runoff from that specific Facility will be conveyed to an adequate outlet system to the satisfaction of the Riverside County Flood Control and Water Conservation District. As feasible, development of the MDP Facilities shall occur in appropriate phases as to ensure conveyance of storm flows and runoff will have adequate outlets.	

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**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
Noise	<p>Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; and</p> <p>Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project</p>	<p><b>MM NOI 1:</b> To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of <del>6</del><u>7</u>:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.</p> <p><b>MM NOI 2:</b> To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer’s specifications to the satisfaction of the District or Moreno Valley, as appropriate. Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.</p> <p><b>MM NOI 3:</b> To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors’ roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.</p>	Less than significant
	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels	<b>MM NOI 1</b> (see above)	Less than significant

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## 1.6 Areas of Controversy and Issues to be Resolved

Section 15123(b)(2) of the *State CEQA Guidelines* requires that areas of controversy known to the Lead Agency must be stated in the EIR summary. Issues of interest to the public and public agencies were identified during the 30-day public comment period of the Initial Study and Notice of Preparation (NOP). Comments in response to the NOP were received from:

- California Department of Fish and Game
- California Department of Toxic Substances Control
- California Department of Transportation
- Devlin Engineering
- Governor’s Office of Planning and Research
- Native American Heritage Commission
- Soboba Band of Luiseño Indians
- South Coast Air Quality Management District

The Initial Study, NOP, distribution list, and comment letters received during the NOP review period are included in Appendix A of this Draft EIR.

Comments were received at the Project’s scoping meeting from Riverside County Department of Environmental Health – Vector Control and Roger Turner, a consultant representing dairy owners in the San Jacinto area.

The major issues to be resolved for the Project include decisions by the District as to whether:

- The Draft PEIR adequately describes the potential environmental impacts of the Project;
- The recommended mitigation measures should be adopted or modified;
- Additional mitigation measures need to be applied;
- There are alternate locations for the Cactus Basin;
- The Project should or should not be approved as proposed; or
- The Project should be modified based on the alternatives considered in the PEIR.

## 1.7 Project Alternatives

State *CEQA Guidelines* Section 15126.6 identifies the parameters within which consideration and discussion of alternatives to a proposed project should occur. As stated in this section of the guidelines, alternatives must focus on those that are reasonably feasible and which attain most of the basic objectives of a project. Each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed project. The rationale for selecting the alternatives to be evaluated and a discussion of the “no project” alternative are also required.

Because the Project is the implementation of a revision to the 1991 Moreno MDP, the boundary (not the Facility locations) for all alternatives is the same as the proposed Project. Each alternative, except the No Project Alternative, provides the same level of flood protection (in conjunction with the ultimate street improvements) within the Moreno Watershed. All alternatives were developed to reduce flooding, and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno Watershed. The overall footprint of the proposed lateral facilities (channels and storm drains) is similar among all alternatives (except for the No Project Alternative) and there is only a 10 acre difference in the basin footprints between the proposed Project and Alternatives 1, 2A, 2B, and 3. All of the alternatives evaluated, except for the No Project Alternative, would be subject to the same mitigation measures as the proposed Project. None of the alternatives evaluated, including the No Project Alternative, will reduce the significant short-term air quality impacts that would occur during construction of the proposed basins and channels.<sup>6</sup> Therefore, as shown in **Table 1-B – Comparison of Alternatives Matrix** (on the following page) impacts among the alternatives are similar and there is no single alternative that is clearly environmentally superior to the others.

This Draft PEIR evaluates the following five alternatives:

- **No Project Alternative:** The continued implementation of the existing 1991 Moreno MDP.
- **Alternative 1:** Consists of the same types of facilities (i.e., storm drains and channels) and alignments as the 1991 Moreno MDP (see **Figure 7-2 – Alternative 1**). In addition, Alternative 1 includes three basins encompassing approximately 75.3 acres.
- **Alternative 2A and Alternative 2B:** Alternative 2 consists of the realignment of proposed facilities upstream of State Route 60. Both Alternative 2A and Alternative 2B propose Line F, Line G and Line K as earthen channels with rock-lined side slopes and also include the Reche Canyon Debris Basin to capture debris upstream of Line K. The primary difference between Alternative 2A and Alternative 2B are the size, number, and location of the proposed detention basins (see **Figure 7-3 – Alternative 2A** and **Figure 7-4 – Alternative 2B**). Alternative 2A proposes a six basins encompassing a total of 71.9 acres. Alternative 2B proposes a total of five basins encompassing a total of 74.9 acres
- **Alternative 3:** Alternative 3 consists of the realignment of proposed facilities upstream of State Route 60 and proposes three detention basins downstream of State Route 60 (see **Figure 7-5 – Alternative 3**). Alternative 3 would require upsizing the existing highway drainage culverts under State Route 60 to convey the 100-year flows to the proposed basins. Alternative 3 proposes a total of four basins encompassing a total of 78.3. Alternative 3 proposes Line F, Line G, and Line K as earthen channels.

<sup>6</sup> As discussed in Section 5.1.7, even with mitigation, construction of the Project's proposed basins and channels will exceed the SCAQMD threshold for NO<sub>x</sub>. If basin grading and channel grading of proposed MDP Facilities occurs at the same time, VOC emissions would exceed the SCAQMD threshold even with mitigation.

**Table 1-B – Comparison of Alternatives Matrix**, on the following pages, compares the potential environmental impacts of each alternative and ranks each alternative as better, same, or worse in comparison to the significance determinations that the proposed Project would have with respect to each issue area.

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**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<p><b>Air Quality and Greenhouse Gas Emissions</b> (Threshold A) Air Quality Standards</p>	<p><b>Significant Unavoidable Impact:</b> The proposed Project includes five basins with a combined footprint of approximately 82 acres, in addition to multiple channels, and storm drains.</p> <p>The analysis determined that emissions impacts generated by <b>storm drain installation would be less than significant</b>. Long-term air quality impacts associated with the <b>maintenance of the MDP Facilities would be less than significant</b>.</p> <p>However, impacts from the construction of the channels and basins could exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC (if certain construction activities overlap), even with mitigation measures. Therefore, a <b>Statement of Overriding Considerations (SOC) would be required for short-term air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and VOC if certain activities overlap</b>.</p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact:</b> The No Project Alternative is the 1991 Moreno MDP, which includes the 12-acre Sinclair Basin, in addition to open concrete-lined channels and storm drains. Although the No Project Alternative includes fewer acres of basins than the proposed Project; this alternative would still entail construction of channel and basin facilities. Therefore, it is anticipated that construction of the Sinclair Basin and the channels identified in the No Project Alternative would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project</p> <p>Maintenance for the Facilities in the No Project Alternative would be the same as the proposed Project; thus, no new long-term emissions would occur.</p> <p><i>Note that although impacts are expected to be significant and unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having "Impacts Less Than the Project."</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 1 includes three basins with a combined footprint of approximately 75 acres, in addition to channels, and storm drains.</p> <p>The basins in Alternative 1 have a slightly smaller footprint (7 fewer acres) than the proposed Project. However, Alternative 1 would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 1 for construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 1 would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 2A includes six basins with a combined footprint of approximately 72 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 2A includes approximately 10 fewer acres of basins than the proposed Project; Alternative 2A would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's six basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 2A for construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 2A would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 2B includes five basins with a combined footprint of approximately 75 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 2B includes approximately 7 fewer acres of basins than the proposed Project; Alternative 2B would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's five basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 2B for the construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 2B would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 3 includes four basins with a combined footprint of approximately 78 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 3 includes approximately 4 fewer acres of basins than the proposed Project; Alternative 3 would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's four basins and construction of its channels will exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 3 for the construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 3 would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>

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**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<p><b>Air Quality and Greenhouse Gas Emissions</b> (Threshold B) Cumulatively Considerable Contribution to a Criteria Pollutant</p>	<p><b>Significant Unavoidable Impact:</b> The Project is located in a non-attainment area for NO<sub>2</sub> under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.</p> <p>Even through the proposed Project is in conformance with the AQMP, because the short-term construction of MDP Facilities would result in Project-specific impacts to ozone precursors, the Project’s incremental contribution to criteria pollutant emissions is considered potentially cumulatively considerable. Therefore, a <b>Statement of Overriding Considerations (SOC) would be required for the Project’s cumulatively considerable contribution to air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and possibly VOC (both ozone precursors).</b></p> <p>Note that a cumulative contribution of criteria pollutants does not indicate cumulative GHG impacts.</p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact;</b> The 1991 MDP is in conformance with the AQMP. However, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in the 1991 MDP is considered potentially cumulatively considerable.</p> <p><i>Note that although impacts are expected to be significant and unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having “Impacts Less Than the Project.”</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 1 is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 1 is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 2A is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 2A is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 2B is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 2B is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> Alternative 3 is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 3 is considered potentially cumulatively considerable.</p>
<p><b>Air Quality and Greenhouse Gas Emissions</b> (Threshold C) Sensitive Receptors</p>	<p><b>Significant Unavoidable Impact:</b> The closest sensitive receptors are immediately adjacent to MDP Facilities. No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities due to the lack of new long-term sources of emissions. Short-term emissions during construction are less than significant on a localized level.</p> <p>However, even with mitigation incorporated, NO<sub>x</sub> (and VOC if certain construction activities overlap) generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p> <p>Therefore, a Statement of Overriding Considerations would be required <b>for short-term air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and possibly VOC.</b></p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact;</b> The 1991 MDP proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p> <p><i>Note that although impacts are expected to be significant and</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> As with the proposed Project, Alternative 1 proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> As with the proposed Project, Alternative 2A proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> As with the proposed Project, Alternative 2B proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b> As with the proposed Project, Alternative 3 proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub>, VOC and PM10 emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>

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**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
		<i>unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having "Impacts Less Than the Project."</i>				
<b>Air Quality and Greenhouse Gas Emissions</b> (Threshold D) Greenhouse Gas Emissions	<b>Less than Significant Impacts:</b> Project-related GHG emissions would result from fuel usage during Project construction and operation (Facility maintenance activities). The total GHG emissions from Project construction is below the lowest SCAQMD recommended screening level of 3,000 MTCO <sub>2</sub> E/yr (for commercial projects). The projected emissions from construction of the MDP, and negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines. Thus, implementation of the proposed Moreno MDP will not generate a significant amount of GHG.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities in the 1991 Moreno MDP would result in GHG emissions similar to the proposed Project. Operational emissions from infrequent maintenance vehicles will remain unchanged.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 1 would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 2A would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 2B would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 3 would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.
<b>Biological Resources</b> (Threshold A) Candidate, Sensitive, or Special-Status Plant Species	<b>Less than Significant Impacts with Mitigation:</b> Biological resources were evaluated at a program level in the Draft PEIR. Special status species, such as the burrowing owl, least Bell's vireo, and fairy shrimp, Los Angeles pocket mouse, Stephen's kangaroo rat, and raptors have the potential to occur within the boundaries of the Moreno MDP Watershed.  The proposed Project includes five basins with a combined footprint of approximately 82 acres, in addition to channels, and storm drains Through compliance with the provisions of the MSHCP and implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> that require focused surveys, replacement of lost habitat, and seasonal avoidance of vegetation removal or nesting bird surveys, impacts would be reduced to less than significant.	<b>Impacts Less than the Project; Less than Significant Impacts:</b> The No Project Alternative is the 1991 Moreno MDP, which includes the 12-acre Sinclair Basin, in addition to open concrete-lined channels and storm drains.  As with the proposed Project, Facilities proposed by this alternative are located in areas that have the potential to support special status species. Because this alternative is anticipated to have an approximately 70 acre smaller footprint than the proposed Project it would impact less habitat.  The District and Moreno Valley are Permittees under the MSHCP; therefore, construction of any	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 1 are located in areas that have the potential to support special status species. Because the footprint for Alternative 1 is only approximately 7 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 2A are located in areas that have to potential to support special status species. Because the footprint for Alternative 2A is only approximately 10 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 2B are located in areas that have to potential to support special status species. Because the footprint for Alternative 2B is only approximately 7 acres smaller than the proposed Project, it would not affect significantly less habitat than the propose Project and comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, Facilities proposed by Alternative 3 are located in areas that have to potential to support special status species. Because the footprint for Alternative 3 is only approximately 4 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project and would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .

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**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
		Facility shall be in compliance with the MSHCP, which would reduce potential impacts to less than significant.				
<b>Biological Resources</b> (Threshold B) Riparian Habitat portion	<b>Less than Significant Impacts with Mitigation:</b> Riparian habitat is present within the Moreno MDP Watershed. Per the MSHCP, identification of riparian/riverine habitats and avoidance of these habitats are required where possible. If riparian/riverine features cannot be avoided, then approval of a DBESP that identifies appropriate mitigation will be required. Thus, through compliance with the provisions of the MSHCP and implementation of mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> , impacts would be less than significant.	<b>Impacts Less than the Project Less than Significant Impacts:</b> Because the No Project Alternative is anticipated to have an approximately 70 acre smaller footprint than the Project, it may impact less riparian/riverine habitat. Because the District and Moreno Valley are MSHCP Permittees construction of Facilities identified in the 1991 Moreno MDP must comply with the MSHCP and if avoidance is not possible, then a DBESP must be prepared and approved. Through compliance with the MSHCP, impacts would be less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 1 is anticipated to have a slightly smaller (approximately 7 acre) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 2A is anticipated to have a slightly smaller (approximately 10 acres) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement of mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 2B is anticipated to have a slightly smaller (approximately 7 acres) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Alternative 3 is anticipated to have essentially the same-sized footprint as the Project and certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .
<b>Biological Resources</b> (Threshold B) Jurisdictional Water Features portion	<b>Less than Significant Impacts with Mitigation:</b> Potentially jurisdictional areas are present within the boundaries of the Moreno MDP Watershed. Potentially jurisdictional areas are in proximity to various components of the MDP Revision. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Less than the Project Less than Significant Impacts:</b> Potentially jurisdictional areas are in proximity to various components of the No Project Alternative. However, because there is only one basin with this alternative, the impacts would be slightly less than the proposed Project, with five basins to mitigate. Nonetheless, through compliance with the MSHCP, and compliance with any related permits from the Resource Agencies, any potential impacts would be less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 1. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 2A. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 2B. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, jurisdictional areas are in proximity to various components of Alternative 3. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<p><b>Biological Resources</b>                      (Threshold C)                      Native Resident or Migratory Fish or Wildlife Species</p>	<p><b>Less than Significant Impacts with Mitigation:</b>                      According to the MSHCP, there are no special linkage corridors within the Moreno MDP Watershed and no recognized wildlife nursery sites.                       The MDP Watershed contains trees, shrubs, and herbaceous vegetation with the potential to support nesting birds. Construction of MDP Facilities will entail removing vegetation suitable for nesting migratory birds. The MBTA and California Fish and Game Code prohibit impacts to nesting bird; however, with implementation of mitigation measure <b>MM BIO 9</b>, potential impacts to migratory birds would be less than significant.</p>	<p><b>Impacts Less than the Project; Less than Significant Impacts:</b>                      Construction of Facilities identified in the No Project Alternative will entail removal of vegetation suitable for nesting migratory birds. However, because the combined Facility footprint for this alternative is approximately 70 acres smaller than the proposed Project, it is assumed that substantially less vegetation removal would be required.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 1 will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 1 would implement mitigation measure <b>MM BIO 9</b>.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 2A will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 2A would implement mitigation measure <b>MM BIO 9</b>.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 2B will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 2B would implement mitigation measure <b>MM BIO 9</b>.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 3 will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is essentially the same size as the proposed Project, it is anticipated a similar amount of vegetation removal may be required. As with the Project, Alternative 3 would implement mitigation measure <b>MM BIO 9</b>.</p>
<p><b>Biological Resources</b>                      (Threshold D)                      Conflict with local policies or ordinances protecting biological resources</p>	<p><b>Less than Significant Impacts:</b> The Project will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 1 will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 2A will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 2B will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 3 will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.</p>
<p><b>Biological Resources</b>                      (Threshold E)                      Conflict with the Provisions of an adopted HCP.</p>	<p><b>Less than Significant Impacts with Mitigation:</b>                      The Moreno Watershed is located within the boundaries of the MSHCP; however none of the MDP Facilities are located within the MSHCP Criteria Areas and none of the potential footprints of the MDP Facilities are targeted for conservation (i.e., within a Criteria Cell).                       In addition to Criteria Cell requirements, the MSHCP requires consistency with Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and 7.5.3</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts:</b>                      None of the Facilities for the No Project Alternative are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. The No Project Alternative would be subject to implementation of similar mitigation as the Project, which would be identified at the time individual Facilities are proposed.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 1 are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b>, this alternative would comply with the provisions of the MSHCP.</p>	<p><b>Impacts Same as the Project; Less Than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 2A are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b>, this alternative would comply with the provisions of the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 2B are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b>, this alternative would comply with the provisions of the MSHCP.</p>	<p><b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 3 are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b>, this alternative would comply with the provisions of the MSHCP.</p>

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
	(Construction Guidelines). With implementation of mitigation measures <b>MM BIO 1</b> through <b>MM BIO 9</b> , the Project would comply with the provisions of the MSHCP.					
<b>Cultural Resources</b> (Threshold A) Historic Resources	<b>Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the proposed MDP Facilities. In the event the actual location and type of any MDP Facility changes during the final design process from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in the 1991 Moreno MDP. As with the proposed Project, the location of the Facilities in the No Project Alternative is conceptual.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of Facilities identified in Alternative 1, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 2A, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 2B, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 3, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.
<b>Cultural Resources</b> (Threshold B) Archaeological Resources	<b>Less-than-Significant Impacts with Mitigation:</b> Due to extensive ground disturbance in proximity to the proposed MDP Facilities, no impacts to archaeological resources are anticipated. In the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  Additionally, because the proposed location of the MDP Facilities is conceptual, if the actual location and type of any MDP Facility changes during the final design process from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in the No Project Alternative, no impacts to archaeological resources are anticipated. However, as with the proposed Project, the location of the Facilities in the No Project Alternative is conceptual.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 1, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 2A, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 2B, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 3, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project if the actual location and type of any proposed Facility changes during from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<b>Cultural Resources</b> (Threshold C) Paleontological Resources	<b>Less than Significant Impacts with Mitigation:</b> No unique geologic feature is known to exist and no fossils have been documented within or adjacent to the proposed MDP Facilities. The Moreno MDP Watershed is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Ground-disturbing activities resulting from construction of the proposed Project could damage or destroy previously undocumented unique fossils within the footprint of proposed MDP Facilities. Mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> , outline specific measures that will be taken if certain soil types or any paleontological specimens are unearthed during construction activities.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the Project, no unique geologic feature is known to exist and no fossils have been documented within or adjacent to the Facilities proposed by the No Project Alternative. Although the No Project Alternative has a substantially smaller footprint than the proposed Project, ground-disturbing activities resulting from construction of this alternative could damage or destroy previously undocumented unique fossils.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 1 Facilities could damage or destroy previously undocumented unique fossils; however this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 2A Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 2B Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 3 Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .
<b>Hydrology and Water Quality</b> (Threshold A) Violate any water quality standards or waste discharge requirements	<b>Less than Significant Impacts with Mitigation:</b> Construction of the proposed MDP Facilities may result in the discharge of sediment and other construction by-products. Existing NPDES permitting requires that SWPPPs identify BMPs to control erosion and discharge of polluted runoff during construction. For any Facility for which a SWPPP is not required, mitigation measure <b>MM HYD 1</b> requires an erosion control plan be prepared that identifies appropriate BMPs to be implemented during construction.  The Project proposes three detention basins with a combined footprint of approximately 82 acres. Detention basins have a medium efficiency for the removal of sediment/turbidity, nutrients, and metals, which are impairments for one or more of the Project's receiving water bodies.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> Construction of the No Project Alternative's Facilities has the same potential for construction impacts as the Project and is subject to the same NPDES permit requirements. This alternative would not implement mitigation measure <b>MM HYD-1</b> so an erosion control plan would not be prepared for any Facility for which a SWPPP is not required.  The No Project Alternative includes one, approximately 12-acre detention basin, which is 70 acres smaller than the Project's basins and would not provide as much potential for the removal of sediment/turbidity, nutrients, and metals as the Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 1 Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 1 proposes two detention basins with a combined footprint of approximately 75 acres, which is slightly smaller than the proposed Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 2A Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 2A proposes five detention basins with a combined footprint of approximately 72 acres, which is slightly smaller than the proposed Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 2B Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 2B proposes four detention basins with a combined footprint of approximately 75 acres, which is slightly smaller than the Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 3 Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 3 proposes three detention basins with a combined footprint of approximately 78 acres, which is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold B) Substantial discharges of	<b>Less than Significant Impacts with Mitigation:</b> The proposed Project is designed to collect and convey stormwater runoff from within the Moreno MDP Watershed. This runoff is expected to contain the following pollutants:	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The pollutants would be the same as for the proposed Project and would be minimized through implementation	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 1 as for the proposed Project and would be	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 2A as for the proposed Project and would	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 2B as for the proposed Project and would	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 3 as for the proposed Project and would be

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**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
typical storm water pollutants or substantial changes to surface water quality	Nutrients, bacteria and viruses (pathogens), organic compounds, oxygen demanding substances, oil and grease, sediment, pesticides, trash and debris, and metals. The discharge of pollutants would be minimized through implementation of the NPDES MS4 permits, which requires preparation of a SWPPP that identifies appropriate BMPs and implementation of mitigation measure <b>MM HYD 1</b> , which requires an erosions control plan when a SWPPP is not required..  The proposed Project includes two debris basins and three detention basins with a combined footprint of 82 acres that may have a beneficial impact on downstream water quality, particularly with regard to the removal of sediment/turbidity.	of the NPDES MS4 permits. Although Facilities for which a SWPPP is not required will not have an erosions control plan.  Because the No Project Alternative does not include any debris basins and only one detention basin; it may not have as much of a beneficial impact on downstream water quality as the Project, particularly with regard to the removal of sediments/turbidity.	minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 1 proposes one debris basin and two detention basins with a combined footprint of 75 acres. Because Alternative 1 includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.	be minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 2A proposes one debris basin and five detention basins with a combined footprint of 72 acres. Because Alternative 2A includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed as the proposed Project.	be minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 2B proposes one debris basin and four detention basins with a combined footprint of 75 acres. Because Alternative 2B includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.	minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 3 proposes one debris basin and three detention basins with a combined footprint of 78 acres. Because Alternative 3 includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.
<b>Hydrology and Water Quality (Threshold C)</b> Substantially deplete groundwater supplies or interfere with groundwater recharge.	<b>Less than Significant:</b> The proposed Project does not involve the extraction of groundwater and it will not create a substantial addition of impervious surfaces within the Moreno MDP Watershed such that existing areas of groundwater recharge are affected.  The proposed project includes three detention basins and two debris basins with a total projected infiltration potential of 95 to 336 acre-feet per day as stormwater flows are conveyed through the Project Facilities.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The No Project Alternative does not involve groundwater extraction and it will not interfere with groundwater recharge.  The No Project Alternatives includes one detention basin with a projected infiltration potential of 24 to 94 acre-feet per day as stormwater flows are conveyed through the 1991 Moreno MDP Facilities. The No Project Alternative has substantially less potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than significant Impacts:</b> As with the proposed Project, Alternative 1 does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 1 includes two debris basins and one detention basins with a total projected infiltration potential of 97 to 460 acre-feet per day as stormwater flows are conveyed through the Alternative 1 Facilities. Alternative 1 has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 2A does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 2A includes one debris basin and five detention basins with a total projected infiltration potential of 96 to 490 acre-feet of per day as stormwater flows are conveyed through the Alternative 2A Facilities. Alternative 2A has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 2B does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 2B includes one debris basin and four detention basins with a total projected infiltration potential of 92 to 338 acre-feet per day as stormwater flows are conveyed through the Alternative 2B Facilities. Alternative 2B has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 3 does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 3 includes one debris basin and three detention basins with a total projected infiltration potential of 88 to 301 acre-feet of per day as stormwater flows are conveyed through the Alternative 3 Facilities. Alternative 3 has essentially the same potential for infiltration as the proposed Project.
<b>Hydrology and Water Quality (Threshold D)</b> Substantially alter existing drainage patterns or increase surface runoff that would	<b>Less than Significant with Mitigation:</b> The proposed Project's Facilities were designed and sized to follow the historic and natural drainage conditions. Existing drainage patterns includes sheet flows due to the lack of natural watercourses and substantial drainage facilities. The Project will modify the existing drainage condition by collecting and conveying the current sheet flows in Project Facilities.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The No Project Alternative will modify the drainage pattern by collecting and conveying the current sheet flows in Facilities identified in the 1991 Moreno MDP. The No Project Alternative includes Facilities that constitutes a major diversion of the	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 1 would modify the existing drainage condition by collecting and conveying the current sheet flows, but Alternative 1 does not follow the natural and historic drainage conditions to the same	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 2A would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 2A revises a number of alignments and mimics existing	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 2B would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 2B mimics existing drainage conditions to a similar	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 3 would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 3 mimics existing drainage conditions to a similar extent as the proposed

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
result in flooding	When completed the Project’s Facilities combined with street improvement will provide a comprehensive drainage system to convey runoff through the Moreno MDP Watershed. Implementation of mitigation measure <b>MM HYD 2</b> would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding.	natural drainage course upstream of State Route 60; thus it is expected to have slightly greater impacts than the Project. The Facilities in the No Project Alternative were sized based on outdated land use and rainfall data.	degree as the proposed Project. However, Alternative 1 includes a debris basin and peak reduction basin to account for the expected debris volumes and higher rainfall rates. In addition, as with the proposed Project, Alternative 1 would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	drainage conditions to a marginally greater extent than the proposed Project. Alternative 2A would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	extent as the proposed Project and Alternative 2B would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	Project and Alternative 3 would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold E) Place structures within a 100-year Flood Hazard Area	<b>Less than Significant:</b> Portions of the Moreno MDP Facilities will be constructed within 100-year flood hazard areas due to the flat topography, but will help contain the 100-year storm flows.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Facilities identified in the 1991 Moreno MDP will be constructed within the 100-year flood hazard area. However, because the 1991 Moreno MDP Facilities were designed and sized based on older land use assumptions and older rainfall data, these facilities will not contain the 100-year storm flows to the same extent as the proposed Project Facilities.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 1 Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 2A Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 2B Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 3 Facilities will be constructed within 100-year flood hazard areas but will help contain the 100-year storm flows.
<b>Noise</b> (Threshold A) Exposure or generation of noise in excess of standards  (Threshold C) Substantial Temporary or Periodic Noise Increase	<b>Less than Significant with Mitigation:</b> Long term noise impacts would result from the maintenance of the proposed Project’s Facilities and will be negligible.  Implementation of the Project would entail construction of proposed Facilities within 200-feet of existing residential and commercial uses. Construction noise will be perceptible; however, the noise level at that distance will be below the allowable daytime noise levels set forth in the Moreno Valley Municipal Code.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative would result in the same noise impacts as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 1 would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2A would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2B would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 3 would result in the same noise impacts as the proposed Project and implement the same mitigation measures.

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





**Table 1-B – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
	Mitigation measures that limit construction hours ( <b>MM NOI 1</b> ) require properly tuned construction equipment ( <b>MM NOI 2</b> ), inform potential sensitive receivers of pending construction ( <b>MM NOI 3</b> ), and limit equipment idling time ( <b>MM Air 2</b> ) would be implemented.					
<b>Noise</b> (Threshold B) Exposure or generation of excessive ground-borne vibration or ground-borne noise	<b>Less than Significant with Mitigation:</b> Long term noise vibration associated with the maintenance of the proposed Project Facilities will be negligible.  Construction of certain Facilities may take place within 50-feet of residential structures. Vibrational noise may occur during construction of the proposed Project. At a distance of 50 feet vibration would be “Barely Perceptible” and at 25 feet vibration noise would be “Distinctly Perceptible.”  Construction-related vibration is significantly below the vibration damage threshold for any structure. Exposure to vibration would be limited through implementation of mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative would result in the same vibration impacts at the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 1 would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2A would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2B would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than significant Impacts with Mitigation:</b> Alternative 3 would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .
<b>Environmentally Superior to Proposed Project?</b>	<b>Not applicable</b>	<b>Yes</b>	<b>Very slightly, but still has significant and unavoidable impacts</b>	<b>Very slightly, but still has significant and unavoidable impacts</b>	<b>Slightly, but still has significant and unavoidable impacts</b>	<b>No</b>

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



## Section 2 – Introduction

### 2.1 Purpose and Scope

The purpose of this Draft Program Environmental Impact Report (Draft PEIR) is to evaluate and disclose potential environmental impacts resulting from the implementation of the proposed Moreno Master Drainage Plan Revision (Moreno MDP or MDP), which is also referred to as the “MDP Facilities,” “Project Facilities,” or simply “Project.” The Moreno MDP is further described in Section 3 of this Draft PEIR.

A program EIR (PEIR), as described in Section 15168 of Guidelines for the Implementation of the California Environmental Quality Act (State *CEQA Guidelines*),<sup>1</sup> is appropriate when a project consists of a series of related actions that can be classified as one large project. A PEIR is typically a conceptual long-rang planning document, such as a General Plan, or in this case, a Master Drainage Plan that provides the framework for future flood control facilities.

The Moreno MDP consists of an assemblage of storm water conveyance facilities that are anticipated to be implemented separately by multiple entities over a series of many years. The individual facilities proposed in the Moreno MDP are typically referred to as the “MDP Facilities” or “MDP Facility.”

#### 2.1.1 Subsequent Tiering

As provided and encouraged by Section 15152 of the State *CEQA Guidelines*, the District expects that the individual MDP facilities will “tier” off this PEIR and that each future MDP Facility will be examined on a facility-by-facility basis to determine the appropriate type of CEQA document that is required at the time each MDP Facility comes to fruition.

With regards to use of a PEIR for subsequent activities, Section 15168(c) of the State *CEQA Guidelines* states:

*Subsequent activities in the program must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared.*

- (1) If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
- (2) If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
- (3) An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*

<sup>1</sup> Sections 15000–15387 of the California Code of Regulations.

- (4) *Where the subsequent activities involve site specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.*

Subsequent CEQA documents may consist of a notice of exemption, negative declaration, mitigated negative declaration, addendum to the PEIR, or environmental impact report as determined by the lead agency for the Facility in question. As typical for the District, some of MDP Facilities will be constructed as part of private development projects. Therefore, subsequent CEQA analysis and documentation for some proposed MDP Facilities may be included as part of the evaluation of larger projects.

## 2.2 Authorization

This Draft PEIR has been prepared by the Riverside County Flood Control and Water Conservation District (District) as “Lead Agency” in accordance with the State *CEQA Guidelines* (Sections 15000 et seq. of the California Code of Regulations). The proposed Moreno MDP Revision evaluated in this Draft PEIR constitutes a “project,” as defined by Section 15378 of the State *CEQA Guidelines*.

After completion of the Initial Study and Notice of Preparation (IS/NOP), included in Appendix A of the Draft PEIR, the District determined that the Project may have a significant adverse impact on the environment; therefore, preparation of a PEIR was required, pursuant to Section 15081 of the State *CEQA Guidelines*.

## 2.3 Lead and Responsible Agencies

CEQA defines a “Lead Agency” as the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment. Other agencies, e.g., the California Department of Transportation (Caltrans), the South Coast Air Quality Management District (SCAQMD), or the Regional Water Quality Control Board (RWQCB), which also have some authority or responsibility to issue permits for project implementation, are designated as “responsible agencies.” Both the Lead Agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving a project.

The District is the Lead Agency for the Project. The District’s address is as follows:

Riverside County Flood Control and Water Conservation District  
1995 Market Street, Riverside, California 92501  
Contact: Mr. Kris Flanigan, P.E., Engineering Project Manager  
951.955.1200 or kflaniga@rcflood.org

Since certain MDP Facilities are located within the city of Moreno Valley (Moreno Valley) and may be approved by Moreno Valley as part of private development projects, Moreno Valley is considered a responsible agency for the Project.

Although it is unlikely, if other Riverside County Departments, such as the Transportation & Land Management Agency, have any discretionary approval(s) for certain MDP Facilities at the time they are implemented, the County of Riverside would be a responsible agency for such Facilities.

## 2.4 Project Applicant/Proponent

The Project Applicant/Proponent is:

Riverside County Flood Control and Water Conservation District  
1995 Market Street, Riverside, California 92501  
Contact: Mr. Kris Flanigan, P.E., Engineering Project Manager  
951.955.1200 or kflaniga@rcflood.org

## 2.5 Purpose of CEQA

The basic purpose of CEQA is to:

1. Inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities;
2. Identify the ways that environmental damage can be avoided or significantly reduced;
3. Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
4. Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved. (State *CEQA Guidelines*, Section 15002)

Other objectives of and benefits from the CEQA process include fostering interagency cooperation and enhancing public participation in the planning process.

## 2.6 CEQA Process

When preparing an EIR, the CEQA process typically consists of the following components:

1. Initial Study (IS)
2. Notice of Preparation (NOP) and public scoping
3. Draft EIR, and
4. Final EIR and Response to Comments.

Pursuant to Section 15063 of the State *CEQA Guidelines*, the District prepared an Initial Study for the Project in order to determine if the Project may have a significant effect on the environment. Based upon the findings of fact contained with the Initial Study, the District concluded that an EIR should be prepared.

An NOP for the Draft PEIR and a description of potential adverse impacts were distributed to the State Clearinghouse, responsible agencies, and other interested parties on April 3, 2012. A notice advising of the availability of the NOP was posted by the Riverside County Clerk on April 3, 2012. Pursuant to Section 15082 of the State *CEQA Guidelines*, recipients of the IS/NOP were requested to provide responses within 30 days after their receipt of the IS/NOP. Copies of the IS/NOP and the IS/NOP distribution list are located in Appendix A.1. Comments regarding the IS/NOP, received by the District, are also included in Appendix A.1. Two public scoping meetings were held on April 19, 2012, an afternoon meeting for public agency staff and an evening meeting for the general public, pursuant to the requirements of Section 15082 (c)(1) of the State *CEQA Guidelines*.

An EIR (or PEIR) is an informational document intended to inform decision makers and the general public of potentially significant environmental impacts of a project. Pursuant to CEQA, this Draft PEIR identifies possible ways to minimize these potentially significant impacts (referred to as mitigation) at a programmatic level and describes alternatives to the Project that may also reduce its significant impacts.

The District, as Lead Agency will consider the information in this PEIR in their evaluations of the Project. The findings and conclusions presented in the PEIR regarding environmental impacts do not control the District's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

As set forth in Section 15021 of the State *CEQA Guidelines*, the District has the duty to avoid or minimize environmental damage where feasible. Furthermore, Section 15021 (d) states that, "CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian." If the Lead Agency determines the benefits of the proposed Project outweigh any significant unavoidable environmental effects, the Lead Agency will be required to adopt a statement of overriding considerations stating the reasons supporting their action notwithstanding the Project's significant environmental effects.

Other public agencies (i.e., responsible and trustee Agencies) that may use this PEIR in their decision-making or permit processing, will consider the information in this PEIR along with other information that may be presented during the CEQA process. In accordance with CEQA, the public agencies will be required to make findings for each environmental impact of the Project that cannot be mitigated to below a level of significance.

### **2.6.1 Less than Significant Environmental Effects**

CEQA requires consideration and discussion of significant environmental effects. Sections 15126–15126.2 of the State *CEQA Guidelines* state that "All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation [...] an EIR shall identify and focus on the significant environmental effects of the proposed project." CEQA provides that a Draft PEIR shall focus on all potentially significant effects created by the project onto the

environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects determined in an IS as insignificant and unlikely to occur need not be discussed further in the Draft PEIR unless information inconsistent with the finding in the IS is subsequently received. Therefore, the following impact areas will not be further analyzed in the PDEIR because as analyzed in the IS and noticed in the NOP, the Project will not result in significant impacts to:

- Aesthetics
- Agriculture Resources
- Geology/Soils
- Hazards & Hazardous Materials
- Land Use/Planning
- Mineral Resources
- Population/Housing
- Public Services
- Recreation
- Transportation/Traffic
- Utilities/Service Systems

## 2.6.2 Potentially Significant Environmental Effects

Section 5 of the Draft PEIR addresses each environmental effect that was determined to be potentially significant during preparation of the Project's IS/NOP (Appendix A.1). Each effect is organized into an issue area; those that will be analyzed (and the section of the Draft PEIR in which the analysis is contained) are listed below:

- Air Quality and Greenhouse Gas Emissions (Section 5.1)
- Biological Resources (Section 5.2)
- Cultural Resources (Section 5.3)
- Hydrology and Water Quality (Section 5.4)
- Noise (Section 5.5)

## 2.7 Format of the Draft PEIR

This Draft PEIR has been organized in several sections as follows:

**Table of Contents** to assist readers in locating the analysis of different subjects and issues as required by Section 15122 of the State *CEQA Guidelines*. A list of acronyms used in the Draft PEIR is included in the table of contents.

**Section 1 – Executive Summary** covers the summary requirements of CEQA as required by Section 15123 of the State *CEQA Guidelines* and includes: the proposed Project location, a brief Project



description, a matrix containing a summary of environmental impacts and mitigation measures, Project objectives, approvals related to the proposed Project, areas of controversy, and a brief description of the Project alternatives.

**Section 2 – Introduction** describes the scope and purpose of the Draft PEIR, identifies the Project applicant and Lead Agency, provides a brief summary of the CEQA process to date, identifies the Lead Agency and Project applicant, summarizes and identifies the documents incorporated by reference in the Draft PEIR.

**Section 3 – Project Description** contains the information required by Section 15124 of the State *CEQA Guidelines* including: a detailed description of the proposed Project, the Project location, the Project objectives, a general description of the Project’s environmental setting, the approvals needed to implement the Project, and a list of agencies expected to use the Draft PEIR.

**Section 4 – Environmental Effects Found Not to be Significant** includes the Initial Study/Notice of Preparation Comment Letters and identifies those environmental effects found not to be significant during preparation of the IS/NOP and discusses why the effects were found not to be significant. This section also identifies the agencies that provided comments in response to the IS/NOP, summarized the comments provided, and identifies the location in the Draft PEIR in which the comments are addressed.

**Section 5 – Potentially Significant Environmental Effects** satisfies the requirements of Sections 15125, 15126, 15126.2, and 15126.4 of the State *CEQA Guidelines* by including an analysis of each environmental issue area determined to have potentially significant impacts during preparation of the IS/NOP or as a result of comments received in response to the IS/NOP. For each issue area analyzed, this section includes a discussion of the setting to which each issue area is analyzed against, defines the related regulations affecting the proposed Project, identifies the significance threshold criteria, describes any Project design features that would reduce impacts, analyzes the proposed Project’s impacts, provides a description of the mitigation measures used to reduce or lessen potential impacts, and discusses the Project’s impacts after mitigation.

**Section 6 – Other CEQA Topics** includes the Project’s cumulative impact analysis, unavoidable adverse impacts of the proposed Project, growth inducing impact discussion, and an analysis of the Project’s consistency with applicable regional plans.

**Section 7 – Alternatives** satisfies the requirements of Section 15126.6 of the State *CEQA Guidelines* by identifying and discussing the no Project alternative in addition to alternatives to the proposed Project that lessen the severity of significant impacts and identifying the environmentally superior alternative. This section also includes a brief description of alternatives that were considered and rejected.

**Section 8 – References** includes a listing of all reference materials, the organizations and persons contacted in preparing the Draft PEIR, and a list of preparers as required by Section 15129 of the State *CEQA Guidelines*.

## 2.8 Documents Incorporated by Reference

Section 15150 of the State *CEQA Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant data. The documents summarized below are incorporated by reference and the pertinent material is summarized throughout this Draft PEIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the District or Moreno Valley Planning Division. Technical studies cited below were specifically developed in conjunction with the Project. Where noted as appendices, the reports are included in their entirety in the CD-ROM version of the Draft PEIR, and are also included in the CD-ROM attached to the front cover of hard copy versions of the Draft PEIR.

### 2.8.1 City of Moreno Valley General Plan

The *City of Moreno Valley General Plan (MVGP)* was adopted in 2006. The MVGP is a long-range plan designed to embrace the interests of its residents. Moreno Valley strives to meet their needs by creating a sense of community while promoting a safe and healthy environment (MVGP, p. 3). The MVGP contains goals and policies that serve as the planning framework for Moreno Valley in addition to providing direction for Moreno Valley operations and programs and serves as a guide to public and private decision making. The MVGP includes the following elements: Community Development, Economic Development, Parks, Recreation, and Open Space, Safety, Conservation, and Housing Element. The planning area boundary of the MVGP includes the approximately 50 square miles within the Moreno Valley's city limits and 18 square miles within the sphere of influence, land which is north and east of Moreno Valley (MVGP, p. 1-2) and encompasses the entire Moreno MDP boundary.

### 2.8.2 Moreno Valley Municipal Code

The Moreno Valley Municipal Code complements the MVGP. The Municipal Code, which contains among other ordinances, the Moreno Valley Zoning Code, is a mechanism to implement and enforce the goals, objectives, policies, and programs articulated in the MVGP. Many of the potential environmental concerns considered in this Draft PEIR are adequately addressed through application of regulations contained in the Municipal Code.

### 2.8.3 Project Technical Studies and Supporting Analyses

The analysis contained in the IS/NOP and Draft PEIR are supported by the following Project-specific technical studies.

#### IS/NOP and IS/NOP Responses

The IS/NOP, along with the comment letters received in response to the IS/NOP, are included in Appendix A.1 and A.2 of this Draft PEIR. Based on the IS/NOP and responses, the Draft PEIR has been focused on the topics identified in Section 2.6.2, above.

**Air Quality Analysis/Greenhouse Gas Emissions Report**

Potential air quality and climate change impacts of the Project, including potential short-term construction emissions impacts, potential long-term operational emissions impacts, and greenhouse gas emissions are evaluated within the *Air Quality and Greenhouse Gas Impact Analysis for the Moreno Master Drainage Plan Revision* (Albert A. Webb Associates, April 2014). This document is included as Appendix B to the Draft PEIR.

**General Biological Report**

The *General Biological Report for the Moreno Master Drainage Plan* (Glenn Lukos Associates, Inc., February 27, 2012), provides the results of program-level general biological surveys and habitat of the various proposed MDP Facilities, and the relationship of the MDP to the: requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), CEQA, and state and federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code. This document is included as Appendix C to the Draft PEIR.

**Archeological Assessment Report**

The *Phase I Archeological Assessment, Moreno Master Drainage Plan revision, City of Moreno Valley, Riverside County, California* (CRM TECH, January 31, 2012), presents the results of a cultural resources study on the MDP Facilities. This document is included as Appendix D.1 to the Draft PEIR.

**Paleontological Resources Assessment Report**

The *Paleontological Resources Assessment Report, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California* (CRM TECH, February 1, 2012) presents the results of a paleontological resources study on the MDP Facilities. This document is included as Appendix D.2 to the Draft PEIR.

## Section 3 – Project Description

The proposed Project is a revision of the existing Moreno Master Drainage Plan (Moreno MDP) that was adopted in 1991. The District is proposing revisions in the size, type, and conceptual location of drainage facilities and basins that would improve flood protection for both existing users and future development within the Moreno Watershed. The Project proposes a system of open channels, underground storm drains, and five new basins as further described in Section 3.3.2.

The drainage boundary of the Moreno MDP (the Moreno Watershed or MDP Watershed) is drawn to include all of the watershed area that contributes to the drainage problems in the community. Therefore, the boundaries of the Moreno MDP are coterminous with the Moreno Watershed. Because the boundaries of the Moreno MDP and Moreno Watershed are coterminous, the terms Moreno MDP, Moreno Watershed, and Project Watershed are used interchangeably throughout the Draft PEIR.<sup>1</sup>

### 3.1 Project Location

The Moreno MDP is primarily located in the city of Moreno Valley, California (City or Moreno Valley); only one proposed facility within the Moreno MDP is located outside of City limits within unincorporated Riverside County, the Ironwood Debris Basin. Although outside of the City limits, the Ironwood Debris Basin is within the City's sphere of influence. The Moreno Watershed encompasses all or a portion of: Sections 30 and 31, Township 2 South, Range 2 West; Sections 21 through 23, 25 through 29, 33 through 36, Township 2 South, Range 3 West; Sections 1 through 4, 9 through 16, 21 through 24, 27, and 28, Township 3 South, Range 3 West, San Bernardino Base and Meridian. Longitude/Latitude for the Project is 117 degrees, 11 minutes, 58 seconds north and 33 degrees, 56 minutes, 57 seconds west.

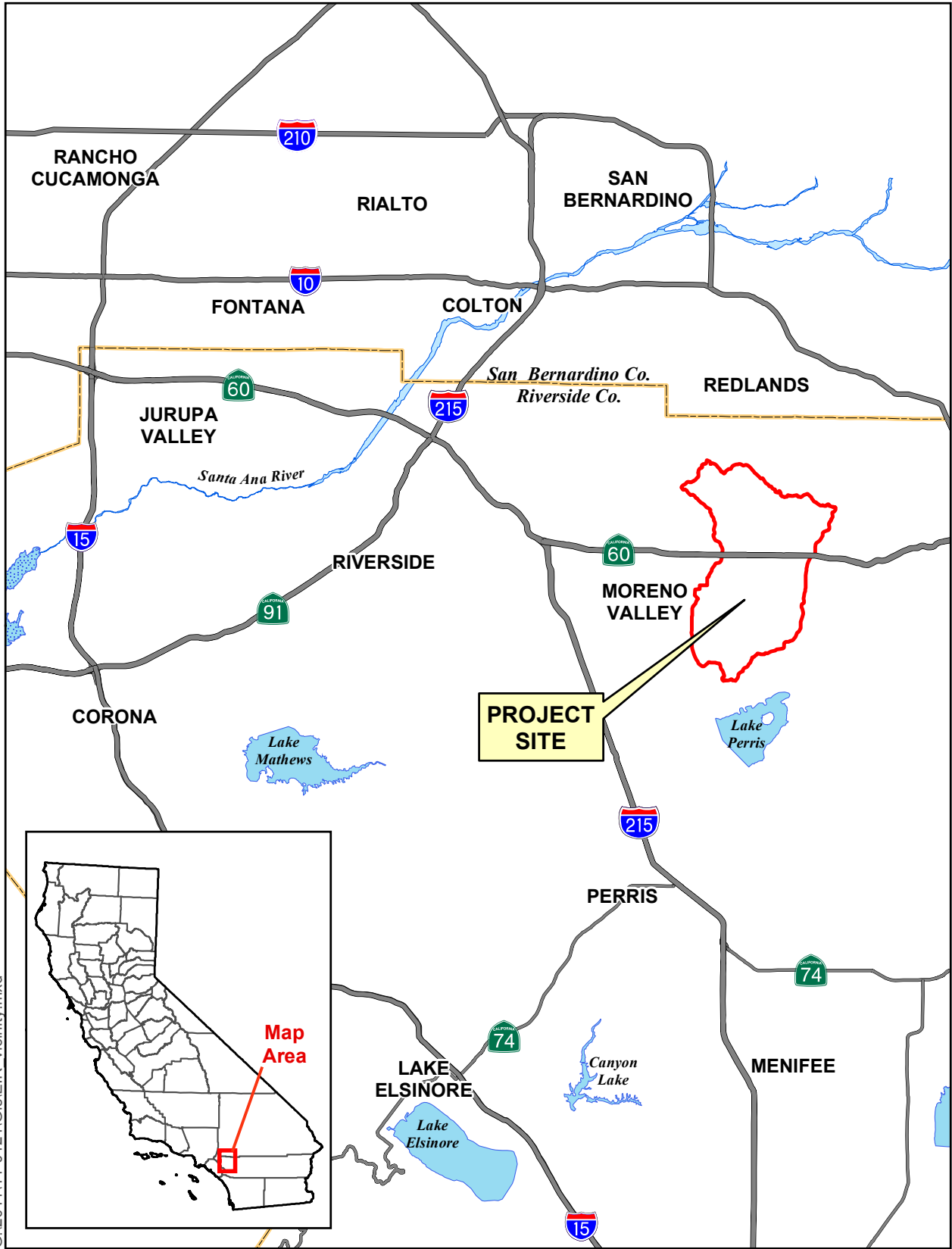
The Project is designed to capture storm water from the Moreno Watershed. The Moreno Watershed encompasses approximately 21 square miles and is generally bounded by Lasselle Street to the west, Theodore Street to the east, Reche Canyon and San Timoteo Badlands foothills to the north, and Mount Russell foothills to the south (**Figure 3-1 – Vicinity Map and Figure 3-2 – Proposed Project**). The Moreno Watershed includes land within Moreno Valley and unincorporated Riverside County, as summarized in **Table 3-A** and shown on **Figure 3-3 – City/County Boundaries**.

**Table 3-A – Acreage and Municipalities within the Moreno Watershed**

Municipality	Acres <sup>1</sup>	Portion of Total
Moreno Valley	10,268	77%
Unincorporated County	3,009	23%
Total	13,277	100%
Notes:		
<sup>1</sup> This table presents the total acreage within the Moreno Watershed (or Moreno MDP); not the acreage associated with the footprints of the MDP Facilities. Refer to <b>Table 3-B – Moreno MDP Facilities Overview</b> for Facility sizes.		

<sup>1</sup> As used in this Draft PEIR, the terms: Moreno MDP Facilities (or Moreno MDP Facility), MDP Facilities (or MDP Facility), Project Facilities (or Project Facility), and Facility (or Facilities) refer to the storm drains, channels, and/or basins identified in the Moreno MDP.

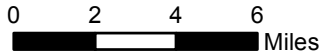




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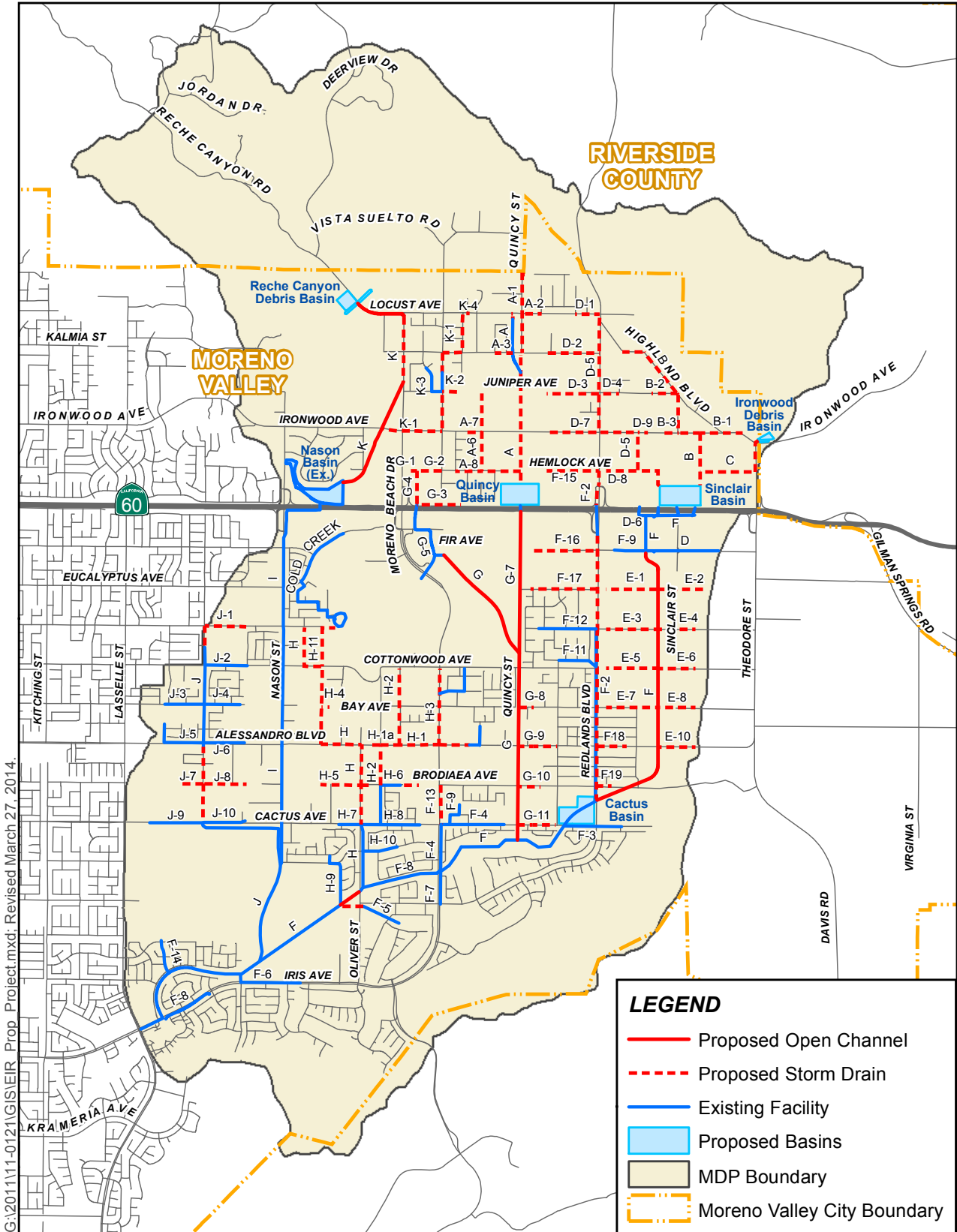
Figure 3-1. Vicinity Map

Moreno Master Drainage Plan Revision



Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





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Source: County of Riverside GIS, 2014; RCFC&WCD, 2014.

0 0.5 1 1.5 Miles

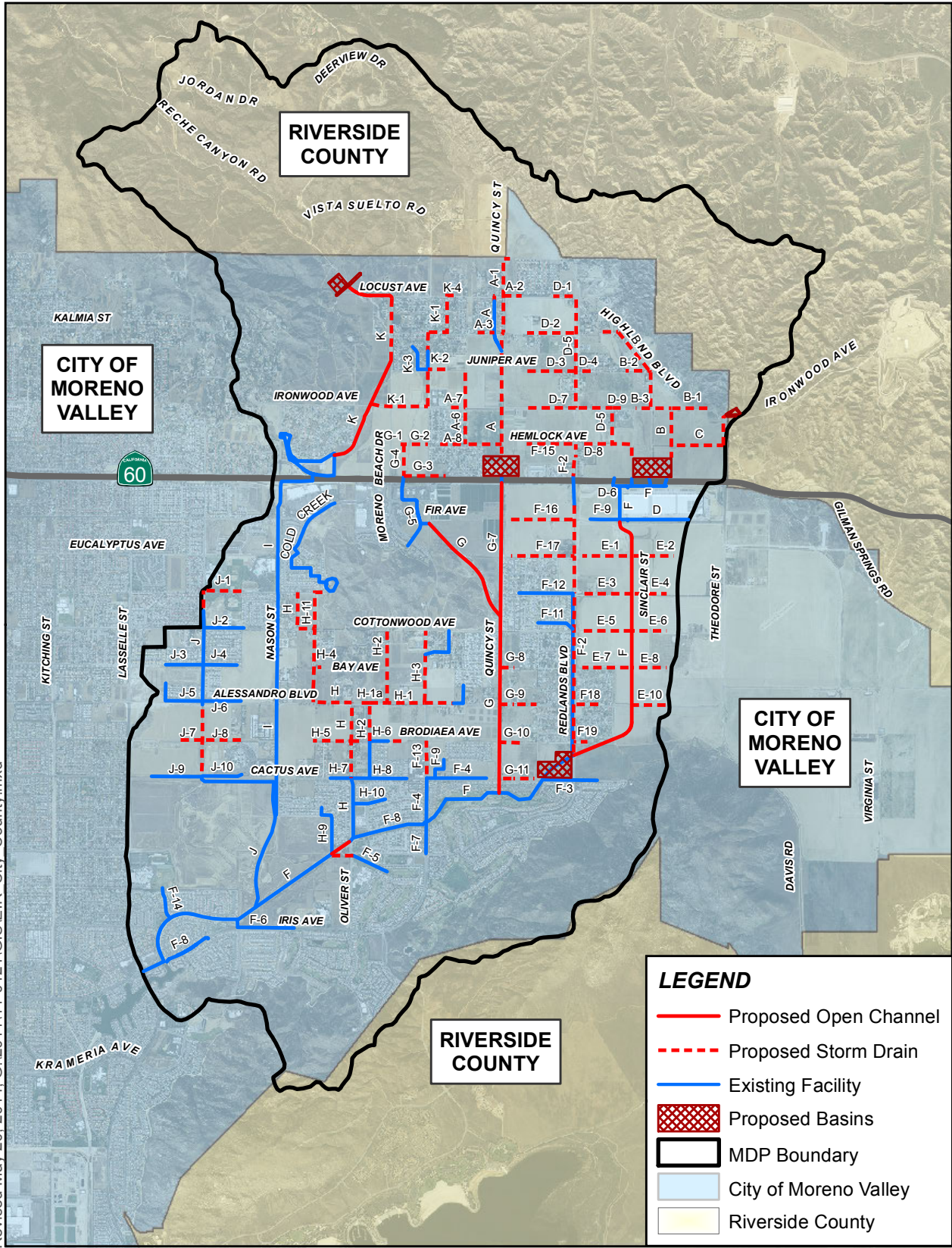


**Figure 3-2. Proposed Project**  
Moreno Master Drainage Plan Revision

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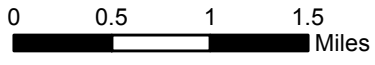




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Sources: County of Riverside GIS, 2014; RCFC&WCD, 2014; Eagle Aerial, 2012.

Figure 3-3. City/County Boundaries  
Moreno Master Drainage Plan Revision



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### 3.2 Background

Master drainage plans are conceptual planning documents that address the current and future drainage needs of a given community. The boundary of master drainage plans usually follow regional watershed limits. Proposed drainage facilities may include channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within a master drainage plan watershed. A master drainage plan also includes an estimate of facility capacity, sizes, and costs.

Proposed drainage facilities were originally described in the Moreno MDP dated October 1980 (Revised April 1991). The Moreno MDP Revision (the Project evaluated in this Draft PEIR) proposes revisions that are the result of the re-evaluation of the original plans. If adopted, the Project will supersede the 1991 Moreno MDP. The preliminary estimated total cost of the revised Moreno MDP is approximately \$160 million.<sup>2</sup>

Master drainage plans are prepared for a variety of purposes:

- 1) Identify solutions to existing flood hazards;
- 2) Provide a guide to orderly development of a master drainage plan watershed;
- 3) Provide an estimate of costs to resolve flooding issues within a community; and
- 4) Establish area drainage plan (ADP) fees, which will offset taxpayer costs for proposed drainage facilities.

An ADP is a financing mechanism, which is used to ensure that all new development pays its fair share for needed drainage facilities. ADP fees are imposed on new development within the boundary of the ADP. For this Project, the applicable ADP is the Moreno ADP, which covers the same geographic area as the Project.

### 3.3 Moreno Master Drainage Plan

CEQA analysis of a master drainage plan is more complex than the typical project because master drainage plans have a variety of purposes that are implemented over time; in fact, some parts of the plan could be implemented many years in the future, in a different alignment/configuration, or not at all. Therefore, due to the Facility variations that could occur at Project build-out, a Program Environmental Impact Report (PEIR) was determined to be the appropriate CEQA document for the proposed Project. The proposed Project consists of revisions to the previously adopted Moreno MDP and identifies conceptual locations for the future installation of drainage Facilities in response to the existing and planned land use within the MDP Watershed

The Draft PEIR for the Moreno MDP evaluates the “reasonably foreseeable impacts” of three separate Project components: Administration of the MDP, Right-of-way acquisition (if needed) and Construction of the MDP Facilities, and Operations and Maintenance of the MDP Facilities.

<sup>2</sup> Includes construction, right-of-way costs, engineering, administration, Western Riverside County Multiple Species Habitat Conservation fees, and contingencies.

### 3.3.1 Administration of the MDP

The first component of the Moreno MDP being analyzed in this Draft PEIR is the reasonably foreseeable impacts resulting from preparation and, ultimately, the adoption of the Moreno MDP as a long-range planning document. The Moreno MDP will be a guide for the alignment, type, size, and cost estimate of major proposed facilities (MDP Facilities, or Project Facilities) within the Moreno watershed to address the current and future drainage needs of Moreno Valley and the surrounding area. The MDP Facilities along with street improvements would contain the 100-year flood discharge.

The Moreno MDP will be relied upon by Moreno Valley and Riverside County as these agencies review and approve development in the MDP Watershed. New development may be required to construct MDP Facilities or set aside right-of-way for future MDP Facilities, or otherwise provide adequate drainage facilities that would attenuate and/or contain storm flows projected in the MDP Revision. The local jurisdictions can also use the Moreno MDP to identify Project Facilities and cost estimates for inclusion in capital improvement programs. Finally, the local jurisdictions can use the Moreno MDP for long-range planning of other public infrastructure projects like roads or utility pipelines.

### 3.3.2 Construction of Moreno MDP Facilities

The second component of the Project being analyzed in this Draft PEIR is the reasonably foreseeable impacts resulting from the acquisition of right-of-way and construction of the MDP Facilities. The MDP identifies the approximate location, size, and type of Project Facilities needed in order to attenuate flooding within the MDP Watershed. The Moreno MDP proposes the construction of approximately 30 miles of storm drains and channels, and approximately 82 acres of detention and debris basins. The alignments and type of facility depicted in the Moreno MDP can change as more detailed information becomes available during the design process. For example, the locations of underground utilities, new development patterns, right-of-way availability, hazardous materials sites, or the results of subsequent focused archaeological, biological, hazardous materials, or paleontological surveys may necessitate a shift in alignment or change in facility type. To add to that uncertainty, the construction of the Project Facilities will be accomplished in discrete phases over a number of decades, which is always a challenge for long-term planning.

Despite this future environment of uncertainty and potential Project Facility variations, the Draft PEIR still must identify the general types of construction activities anticipated and the associated impacts. Subsequent CEQA analysis would be required as the individual Project Facilities are designed and proposed for construction, but those future construction projects could tier from this PEIR. The general types of construction activities evaluated in the Draft PEIR include, but are not limited to:

- Basin/channel excavation;
- Channel/storm drain installation; and
- Asphalt replacement

Construction will typically entail the use of heavy equipment such as backhoes, excavators, dozers, scrapers, water trucks, wheeled loaders, and dump trucks.

The Project proposes a system of open channels, underground storm drains, and five new basins (three detention basins and two debris basins), the conceptual location of which is presented on **Figure 3-2 – Proposed Project**. A list of all existing and proposed Project facilities is presented in **Table 3.2-B – Project Update Facilities Overview**, which commences page 3-11.

### Open Channels

The Project proposes two types of open channels: lined and unlined or rather partially lined channels, which are also referred to as “soft-bottom” channels. However, for purposes of this PDEIR, the designation unlined channels is used. Typical cross sections for the open channel are shown on **Figure 3-4a – Typical Cross Section - Channels**.

Lined channels are either trapezoidal or rectangular shaped with concrete paving on the sides and bottom. Sides slope upward from the bottom at a rate of one foot vertically for every 1.5 feet horizontally. There will only be three lined trapezoidal channels, a section of Line A, a section of Line F, and a section of Line K, and one rectangular channel, Line G-3.

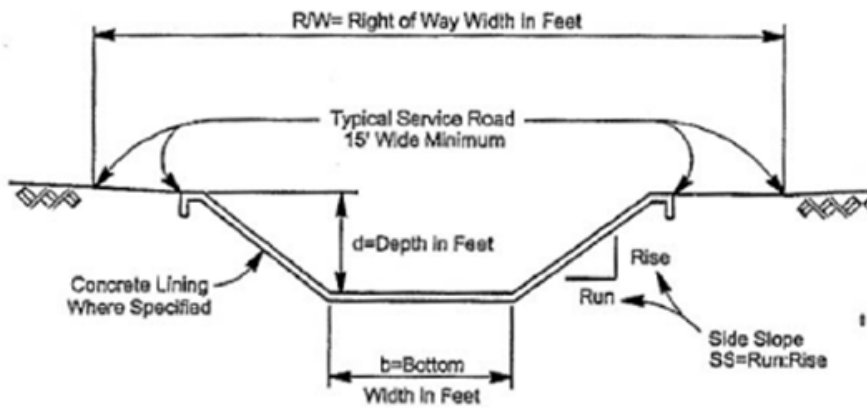
Unlined channels are usually trapezoidal shaped, paved with rock-lined side slopes and a soft earthen bottom. Side slopes for unlined channels will run either 1.5 or 2 feet horizontally for every one foot of rise. Unlined channels in the Project have a bottom width ranging from 6 to 40 feet and a depth ranging from 6 to 12.5 feet. Unlined channels require additional rights-of-way due to their wider cross sections.

Open channel rights-of-way for both lined and unlined facilities must accommodate the channel footprint plus areas needed for channel maintenance including access roads and fences. Generally, channels with top widths less than 20 feet will require one access road; channels with top widths 20 feet or greater, require two access roads.

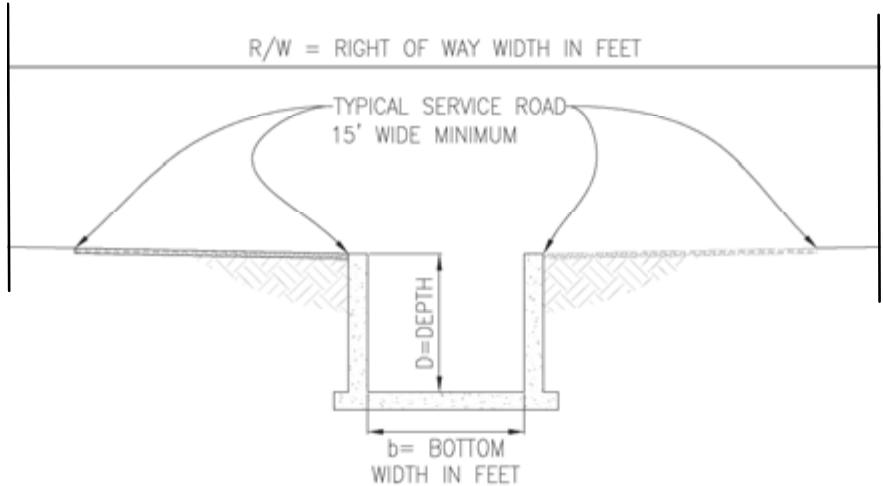
Open channels are generally considered the most economically feasible means of transporting large flood flows for any appreciable distance and are used wherever appropriate. In addition to their role as flow conveyors, open channels provide an outlet for the underground facilities proposed in the Project as well as local drainage facilities to be built by developers and others. All open channels proposed in the Project are intended to carry the runoff from a 100-year frequency storm.

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TRAPEZOIDAL CHANNEL  
EARTHEN OR CONCRETE  
BOTTOM



RECTANGULAR CHANNEL  
EARTHEN OR CONCRETE  
BOTTOM

**Figure 3.4a - Typical Cross Section  
- Channels**

Moreno Master Drainage Plan Revision

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### Underground Storm Drains

The underground storm drains proposed by the Project, generally consist of reinforced concrete pipe (RCP), ranging in size from 30 inches to 96 inches in diameter, and reinforced concrete box (RCB). An RCB is rectangular or square-shaped concrete “pipe.” The RCB may be either precast, which means the RCB was cast somewhere other than the location at which it will be installed or cast-in-place, which means the concrete for the RCB was mixed and poured into a frame at a project site. The Project proposes both square and rectangular RCBs. A single RCB pipe is referred to as a “cell.” Most of the RCBs proposed by the Project are single cell. When additional capacity is needed to convey storm flows, multiple RCB cells can be placed side by side. A segment of the southern portion of Line J is proposed to be a double cell RCB.

Manholes are located as necessary for maintenance access with a maximum spacing of 500 feet. Catch basins are not specifically located until final design. A catch basin is a curbside opening that collects rainwater and serves as an entry point to the storm drain system.<sup>3</sup> Typical cross sections for a pipe and RCB are shown on **Figure 3-4b – Typical Cross Section – Storm Drains**.

Underground drainage facilities are only proposed in those locations within the Project where open channels are not feasible, either because of topographic constraints or existing development. Where possible, underground storm drains proposed in the Project are located in existing or future street rights-of-way.

Most of the underground facilities within road rights-of-way are sized to carry the runoff generated by a 10-year storm event. During a 100-year storm event, excess flow is expected to be carried in the street section above the underground facility. Otherwise, underground facilities are sized to convey the 100-year storm runoff.

### Detention Basins and Debris Basins

The Project proposes three detention basins and two debris basins.<sup>4</sup> The detention basins’ use as temporary storage will reduce fairly high inflow rates to substantially lower outflow rates. In other words, detention basins are designed to temporarily hold water much like a bathtub with a drain that slowly empties the basin. Therefore, during storm events, excessive flows are retained in the basins and drain slowly at less hazardous volumes and velocities.

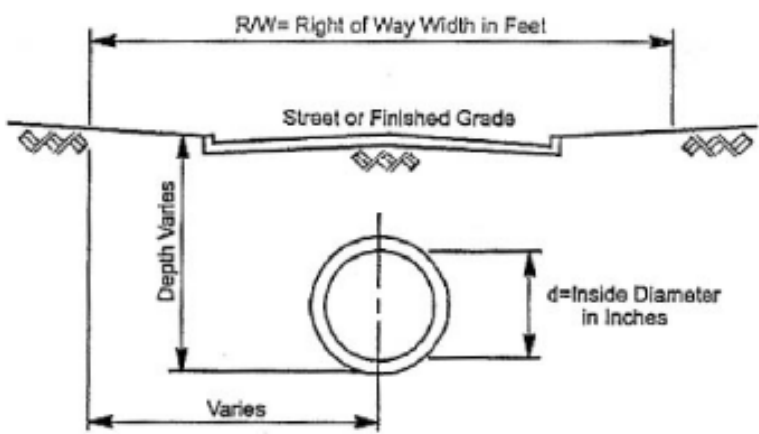
The debris basins will reduce the sediment downstream. The reduction of peak flows and debris allows for smaller, less costly facilities downstream of the basins. All three proposed detention basins are designed for ultimate 100-year storm events. The two proposed debris basins are designed for 10-year sediment yield from the Moreno Watershed. Flows exceeding the design capacity of a basin would pass over the emergency spillway in flow patterns approximating current conditions.

<sup>3</sup> Riverside County Flood Control and Water Conservation District, *Glossary of Terms*. (Available at <http://rcflood.org/GlossaryTerms.aspx#c>, accessed January 14, 2014).

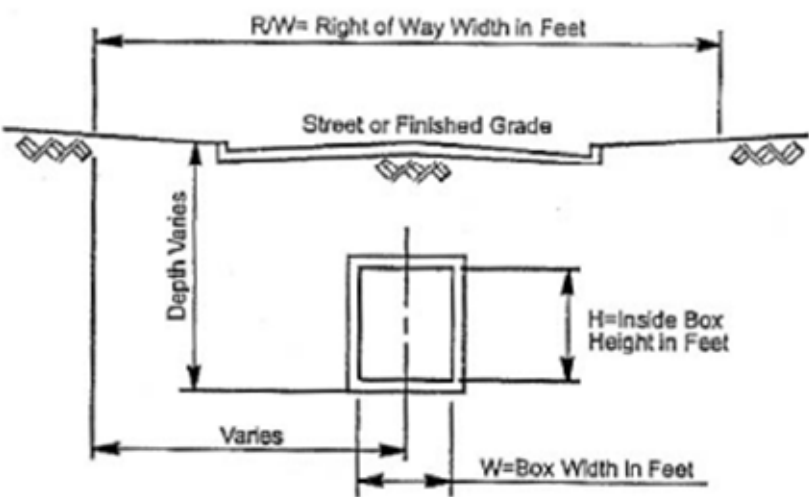
<sup>4</sup> The Nason Basin is an existing basin.



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REINFORCED CONCRETE PIPE (RCP)



REINFORCED CONCRETE BOX (RCB)

Figure 3.4b - Typical Cross Section - Storm Drains  
Moreno Master Drainage Plan Revision

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**Table 3-B – Project Facilities Overview** lists the types of drainage improvements (i.e., new facilities and upgrades to existing ones) proposed in the Project and provides a description of each of the individual MDP Facilities.

**Table 3-B – Moreno MDP Facilities Overview**

Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
<b>Basins</b>								
Cactus Basin	Located in between Redlands Blvd and Wilmot St, north of Cactus Ave.	Proposed	Detention Basin	21.7	NA	21.7	100	Q <sub>in</sub> = 3020 Q <sub>out</sub> = 2115
Ironwood Debris Basin*	Located north of the intersection of Ironwood Ave and Theodore St.	Proposed	Debris Basin	3.1	NA	2.3	-	-
Nason Basin	Located north of SR-60 and approximately 350 ft. east of the Nason St SR-60 off-ramp.	Existing	Detention Basin	20.5 ac	234	-	-	-
Quincy Basin	Located north of the SR-60 and approximately 2,000 ft. west of the Redlands Blvd SR-60 off-ramp.	Proposed	Detention Basin	22.5	NA	22.5	150	Q <sub>in</sub> = 1555 Q <sub>out</sub> = 280
Reche Canyon Debris Basin	Located approximately 1,500 ft. west and 350 ft. north of the intersection of Moreno Beach Dr. and Locust Ave. The portion of Reche Canyon Rd adjacent to the basin will have to be raised. Improvements shall include collector dykes to direct flows into the basin.	Proposed	Debris Basin	10.0	NA	7.5.5	-	-
Sinclair Basin*	Located north of SR-60 approximately 1,900 ft. west of the Theodore St SR-60 off-ramp.	Proposed	Detention Basin	25	-	25	170	Q <sub>in</sub> = 2525 Q <sub>out</sub> = 635

\*The basic footprint acreages for the Ironwood Debris Basin and the Reche Canyon Debris Basin have been adjusted by a factor of 1.33 to account for additional right-of-way requirements (e.g. access road right-of-way, embankment slopes, property boundaries, basin grading, existing topography, spillway requirements, etc.) that are already a part of the Facility Size shown in this table for the Sinclair Basin, Cactus Basin, and Quincy Basin. This factor was based on comparisons of basin modeling methodologies for the Project’s other basins and engineering judgment.

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
<b>Channels and Storm Drains</b>								
Line A	Line A begins approximately 350 ft. west of the intersection at Locust Ave and Quincy St and connects to an existing portion of Line A that runs southerly and south easterly to a confluence point with proposed Line A-1 approximately 670 ft. south of the intersection of Kalmia and Quincy St. The proposed line then continues southerly from the confluence along Quincy St to an outlet into proposed Quincy Basin, just north of SR-60.	Proposed	Trapezoidal Channel (Lined)	b=6 ft. d=4.5 ft. *ss=1.5:1	225	0.3	-	910
		Existing	Channel (Lined)	b=6 ft. d=4.5 ft. ss=1.5:1	1,080	-	-	-
		Proposed	Storm Drain (RCB)	8 ft. X 7 ft.	710	-	-	1255
		Proposed	Storm Drain (RCB)	9 ft. X 7 ft.	1,290	-	-	1300
		Proposed	Storm Drain (RCB)	9 ft. X 7 ft.	1,325	-	-	1340
		Proposed	Storm Drain (RCB)	9 ft. X 7 ft.	415	-	-	1515
Line A-1	Line A-1 begins approximately 1,315 ft. north and 235 ft. east of the intersection of Locust Ave and Quincy St, runs west to Quincy St, south along Quincy St, and confluences with existing Line A approximately 670 ft. south of the intersection of Kalmia and Quincy St.	Proposed	Storm Drain (RCP)	72 in.	235	-	-	560
		Proposed	Storm Drain (RCP)	72 in.	1,315	-	-	560
		Proposed	Storm Drain (RCP)	72 in.	1,315	-	-	670
		Proposed	Storm Drain (RCP)	78 in.	670	-	-	670
Line A-2	Line A-2 connects to proposed Line A-1 at the intersection of Locust Ave and Quincy St and extends easterly.	Proposed	Storm Drain (RCP)	42 in.	650	-	-	85
Line A-3	Line A-3 begins at intersection of Edmonson Ave and Kalmia Ave. Runs easterly along Kalmia Ave and connects to existing Line A.	Proposed	Storm Drain (RCP)	42 in.	600	-	-	95

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line A-6	Line A-6 connects to proposed Line A approximately 1,550 ft. east of the intersection of Fenimore Dr. and Hemlock Ave. The line extends westerly along Hemlock Ave to a point approximately 250 ft. east of the intersection of Fenimore Dr. and Hemlock Ave and then northerly for approximately 2,600 ft.	Proposed	Storm Drain (RCP)	36 in.	650	-	-	80
		Proposed	Storm Drain (RCP)	42 in.	650	-	-	130
		Proposed	Storm Drain (RCP)	48 in.	1,315	-	-	180
		Proposed	Storm Drain (RCP)	78 in.	325	-	-	310
		Proposed	Storm Drain (RCP)	84 in.	650	-	-	335
		Proposed	Storm Drain (RCB)	7 ft. X 7 ft.	325	-	-	375
Line A-7	Line A-7 connects to proposed Line A-6 and extends westerly along Ironwood Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	55
Line A-8	Line A-8 connects to proposed Line A-6 and extends westerly along Hemlock Ave. to Hinson St.	Proposed	Storm Drain (RCP)	42 in.	625	-	-	60
		Proposed	Storm Drain (RCP)	54 in.	265	-	-	105
Line B	Line B begins approximately 1,200 ft. southeast of the intersection of Redlands Blvd. and Highland Blvd. The line runs southeasterly along Highland Blvd, southerly along Sinclair St to Ironwood Ave, easterly along Ironwood Ave for 735 ft., and southerly for approximately 2,100 ft. to an outlet into the proposed Sinclair Basin.	Proposed	Storm Drain (RCP)	66 in.	720	-	-	510
		Proposed	Storm Drain (RCB)	8 ft. X 7 ft.	1,775	-	-	805
		Proposed	Storm Drain (RCB)	8 ft. X 7 ft.	1,350	-	-	1175
		Proposed	Storm Drain (RCB)	8 ft. X 8 ft.	735	-	-	1175
		Proposed	Storm Drain (RCB)	8 ft. X 8 ft.	1,310	-	-	1175
		Proposed	Storm Drain (RCB)	10 ft. X 8 ft.	445	-	-	1920

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line B-1	Line B-1 connects to proposed Line B 735 ft. west of the Ironwood Ave and Sinclair St intersection and extends easterly along Ironwood Ave.	Proposed	Storm Drain (RCP)	78 in.	1,430	-	-	315
Line B-2	Line B-2 connects to proposed Line B at the intersection of Highland Blvd and Juniper Ave and extends westerly along Juniper Ave.	Proposed	Storm Drain (RCP)	54 in.	850	-	-	100
Line B-3	Line B-3 connects to proposed Line B at the intersection of Sinclair St and Ironwood Ave and extends westerly along Ironwood Ave.	Proposed	Storm Drain (RCP)	42 in.	535	-	-	90
Line C	Line C begins at the intersection of Theodore St and Ironwood Ave. The line runs southerly for 930 ft. along Theodore St and then westerly to connect with proposed Line B.	Proposed	Storm Drain (RCP)	66 in.	920	-	-	545
		Proposed	Storm Drain (RCP)	78 in.	1,845	-	-	680
Line D	Line D begins approximately 1,370 ft. east of the intersection of Sinclair St and Eucalyptus Ave. and extends westerly to connect to existing Line F.	Existing	Storm Drain (RCP)	36-42 in.	2,400	-	-	-
Line D-1	Line D-1 connects to proposed Line D-5 at the intersection of Locust Ave and Redlands Blvd and extends westerly along Locust Ave.	Proposed	Storm Drain (RCP)	42 in.	375	-	-	45
		Proposed	Storm Drain (RCP)	48 in.	445	-	-	80
Line D-2	Line D-2 connects to proposed Line D-5 at the intersection of Kalmia and Redlands Ave and extends westerly along Kalmia Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	50
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	85
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	120
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	155

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line D-3	Line D-3 connects to proposed Line D-5 at the intersection of Juniper and Redlands Ave and extends westerly along Juniper Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	50
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	85
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	125
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	160
Line D-4	Line D-4 connects to proposed Line D-5 at the intersection of Juniper Ave and Redlands Ave and extends easterly along Juniper Ave.	Proposed	Storm Drain (RCP)	42 in.	670	-	-	70
Line D-5	Line D-5 begins at the intersection of Locust Ave and Redlands Blvd. The line runs southerly along Redlands Blvd to Ironwood Ave, easterly along Ironwood Ave for approximately 1,300 ft., southerly for 1,300 ft., easterly for 690 ft., and finally southerly to an outlet into to the proposed Sinclair Basin. There is an existing portion of Line D-5 on the south side of SR-60 approximately 1,980 ft. east of Redlands Blvd which connects existing culverts to existing Line F.	Existing	Storm Drain (RCP)	2-48 in.	130	-	-	-
		Proposed	Storm Drain (RCP)	48 in.	1,310	-	-	155
		Proposed	Storm Drain (RCP)	66 in.	1,360	-	-	300
		Proposed	Storm Drain (RCP)	66 in.	1,300	-	-	525
		Proposed	Storm Drain (RCP)	90 in.	655	-	-	710
		Proposed	Storm Drain (RCP)	90 in.	655	-	-	755
		Proposed	Storm Drain (RCP)	90 in.	1,290	-	-	775
		Proposed	Storm Drain (RCP)	90 in.	1,215	-	-	910
Line D-6	Line D-6 begins approximately 1,350 ft. east of Redlands Blvd just south of SR-60 and connects existing culverts to existing Line F.	Existing	Storm Drain (RCP)	48 in.	420	-	-	-

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line D-7	Line D-7 connects to proposed Line D-5 at the intersection of Redlands Blvd and Ironwood Ave and extends westerly along Ironwood Ave.	Proposed	Storm Drain (RCP)	36 in.	500	-	-	50
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	85
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	120
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	155
Line D-8	Line D-8 begins approximately 1,300 ft. south Ironwood Ave and 240 ft. east of Redlands Blvd and runs easterly to connect to proposed Line D-5.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	45
		Proposed	Storm Drain (RCP)	54 in.	550	-	-	100
Line D-9	Line D-9 connects to proposed Line D-5 approximately 1,300 ft. east of the intersection of Ironwood Ave and Redlands Blvd and extends easterly.	Proposed	Storm Drain (RCP)	36 in.	330	-	-	30
Line E-1	Line E-1 connects to proposed Line F approximately 1,300 ft. south of Eucalyptus Ave and extends westerly.	Proposed	Storm Drain (RCP)	36 in.	500	-	-	60
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	110
		Proposed	Storm Drain (RCP)	66 in.	500	-	-	160
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	210
Line E-2	Line E-1 connects to proposed Line F approximately 1300 ft. south of Eucalyptus Ave and extends easterly.	Proposed	Storm Drain (RCP)	36 in.	250	-	-	45
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	95
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	145

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR

Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	190
Line E-3	Line E-3 connects to proposed Line F and extends westerly along Dracaea Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	65
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	120
		Proposed	Storm Drain (RCP)	66 in.	500	-	-	175
		Proposed	Storm Drain (RCP)	72 in.	250	-	-	225
Line E-4	Line E-4 connects to proposed Line F and extends easterly along Dracaea Ave.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	85
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	140
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	195
Line E-5	Line E-5 connects to proposed Line F and extends westerly along Cottonwood Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	65
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	120
		Proposed	Storm Drain (RCP)	66 in.	500	-	-	170
		Proposed	Storm Drain (RCP)	72 in.	250	-	-	220
Line E-6	Line E-6 connects to proposed Line F and extends easterly along Cottonwood Ave.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	80
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	135
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	185

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line E-7	Line E-7 connects to proposed Line F and extends westerly along Bay Ave.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	65
		Proposed	Storm Drain (RCP)	60 in.	500	-	-	120
		Proposed	Storm Drain (RCP)	66 in.	500	-	-	170
		Proposed	Storm Drain (RCP)	72 in.	250	-	-	215
Line E-8	Line E-8 connects to proposed Line F and extends easterly along Bay Ave.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	70
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	125
		Proposed	Storm Drain (RCP)	66 in.	250	-	-	175
Line E-10	Line E-10 connects to proposed Line F and extends easterly along Alessandro Blvd.	Proposed	Storm Drain (RCP)	36 in.	500	-	-	45
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	95
		Proposed	Storm Drain (RCP)	60 in.	250	-	-	145
Line F	Proposed Line F begins approximately 1,350 ft. south of SR-60 and 1,600 ft. east of Redlands Blvd at the end of an existing portion of Line F. Proposed Line F runs southerly to Alessandro Blvd, southwesterly below Alessandro Blvd to Redlands Blvd, and connects to the proposed Cactus Basin. Cactus Basin outlets to an existing portion of line F which runs southwesterly below Cactus Ave to Oliver St, approximately 500ft north of the intersection of Oliver St and John F Kennedy Dr. A small section of Line F is proposed	Existing	Storm Drain (RCP)	2-48 in.	100	-	-	-
		Existing	Storm Drain (RCP)	2-72 in.	190	-	-	-
		Existing	Storm Drain (RCB)	W=10-12 ft. H=8 ft.	2,700	-	-	-
		Proposed	Trapezoidal Channel (Unlined)	b=30 ft. d=8 ft. *ss=2:1	755	1.8	-	845

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)	
	from this point, running southwesterly, for approximately 850 ft. to connect to another existing portion of Line F which continues in the southwesterly direction.	Proposed	Trapezoidal Channel (Unlined)	b=6 ft. d=8 ft. *ss=2:1	665	1.2	-	845	
		Proposed	Trapezoidal Channel (Unlined)	b=8 ft. d=8 ft. *ss=2:1	1,345	2.5	-	1020	
		Proposed	Trapezoidal Channel (Unlined)	b=12 ft. d=8 ft. *ss=2:1	1,310	2.5	-	1215	
		Proposed	Trapezoidal Channel (Unlined)	b=16 ft. d=8 ft. *ss=2:1	1,310	2.6	-	1410	
		Proposed	Trapezoidal Channel (Unlined)	b=20 ft. d=8 ft. *ss=2:1	680	1.4	-	1600	
		Proposed	Trapezoidal Channel (Unlined)	b=24 ft. d=8 ft. *ss=2:1	645	1.4	-	1600	
		Proposed	Trapezoidal Channel (Unlined)	b=38 ft. d=8 ft. *ss=2:1	3,080	7.7	-	1945	
		Existing	Floodplain Golf Course	-	-	4,970	-	-	-
		Existing	Channel (natural)	-	-	2,650	-	-	-
		Existing	Trapezoidal Channel (Lined)	b=40 ft. d=10 ft. *ss=1.5:1	755	1.9	-	6800	

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
		Existing	Trapezoidal Channel (Lined)	b=40 ft. d=10 ft. *ss=1.5:1	3,320	8.4		-
		Existing	Trapezoidal Channel (Lined)	b=40 ft. d=12.5 ft. *ss=1.5:1	735	2	-	-
		Existing	Trapezoidal Channel (Lined)	b=40 ft. D=10.8 ft. *ss=1.5:1	4,080	-	-	-
Line F-2	Line F-2 begins approximately 1,200 ft. north of SR-60 on Redlands Blvd. The line runs southerly to an existing culvert under SR-60 and continues downstream of the culvert along Redlands Blvd to a confluence with proposed Line F just south of Brodiaea Ave. Line F-2 is to replace the existing line along Redlands Blvd from Dracaea Ave to south of Brodiaea Ave.	Proposed	Storm Drain (RCP)	54 in.	1,155	-	-	215
		Existing	Storm Drain (RCP)	60 in.	900	-	-	-
		Proposed	Storm Drain (RCP)	66 in.	510	-	-	305
		Proposed	Storm Drain (RCP)	72 in.	1,285	-	-	535
		Proposed	Storm Drain (RCP)	78 in.	1,335	-	-	705
		Proposed	Storm Drain (RCP)	84 in.	1,330	-	-	775
		Proposed	Storm Drain (RCP)	90 in.	1,310	-	-	845
		Proposed	Storm Drain (RCP)	96 in.	1,300	-	-	880
		Proposed	Storm Drain (RCP)	96 in.	940	-	-	950
		Proposed	Storm Drain (RCP)	108 in.	400	-	-	950

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
		Proposed	Storm Drain (RCP)	108 in.	450	-	-	1,005
		Existing (to be replaced)	Storm Drain (RCP)	42-60 in.	5,965	-	-	-
		Existing	Channel (natural)	-	1,300	-	-	-
Line F-3	Line F-3 connects to the culvert under Cactus Ave approximately 250 ft. east of the intersection of Wilmot St and Cactus Ave and runs easterly along Cactus Ave.	Existing	Storm Drain (RCP)	48 in.	1,120	-	-	-
Line F-4	Line F-4 connects to existing Line F approximately 400 ft. south of the intersection of Auburn Ln and Moreno Beach Dr. The line extends northerly along Moreno Beach Dr. and easterly along Cactus Ave.	Existing	Storm Drain (RCP)	36-42 in.	1,080	-	-	-
		Existing	Storm Drain (RCP)	48-54 in.	730	-	-	-
		Existing	Storm Drain (RCB)	W: 5-10 ft. H: 5 ft.	970	-	-	-
Line F-5	Proposed Line F-5 connects to existing Line F approximately 100 ft. south and 700 ft. west of the intersection of Oliver St and John F Kennedy Dr. Proposed Line F-5 runs easterly to Olive St and connects to an existing portion of Line F-5 which runs southeasterly until just past Legendary Dr. A portion of existing Line F-5 also extends from Legendary Dr. southwesterly along Via De La Real Dr. to La Palma Way.	Proposed	Storm Drain (RCB)	(2) 8 ft. X 4 ft.	700	-	-	335
		Existing	Storm Drain (RCB)	(2) 8 ft. X 4 ft., 8 ft. X 4 ft.	950	-	-	-
		Existing	Storm Drain (RCP)	60-72 in.	275	-	-	-
		Existing	Storm Drive (RCP)	36-60 in.	550	-	-	-
Line F-6	Line F-6 connects to existing Line F approximately 275 ft. north of the intersection of Grand Vista Dr. and Iris Ave. The line runs southerly to Iris Ave and then easterly along Iris Ave.	Existing	Storm Drain (RCP)	54-78 in.	2,040	-	-	-

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Section 3  
Project Description

Riverside County Flood Control and Water Conservation District  
Moreno Master Drainage Plan Revision Draft PEIR

Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line F-7	Line F-7 connects to existing Line F at the intersection of Moreno Beach Dr. and Artisan St and runs southerly along Moreno Beach Dr. to John F Kennedy Dr.	Existing	Storm Drain (RCP)	36 in.	1,115	-	-	-
Line F-8	Line F-8 begins just southwest of the intersection of Iris Ave and Mesa Verde Dr. on Iris Ave and runs southwesterly along Iris Ave.	Existing	Storm Drain (RCP)	42-54 in.	1,825	-	-	-
Line F-9	Line F-9 connects to existing Line F-4 at the intersection of Bradshaw Cir and Cactus Ave. The line runs northerly approximately 320 ft., easterly 350 ft., and northerly 360 ft. to an inlet on the corner of Annadale Dr. and Arborglenn Dr. This line receives flows from a storm drain running along Arborglenn Dr. from Annadale Dr. to Morningside Dr.	Existing	Storm Drain (RCP)	36 in.	885	-	-	-
		Existing	Storm Drain (RCP)	36 in.	1,030	-	-	-
Line F-11	Line F-11 connects to proposed Line F-2 at Cottonwood Ave and Redlands Blvd and runs westerly along Lexington Way.	Existing	Storm Drain (RCP)	36-42 in.	1,090	-	-	-
Line F-12	Line F-12 connects to proposed Line F-2 at Dracaea Ave and Redlands Blvd and extends westerly on Dracaea Ave.	Existing	Storm Drain (RCP)	42 in.	1,950	-	-	-
Line F-13	Line F-13 connects to existing Line F-4 at the intersection of Moreno Beach Dr. and Cactus Ave and extends northerly along Moreno Beach Dr.	Proposed	Storm Drain (RCP)	33 in.	485	-	-	60
		Proposed	Storm Drain (RCP)	39 in.	850	-	-	90
Line F-14	Line F-14 connects to existing Line F approximately at the intersection of Camino Flores and Calle Camelia. The line runs northerly on Calle Camelia to Casa Encantador Rd.	Existing	Storm Drain (RCP)	42 in.	1,115	-	-	-
Line F-15	Line F-15 begins approximately 1,200 ft. north of SR-60 and 1,750 ft. west of Redlands Blvd. The line runs easterly and connects to the beginning of proposed Line F-2 at Redlands Blvd.	Proposed	Storm Drain (RCP)	36 in.	500	-	-	45
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	80

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	115
		Proposed	Storm Drain (RCP)	54 in.	250	-	-	150
Line F-16	Line F-16 connects to proposed Line F-2 approximately 1,350 ft. south of SR-60 along Redlands Blvd and extends westerly.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	65
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	125
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	180
		Proposed	Storm Drain (RCP)	72 in.	500	-	-	235
		Proposed	Storm Drain (RCP)	72 in.	250	-	-	290
Line F-17	Line F-17 connects to proposed Line F-2 approximately 2,700 ft. south of SR-60 along Redlands Blvd and extends westerly.	Proposed	Storm Drain (RCP)	42 in.	500	-	-	45
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	85
		Proposed	Storm Drain (RCP)	48 in.	500	-	-	125
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	160
		Proposed	Storm Drain (RCP)	60 in.	250	-	-	200
Line F-18	Line F-8 connects to proposed Line F-2 at Alessandro Blvd and extends easterly.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	70
		Proposed	Storm Drain (RCP)	60 in.	505	-	-	130
Line F-19	Line F-19 connects to proposed Line F-2 at Brodiaea Ave and extends easterly.	Proposed	Storm Drain (RCP)	60 in.	500	-	-	120

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line G	Proposed Line G begins approximately 850 ft. south and 450 ft. east of the intersection of Eucalyptus Ave and Auto Mall Dr. Proposed Line G continues from the outlet of an existing portion of Line G which extends to this point from an existing culvert under SR-60 approximately 500 ft. east of Moreno Beach Dr. Proposed Line G runs southeasterly until a confluence with proposed line G-7 approximately 400 ft. north of the intersection of Cottonwood Ave and Quincy St and then continues southerly, parallel to Quincy St, to an outlet into existing Line F. Two sections of Line G currently exist as concrete slope protection, one on the east side of the wash just north of Cottonwood Ave (approximately 400 ft.), and one along the east side of Quincy Dr. below Cottonwood Ave.	Existing	Storm Drain (RCP)	72-96 in.	2,165	-	-	-
		Proposed	Trapezoidal Channel (Unlined)	b=10 ft. d=6 ft. *ss=2:1	4,230	7.2	-	840
		Proposed	Trapezoidal Channel (Unlined)	b=14 ft. d=8 ft. *ss=2:1	1,820	3.6	-	1,135
		Proposed	Trapezoidal Channel (Unlined)	b=14 ft. d=8 ft. *ss=2:1	1,300	2.6	-	1,180
		Proposed	Trapezoidal Channel (Unlined)	b=14 ft. d=8 ft. *ss=2:1	1,350	2.7	-	1,270
		Proposed	Trapezoidal Channel (Unlined)	b=16 ft. d=8 ft. *ss=2:1	1,285	2.6	-	1,325
		Existing	Slope Protection	ss=1.5:1	400	-	-	-
		Existing	Slope Protection	ss=1.5:1	1,185	-	-	-
Line G-1	Line G-1 begins approximately 1,200 ft. north of SR-60 and 250 ft. east of Moreno Beach Dr. and extends easterly to connect to proposed Line G-4.	Proposed	Storm Drain (RCP)	42 in.	250	-	-	50
Line G-2	Line G-2 begins at the corner of Hemlock Ave and Petit St and extends westerly to connect to proposed Line G-4.	Proposed	Storm Drain (RCP)	42 in.	600	-	-	55
		Proposed	Storm Drain (RCP)	54 in.	250	-	-	100

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line G-3	Line G-3 connects to the existing culvert and the downstream end of Line G-4 approximately 500 ft. east of Moreno Beach Dr. just north of SR-60 and extends easterly, parallel to SR-60.	Proposed	Rectangular Channel	b=10 ft. d=6.5	1,480	-	-	105
Line G-4	Line G-4 begins approximately 1,200 ft. north of SR-60 and 500 ft. east of Moreno Beach Dr. and runs southerly to connect to the existing culvert under SR-60 and the downstream end of proposed Line G-3.	Proposed	Storm Drain (RCP)	54 in.	1,130	-	-	215
Line G-5	Line G-5 begins at the intersection of Motor Way and Auto Mall Dr. and extends northeasterly along Auto Mall Dr. to connect to existing Line G. (Referred to as the Auto Mall Dr. Lateral on Dwg # 4-0526)	Existing	Storm Drain (RCP)	48 in.	775	-	-	-
Line G-7	Line G-7 begins approximately 2,600 ft. west of Redlands Blvd just south of SR-60 from the existing culvert which is proposed to serve as the outlet for Quincy Basin. The line runs southerly and connects to proposed Line G approximately 400 ft. north of Cottonwood Ave.	Proposed	Trapezoidal Channel (Unlined)	b=6 ft. d=5 ft. *ss=2:1	4,750	7.2	-	335
		Existing	Slope Protection	ss=1.5:1	2,190	-	-	-
Line G-8	Line G-8 connects to proposed Line G and extends easterly along Bay Ave.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	70
Line G-9	Line G-9 connects to proposed Line G and extends easterly along Alessandro Blvd.	Proposed	Storm Drain (RCP)	48 in.	550	-	-	75
		Proposed	Storm Drain (RCP)	54 in.	500	-	-	110
		Proposed	Storm Drain (RCP)	60 in.	250	-	-	155
Line G-10	Line G-10 connects to proposed Line G and extends easterly along Brodiaea Ave.	Proposed	Storm Drain (RCP)	48 in.	500	-	-	70
		Proposed	Storm Drain (RCP)	54 in.	250	-	-	115

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line G-11	Line G-11 connects to proposed Line G and extends easterly along Cactus Ave.	Proposed	Storm Drain (RCP)	36 in.	250	-		35
		Proposed	Storm Drain (RCP)	48 in.	500	-		65
		Proposed	Storm Drain (RCP)	54 in.	500	-		100
Line H	Line H begins at the intersection of Mill Creek Rd and Dracaea Ave. The line runs southerly to Cottonwood Ave, easterly along Cottonwood Ave for approximately 610 ft., southerly to Alessandro Blvd, easterly along Alessandro to Oliver St, and southerly along Oliver St to connect to existing Line H at the intersection of Oliver St and Cactus Ave. A couple of earthen ditches currently exist along the proposed Line H alignment.	Existing	Ditch	-	-	-		-
		Proposed	Storm Drain (RCP)	42 in.	1,300	-		165
		Proposed	Storm Drain (RCB)	8.25 ft. X 5 ft.	610	-		275
		Proposed	Storm Drain (RCP)	75 in.	1,365	-		590
		Proposed	Storm Drain (RCP)	75 in.	805	-		650
		Proposed	Storm Drain (RCP)	87 in.	3,185	-		710
		Proposed	Storm Drain (RCP)	90 in.	1,320	-		760
Line H-1	Proposed Line H-1 begins at the downstream end of an existing portion of Line H-1, approximately 1,020 ft. east of the intersection of Moreno Beach Blvd and Alessandro Blvd. The line runs westerly along Alessandro Blvd to approximately 650 ft. east of Pearl Ln and connects to proposed line H-2.	Existing	Storm Drain (RCP)	48 in.	1,090	-		-
		Proposed	Storm Drain (RCP)	48 in.	1,020	-		115
		Proposed	Storm Drain (RCP)	63 in.	500	-		285
		Proposed	Storm Drain (RCP)	63 in.	830	-		295
		Proposed	Storm Drain (RCP)	75 in.	630	-		495

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line H-1a	Line H-1a connects to proposed Line H-2 approximately 650 ft. east of Pearl Ln on Alessandro Blvd and extends westerly along Alessandro Blvd.	Proposed	Storm Drain (RCP)	36 in.	280	-		10
Line H-2	Line H-2 begins at the intersection of Cottonwood Ave and Bethany Rd. The line runs southerly of and along Bethany Rd and connects to proposed Line H-1 at Alessandro Blvd. A southern portion of proposed Line H-2 continues southerly from the downstream end of proposed Line H-1, approximately 650 east of Pearl Ln on Alessandro Blvd, to an existing portion of Line H-2 at Brodiaea Ave. The existing portion of Line H-2 continues southerly and connects to existing Line H-8 at Cactus Blvd.	Proposed	Storm Drain (RCP)	33 in.	320	-		105
		Proposed	Storm Drain (RCP)	39 in.	650	-		170
		Proposed	Storm Drain (RCP)	42 in.	640	-		170
		Proposed	Storm Drain (RCP)	54 in.	950	-		205
		Proposed	Storm Drain (RCP)	84 in.	1,350	-		605
		Existing	Storm Drain (RCP)	84-90 in.	1,865	-		-
Line H-3	Line H-3 begins at the intersection of Cottonwood Ave and Moreno Beach Dr. and runs southerly along Moreno Beach Dr. to connect to proposed Line H-1 at Alessandro Blvd. An existing portion of Line H-3 begins approximately 150 ft. east of Arcaro St, extends southerly to Sea Biscuit St, westerly to Moreno Beach drive, and finally southerly to Bay Ave.	Existing	Channel	b=2 ft. d=2 ft. ss=2:1	745	-		-
		Existing	Storm Drain (RCP)	42-48 in.	775	-		-
		Existing	Channel	B=10 ft. d= varies ss=2:1	405			-
		Proposed	Storm Drain (RCP)	42 in.	830	-		110
		Proposed	Storm Drain (RCP)	45 in.	1,040	-		150
		Proposed	Storm Drain (RCP)	45 in.	680	-		165

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line H-4	Line H-4 connects to proposed Line H approximately 1,300 ft. east of the intersection of Nason St and Bay Ave and extends easterly.	Proposed	Storm Drain (RCP)	30 in.	260	-		85
Line H-5	Line H-5 connects to proposed Line H at the intersection of Oliver St and Brodiaea Ave and extends westerly.	Proposed	Storm Drain (RCP)	30 in.	675	-		45
		Proposed	Storm Drain (RCP)	33 in.	675	-		65
Line H-5a	Line H-5a connects to proposed Line H at the intersection of Oliver St and Brodiaea Ave and extends easterly.	Proposed	Storm Drain (RCP)	36 in.	290	-		25
Line H-6	Line H-6 begins approximately 1,130 ft. east of the intersection of Landon Rd and Brodiaea Ave and extends westerly to an existing portion of Line H-6 which continues westerly to connect to Line H-2.	Existing	Storm Drain (RCP)	36-48 in.	640	-		-
		Proposed	Storm Drain (RCP)	36 in.	625	-		45
Line H-7	Line H-7 connects to existing Line H at the intersection of Oliver St and Cactus Ave and extends westerly.	Existing	Storm Drain (RCP)	36 in.	700	-		-
Line H-8	Line H-8 connects to existing Line H at the intersection of Oliver St and Cactus Ave and extends easterly.	Existing	Storm Drain (RCP)	36-60 in.	1,650	-		-
Line H-9	Line H-9 begins at the intersection of Silver Mountain Way and Big Horn Ave. The line extends south on Silver Mountain Way, east on Delphinium Ave, and south on Evergreen St to existing Line F.	Existing	Storm Drain (RCP)	66 in.	1,935	-		-
Line H-10	Line H-10 begins at the intersection of Newburgh Rd and Rockwood Ave and extends westerly to connect to existing Line H.	Existing	Storm Drain (RCP)	36 in.	1,110	-		-
Line H-11	Line H-11 connects to proposed Line H approximately 1,300 ft. east of the intersection of Nason St and Cottonwood Ave. The line extends northerly for approximately 1,300 ft. and easterly for approximately 430 ft. to pick up flows from Cold Creek Storm Drain Line A.	Proposed	Storm Drain (RCP)	60 in.	1,730			260

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line I	Line I connects to existing Nason Basin and runs easterly along SR-60 and southerly on Nason St to Delphinium Ave.	Existing	Storm Drain (RCB)	10 ft. x 5 ft.	120	-		-
		Existing	Storm Drain (RCP)	90 in.	1,730	-		-
		Existing	Storm Drain (RCP)	90-78 in.	3,040	-		-
		Existing	Storm Drain (RCP)	78 in.	3,730	-		-
		Existing	Storm Drain (RCP)	84 in.	3,230	-		-
Line J	(North Portion) Line J begins at the intersection of Morrison St and Dracaea Ave, runs southerly for 720 ft. along Morrison St and connects with existing Line J. Existing Line J continues southerly to Alessandro Blvd.	Proposed	Storm Drain (RCP)	48 in.	720	-		160
Line J	(South Portion) Line J continues from a portion of existing Line J at the intersection of Morrison St and Alessandro Blvd. The line runs southerly to Cactus Ave and connects to an existing portion of Line J. The existing portion of Line J runs easterly along Cactus Ave, southwesterly along Nason St, and connects to existing Line F.	Existing	Storm Drain (RCP)	60-78 in.	3,400	-		-
		Proposed	Storm Drain (RCP)	78 in.	1,250	-		620
		Proposed	Storm Drain (RCP)	84 in.	1,305	-		760
		Existing	Storm Drain (RCP)	108 in.	3,880	-		-
		Existing	Storm Drain (RCB)	14 ft. X 9 ft.	1,530	-		-
		Existing	Storm Drain (Double RCB)	(2) 10 ft. X 7 ft.	1,815	-		-
Line J-1	Line J-1 connects to proposed Line J at the intersection of Morrison St and Dracaea Ave and extends easterly along Dracaea Ave.	Proposed	Storm Drain (RCP)	27 in.	650	-		35
		Proposed	Storm Drain (RCP)	39 in.	755	-		85

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Section 3  
Project Description

Riverside County Flood Control and Water Conservation District  
Moreno Master Drainage Plan Revision Draft PEIR

Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line J-2	Line J-2 connects to existing Line J at the intersection of Morrison St and Cottonwood Ave and extends easterly along Cottonwood Ave.	Existing	Storm Drain (RCP)	48-60 in.	1,160	-		-
Line J-3	Line J-3 connects to existing Line J at the intersection of Morrison St and Bay Ave and extends westerly along Bay Ave.	Existing	Storm Drain (RCP)	36-48 in.	1,325	-		-
Line J-4	Line J-4 connects to existing Line J at the intersection of Morrison St and Bay Ave and extends easterly along Bay Ave.	Existing	Storm Drain (RCP)	48 in.	1,325	-		-
Line J-5	Line J-5 connects to existing Line J at the intersection of Morrison St and Alessandro Blvd and extends westerly along Alessandro Blvd and northerly along Darwin Dr.	Existing	Storm Drain (RCP)	36 in.	1,425	-		-
Line J-6	Line J-6 connects to existing Line J at the intersection of Morrison St and Alessandro Blvd and extends easterly along Alessandro Blvd.	Existing	Storm Drain (RCP)	48 in.	680	-		-
Line J-7	Line J-7 connects to proposed Line J approximately 1,350 ft. south of the intersection of Morrison St and Alessandro Blvd and extends westerly.	Proposed	Storm Drain (RCP)	24 in.	800	-		30
Line J-8	Line J-8 connects to proposed Line J approximately 1,350 ft. south of the intersection of Morrison St and Alessandro Blvd and extends easterly.	Proposed	Storm Drain (RCP)	39 in.	540	-		80
		Proposed	Storm Drain (RCP)	42 in.	920	-		105
Line J-9	Line J-9 connects to existing Line J approximately 2,650 ft. east of the intersection of Lasselle St and Cactus Ave and extends westerly along Cactus Ave.	Existing	Storm Drain (RCP)	57 in.	890	-		-
		Existing	Storm Drain (RCP)	57 in.	570	-		-
		Existing	Storm Drain (RCP)	60 in.	320	-		-

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
Line J-10	Line J-10 connects to existing Line J approximately 2,650 ft. east of the intersection of Lasselle St and Cactus Ave and extends easterly along Cactus Ave to the Riverside County Regional Center.	Existing	Storm Drain (RCP)	42-54 in.	1,435	-		-
Line K	Proposed Line K begins at the outlet of the Reche Canyon Debris Basin, approximately 1,500 ft. west and 350 ft. north of the intersection of Moreno Beach Dr. and Locust Dr. Line K runs southeasterly along Reche Canyon Rd, southerly along Moreno Beach Dr., southwesterly from approximately 300 ft. north of the intersection of Moreno Beach Dr. and Juniper Ave, and continues southwesterly past Ironwood Ave to connect to existing Nason Basin.	Proposed	Trapezoidal Channel (Lined)	b=10 ft. d=7 ft. *ss=1.5:1	1,600	2.2		1,560
		Proposed	Storm Drain (RCB)	14 ft. X 7 ft.	160	-		-
		Proposed	Storm Drain (RCB)	9.5 ft. x 7 ft.	2,200	-		1,790
		Proposed	Trapezoidal Channel (Unlined)	b=25 ft. d=6 ft. *ss=2:1	1,700	3.5		1,790
		Proposed	Trapezoidal Channel (Unlined)	b=30 ft. d=6 ft. *ss=2:1	2,405	5.2		2270
Line K-1	Line K-1 begins at the intersection of Locust Ave and Carrie Ln. Line K-1 runs southerly along Carrie Ln, westerly along Kalmia Ave, and southerly along Petit St to the existing portion of Line K-1 approximately 665 ft. north of the intersection of Pettit St and Juniper Ave. Line K-1 then continues from the existing portion of Line K-1 at the intersection of Juniper St and Petit St, runs southerly along Petit St to Ironwood Ave, and westerly along Ironwood Ave to connect with proposed Line K approximately 700 ft. past the intersection of Moreno Beach Dr. and Ironwood Ave.	Proposed	Storm Drain (RCP)	42 in.	840	-		125
		Proposed	Storm Drain (RCP)	42 in.	475	-		135
		Proposed	Storm Drain (RCP)	51 in.	1,335	-		200
		Existing	Storm Drain (RCP)	54-48 in.	660	-		-
		Proposed	Storm Drain (RCP)	63 in.	600	-		360
		Proposed	Storm Drain (RCP)	63 in.	730	-		390

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Facility Name	Facility Description	Existing or Proposed	Facility Type	Facility Size	Facility Length (ft.)	Right-of-Way Required (acres)	Storage Volume (ac-ft.)	Flow rate Q (cfs)
		Proposed	Storm Drain (RCP)	90 in.	2,035	-		540
Line K-2	Line K-2 connects to proposed Line K-1 at the intersection of Juniper Ave and Pettit St and extends easterly.	Proposed	Storm Drain (RCP)	33 in.	640	-		45
Line K-3	Line K-3 connects to existing Line K-1 at Pettit St and Juniper Ave. The line runs westerly along Juniper Ave and northeasterly along Knoll Vista St to Kalmia Ave.	Existing	Storm Drain (RCB)	48 in.	1,220	-		-
Line K-4	Line K-4 connects to proposed Line K-1 at the intersection of Locust Ave and Carrie Ln and extends easterly.	Proposed	Storm Drain (RCP)	42 in.	235	-		40
Moreno Cold Creek Storm Drain Line A	Moreno Cold Creek Storm Drain Line A begins approximately 870 ft. south of SR-60 and 1,940 ft. west of Motor Way. The line runs southeasterly along Eucalyptus Ave to the intersection of Eucalyptus Ave and Summerwinds Dr. The Line then extends southeasterly along Summerwinds Dr., southwesterly along Waterford Way, southerly along Windhaven Dr., easterly along Woodglen Ln, southerly along warm Springs Way, easterly along Oak Ridge Dr., southerly along Wild Sage Ln, and easterly on Cold Creek Ct to a detention basin just east of Cold Creek Ct.	Existing	Storm Drain (RCP)	36 in.	2,130	-		-
		Existing	Storm Drain (RCP)	48-54 in.	2,845	-		-
<p>* NOTES:</p> <p>ss = side slopes (2:1 side slopes indicate a rock-lined channel with an earthen bottom; 1.5:1 side slopes indicate a concrete lined channel)</p> <p>Right of Way - Includes factors such as side slope lengths, access roads, etc. for fencing.</p>								

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### 3.3.3 Operations and Maintenance of the Moreno MDP Facilities

The final component of the Project to be analyzed in this Draft PEIR is the reasonably foreseeable impacts of future operation and maintenance activities. Once an MDP Facility is constructed it will require maintenance in order to retain function and flood control capacity. It is expected that the District will operate and maintain all of the MDP Facilities.

The District periodically inspects its facilities. The maintenance of the concrete-lined channels and storm drains typically is less costly than earthen channels and basins. Maintenance of storm drains and concrete channels typically consists of keeping these facilities and their side drains clear of debris and sediment, as well as repairs to access roads and fences, and removing graffiti. On rare occasions, major repairs may be required following damaging storm events. Thus, major grading will not routinely occur while maintaining the underground storm drains and open concrete channels. To maintain the constructed facilities, the District will occasionally use equipment similar to the types used to construct the proposed facilities.

The routine maintenance of earthen channels and basins typically require the following activities: the removal of deposition, repair of eroded slopes, and reduction of fire hazards by annually mowing, and application of herbicides as well as the maintenance activities described in the previous paragraph. Vegetation must be removed or mowed, as necessary, to provide the designed hydraulic capacity. Any vegetation that may pose a fire hazard to adjacent structures must also be maintained. The design capacity of the facility and the frequency, duration, and velocity of runoff usually dictate the frequency of vegetation maintenance. Most facilities require some annual vegetation control.

Maintenance of the earthen facilities will also include occasional erosion repair and sediment removal. The frequency of these activities is a function of storm flows, and is difficult to estimate. The proposed earthen facilities are also more likely to be damaged by high velocity peak flows and more frequent storm events. While major repairs are expected to be relatively infrequent, the District will occasionally need to substantially grade and repair the earthen facilities.

### 3.4 Project Objectives

A clear statement of Project objectives allows for the analysis of reasonable alternatives to the proposed Project. The Project objectives are as follows:

1. Revise the Moreno MDP to provide a drainage plan which supports the existing and proposed land use as set forth in the "Riverside County General Plan" updated in 2008, "City of Moreno Valley General Plan" updated in July 2006, and any proposed amendments thereto.
2. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of MDP facilities to protect existing and future development.

4. Identify the most economical combination of facilities considering right-of-way acquisition, construction, and maintenance costs.
5. Develop a plan which, when implemented, will result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Moreno MDP.
6. Revise the Moreno MDP to minimize major diversions and perpetuate the natural drainage pattern of the area to the maximum extent practicable.
7. Where feasible, incorporate facilities which encourage infiltration.
8. Minimize environmental impacts to the maximum extent practicable.

### 3.5 Environmental Setting

Land uses within the Moreno Watershed include developed residential, commercial, public facilities, business park/light industrial and open space.

The Moreno Watershed lies primarily on bedrock geology known as the Perris Block. The Perris Block is a large mass of granitic rock generally bounded by the San Jacinto Fault, the Elsinore Fault, the Santa Ana River and a non-defined southeast boundary. This structural unit is located within the Peninsular Range Geomorphic Province, one of the major geologic provinces of Southern California. An Alquist-Priolo Earthquake Fault Zone that consists of the Claremont segment of the San Jacinto Fault Zone crosses the northeast portion of the proposed MDP Boundary. Two separate Riverside County faults, Reche Canyon and Claremont, cross the northern portion of the Moreno Watershed.

The Moreno Watershed is within the Santa Ana River, Reach 3 watershed. The only surface water body within the Project Watershed is a private manmade lake in the Moreno Valley Ranch, which is generally bounded by Rancho Del Lago on the west, Iris Avenue on the north, Avenida De Circo on the east, and Calle Agua on the south. This lake is part of the Storm Drain/Flood Control Plan for the Moreno Valley Ranch.

The climate of the area is characterized by warm, dry summers and mild winters. Most rain falls between the months of November and March. Winds around Moreno Valley are generally cyclic, blowing from the southwest and west, especially in the summer, during the day, while at night, especially during the winter, a weak off-shore breeze occurs. Occasionally in the fall these cyclical breezes are interrupted by strong, dry, warm desert winds (Santa Anas) from the north/northeast.

The topography and climate of Southern California combine to make the air basin in which the planning area is located an area of high air pollution potential. The Project is within the South Coast Air Basin (Basin). The portion of Basin within which the proposed Project is located is designated as a non-attainment area for NO<sub>2</sub> under state standards, and as a non-attainment area for ozone, PM-10, and PM-2.5 under both state and federal standards.

The proposed Project traverses both undeveloped and developed areas. Nearly all of the proposed MDP Facilities occur in developed areas or in existing/former agricultural areas. A smaller number of the

proposed MDP Facilities occurs within areas supporting non-native grassland and ruderal vegetation. Many of the proposed MDP Facilities occur within existing paved roads, with others occurring within open fields. The majority of the Moreno MDP area is disturbed and does not support native habitats.

### 3.6 Required Permits and Approvals

Implementation of the Project may require permits or other forms of approval from public agencies or other entities prior to construction of the proposed Moreno MDP Facilities.

- **Riverside County Flood Control and Water Conservation District**  
The District owns and operates storm drains, channels, and basins within the Moreno MDP Watershed. To the extent that flood control improvements are proposed that affect the District's facilities; coordination and approval from the District, would be necessary.

Moreover, all new facilities constructed by developers, Moreno Valley, or Riverside County, that require maintenance by the District, would require the District execution of a cooperative agreement and approval of plans and specifications.
- **U.S. Army Corps of Engineers**  
A Clean Water Act Section 404 permit will be required if the construction or maintenance of the proposed Project Facilities involves the discharge of dredged or fill material within "waters of the United States" or adjacent wetlands.
- **Regional Water Quality Control Board, Santa Ana Region (RWQCB)**  
National Pollutant Discharge Elimination System (NPDES) General Construction Permits will be required for grading activities of one acre or larger.

If a 404 Permit is required, then a Section 401 Water Quality Certification will be required.

A Waste Discharge Permit will be required if ground dewatering is necessary during tunneling activities or if waste is discharged into "waters of the State."
- **California Department of Fish and Wildlife**<sup>5</sup>  
A Fish and Game Code Section 1600 Streambed Alteration Agreement will be required if a jurisdictional streambed or stream banks will be altered.
- **California Department of Transportation**  
Encroachment permits, plus Water Pollution Control Plans, as applicable, will be required if any work associated with proposed Project Facilities is required within the right-of-way of State Route 60.
- **County of Riverside, City of Moreno Valley**  
Encroachment permits will be required to construct Project Facilities within road rights-of-way.

<sup>5</sup> Effective January 1, 2013, the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW), although its services and purpose have not changed. Because of this recent agency name change, some references contained within this DPEIR and/or technical appendices may use the terms CDFG and CDFW interchangeably. For example, this document includes several references to the *Fish and Game Code*, which has not yet been updated to reflect the agency name change to CDFW.



## Section 4 – Environmental Effects Found Not to be Significant

CEQA requires that a Draft PEIR discuss all potentially significant effects created by a project onto the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects determined in an Initial Study as insignificant and unlikely to occur need not be discussed further in the Draft PEIR unless information inconsistent with the finding in the Initial Study is subsequently received.

### 4.1 Effects Found Not to be Significant During Preparation of the Initial Study/Notice of Preparation

Section 21100(c) of the Public Resources Code states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore, not discussed in detail in the EIR. Section 15128 of the *CEQA Guidelines* adds, “Such a statement may be contained in an attached copy of an Initial Study.”

The Initial Study/Notice of Preparation (IS/NOP) prepared for the Project concluded that the proposed Project would not result in significant impacts to the following issue areas or portions of those issue areas, as described below. These specific issues listed are not substantively discussed further within the body of the Draft PEIR; See Appendix A to this Draft PEIR for the IS/NOP and related documents

#### 4.1.1 Aesthetics

The following issues related to Aesthetics were determined to be less than significant during preparation of the IS/NOP.

##### Effect on a Scenic Vista

A scenic vista is a distant and picturesque view of a natural landscape. According to the *City of Moreno Valley General Plan (MVGP)*, the proposed Project is surrounded by Reche Canyon area to the north, the “Badlands” to the east, and the Mount Russell area to the south. Also, Moreno Peak is located south of State Route (SR) 60, along Moreno Beach Drive. Construction of the proposed Project could have short-term visual impacts from construction equipment and construction activity. However, the Project will not substantially alter the views of, or from the MDP Watershed since the proposed MDP Facilities consist of proposed storm drains, open channels (lined and unlined) and detention basins, all of which will be located below or at ground surface level. The proposed Project does not entail any vertical facilities or structures. **Therefore, Project implementation would not obstruct any scenic views and potential impacts to scenic vista are less than significant.**

##### Damage to Scenic Resources

The proposed Project is not located adjacent to or in the immediate vicinity of any state scenic highways. The proposed MDP Facilities are primarily within the road rights-of-way and disturbed agricultural areas. Areas where basins are planned are not located on elevated lands. The conceptual alignments and locations of the proposed MDP Facilities do not contain any rock outcroppings or historic buildings that are of significant visual quality; thus, implementation of the Project would not



damage any such resources. The proposed MDP Facilities are primarily within or adjacent to road rights-of-way; however, construction of MDP Facilities may require vegetation removal. Once construction of the underground facilities is complete the surface will be returned to its original condition. Overhanging trees (if present) may need to be minimally trimmed to facilitate construction of the MDP Facilities. The Caltrans Scenic Highway System does not identify any highways within Riverside County that are in the vicinity of the MDP Watershed as scenic highways. **For these reasons implementation of the proposed Project will not substantially damage scenic resources and impacts are considered less than significant.**

### Degrade Existing Visual Character

The proposed Project is located in the city of Moreno Valley and in unincorporated areas of Riverside County. The portion of the Project Boundary or Project Watershed within the unincorporated area is also within Moreno Valley's Sphere of Influence. Exposed surfaces, construction debris, and construction equipment may temporarily affect the aesthetic quality of the area in immediate proximity to the construction. These impacts will be short term and will cease when construction is completed. Therefore, they are considered to be less than significant. When construction is completed, the underground storm drains will not be visible. **The open storm channels and basins will be visible, but are facilities that are aesthetically consistent with existing residential and non-residential development and therefore, will not substantially degrade the existing visual character or quality of the Project Watershed area and impacts will be less than significant.**

### Light or Glare

The proposed Project Facilities will not create new or additional light or glare, either during construction or operation and maintenance; therefore, this will not conflict with any day or nighttime views in the Project Watershed. The only lighting that may be expected to be used in connection with the proposed Project would be temporary lighting used for emergency conditions; however, any such lighting would be directed towards the Project Facilities and not onto adjacent property or into the sky. **For these reasons, impacts from light and glare will be less than significant.**

### 4.1.2 Agriculture and Forest Resources

The following issues related to Agriculture and Forest Resources were determined to be less than significant during preparation of the IS/NOP.

#### Farmland Conversion

Designated Prime and Unique Farmland are located within the MDP Watershed.

Proposed storm drains are underground facilities, and as such, will not result in a permanent conversion of Important Farmland, as the facility footprint could be returned to its original condition. Proposed open channel, Line G-7 will result in a permanent change. However, construction of the proposed open channels will be primarily located within or adjacent to road rights-of-way and impacts, if any, will be negligible.

Construction and operation of the proposed Quincy Basin will result in a permanent change to Important Farmland, since it is an open facility and must be maintained in order to retain flood control capacity. The Quincy Basin is anticipated to encompass approximately 18 acres; however, approximately six acres of the western portion of the basin is mapped as Prime Farmland. According to the city of Moreno Valley General Plan Final Environmental Impact Report (MVGP FEIR), the Moreno Valley planning area has approximately 1,639 acres mapped as Prime Farmland. **Table 4-A – Moreno Valley Planning Area Important Farmland** depicts the acreage for Prime, Unique, and Farmland of Statewide Importance within the Moreno Valley planning sphere.

**Table 4-A – Moreno Valley Planning Area Important Farmland**

Agricultural Classification	Approximate Acreage
Prime Farmland	1,639
Farmland of Statewide Importance	330
Unique Farmland	60
Total Important Farmland	2,029
Moreno Valley Planning Area	26,820
Percentage of Moreno Valley Planning Area	7.6%
Source: City of Moreno Valley, Final Environmental Impact Report, City of Moreno Valley General Plan, Table 5.8-1, Planning Area Agricultural Resources.	

In relation to the Moreno Valley planning area of 26,820 acres, approximately 7.6 percent is mapped as Important Farmland. The MVGP acknowledges that increasing pressures from surrounding urban development and economic pressures will result in the transition of agricultural areas to urban uses and includes policies to support agriculture as an interim use (MVGP, p. 7-11). However, the MVGP Land Use Plan does not designate any land within Moreno Valley or its sphere for long-term agricultural use. Further, the EIR prepared for the MVGP determined impacts to agricultural resources from its implementation will result in significant and unavoidable impacts regarding farmland conversion, and there are no feasible mitigation measures consistent with MVGP's objectives (MVGP FEIR, p. 5.8-10). As such, the MVGP has articulated its farmland conversion and adopted a Statement of Overriding Considerations pursuant to State *CEQA Guidelines* Section 15093. To minimize zoning conflicts associated with the transition from agricultural uses to more urban uses, Moreno Valley's zoning ordinance permits agricultural crops as an allowable use in all zoning categories as long as such agricultural activities can be economically conducted (MVGP FEIR, p. 5.8-7).

The Quincy Basin is bounded by SR60 to the south, existing residential development to the west, residential and residential agricultural to the north, and an existing cell tower and mini-storage facility to the east. Therefore, pressure from existing surrounding urban development is present without the proposed revisions to the Moreno MDP. Additionally, since development can occur in the MDP Watershed under the 1991 Moreno MDP, the proposed revisions to the Moreno MDP will not exacerbate the transition to urban uses.

Implementation of this Project will be within the loss of farmland foreseen by the MVGP, and the adopted Statement of Overriding Considerations has demonstrated that economic and physical development from urbanization within Moreno Valley is the preferred long-term direction for the city's future. As such, the Project's potential impacts to farmland conversion have been considered, albeit indirectly, and determined acceptable as allowed under CEQA. Moreover, this Project provides a necessary component to best complement the anticipated growth in the MDP Watershed with flood control and water management facilities. Further, it should be recognized that a relatively small footprint of Important Farmland will be impacted by the Project, and that this Project will comply with MVGP objectives. **Therefore, potential impacts to Important Farmland are considered to be less than significant.**

### **Conflict with Existing Zoning/Williamson Act Contract**

The California Land Conservation Act of 1965, also known as the Williamson Act, allows owners of agricultural land to have their properties assessed for tax purposes on the basis of agricultural production rather than current market value. According to the MVGP FEIR and Riverside County Land Information System, no lands within the MDP Watershed are under Williamson Act contract (MVGP FEIR, p. 5.8-6). The proposed Project does not conflict with existing zoning for agricultural use and will not affect agricultural land subject to a Williamson Act or within an Agricultural Preserve. **Therefore, no impacts are anticipated.**

### **Other Changes in Environment Leading to Conversion of Farmland**

Construction and operation of the proposed Quincy Basin will convert approximately six acres of Prime Farmland to drainage facility uses. The open channels are not within located within Important Farmland; thus no conversion of Farmland will occur as a result of construction and operation of those MDP Facilities. Implementation of the proposed Project in conjunction with the ultimate street improvements will provide protection from the 100-year flood discharge and alleviate the primary sources of flooding within the MDP Watershed; the Project is not considered growth-inducing. **As discussed later in Section 4.1.11, indirect growth inducing impacts are considered to be less than significant for the proposed Project.**

### **Conflict with Zoning or Cause Rezoning of Forest Land, Timberland, or Timberland Production Zones**

"Forest land," as defined in Public Resources Code (PRC) section 12220(g), is land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Moreno Valley has a wide variation in soil types, terrain, and micro-climates that allow several types of vegetation communities to grow in the region. Oak Woodland is within the MDP Watershed (MVGP FEIR, Figure 5.9-2 Planning Area Vegetation Community). However, the MVGP FEIR states that non-native woodland was erroneously mapped as oak woodland vegetation communities (MVGP FEIR, p. 5.9-5). The city of Moreno Valley staff found the

woodland community to consist of non-native eucalyptus and pepper trees (MVGP FEIR, p. 5.9-11). Therefore, there is no forest land within Moreno Valley as defined by PRC.

Additionally, a portion of the MDP Watershed is in unincorporated Riverside County. Only one of the MDP Facilities will be constructed outside of Moreno Valley, the Ironwood Debris Basin. According to the Riverside County Land Information System, the Ironwood Debris Basin is not within any forest land. Additionally, given that this basin is proposed to encompass approximately 1.5 acres and is located adjacent to Ironwood Avenue, it is highly unlikely the proposed location for this basin will support forest land.

“Timberland,” as defined in PRC Section 4526, means land, other than land owned by the federal government and land designated as experimental forest land, which is available for, and capable of, growing a crop of trees of any commercial species used to produce lumber and other forest products, including Christmas trees. According to Riverside County Zoning Ordinance 348, tree crops are permitted uses in the following zones: Rural Residential (R-R), Rural Residential-Outdoor Advertising (R-R-O); One-Family Dwellings (R-1); One-Family Dwellings- Mountain Resort (R-1A), Residential Agricultural (R-A), Multiple Family Dwellings (R-2), Limited Multiple – Family Dwellings (R-2A), General Residential (R-3), Village Tourist Residential (R-3A), Mobile home Subdivision-Rural (R-T-R), all agricultural zoning (A-1, A-P, A-2, and A-D), Controlled Development Areas (W-2), and Regulated Development Areas (R-D). Only one of the MDP Facilities will be constructed outside of Moreno Valley, the Ironwood Debris Basin. Additionally, according to Title 9 of the Moreno Valley Municipal Code (MVMC), crops are permitted uses in all of its zoning. Therefore, portions of MDP Facilities will be constructed within or adjacent to property zoned for timberland according to PRC 4526. According to the Moreno Valley Planning Department, construction of MDP Facilities will not result in the rezoning of property (MV Planning). Riverside County Ordinance No. 348, Section 18.2a(b), exempts public agency projects, such as this proposed Project, from county zoning regulations and the MVMC does not prohibit infrastructure in any zoning district. Moreover, Timberland Production is defined by California Government Code Section 51104(g) as an area devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses.<sup>1</sup> **The areas proposed for channels and basins are not zoned for nor are they used for Timberland Production, and thus, no impacts to Timberland Production will result.**

It should be noted that, as discussed in under the subheading “Farmland Conversion,” above, the ground surface will be restored to its original condition after construction of the storm drains and as such will not result in a permanent change in land use.

<sup>1</sup> Compatible uses are defined as any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following: management for watershed; management for fish and wildlife habitat or hunting and fishing; a use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas; the erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities; grazing; a residence or other structure necessary for the management of land zoned as timberland production.

Therefore, implementation of the Project will not conflict with zoning or cause the rezoning of Forest land, Timberland, or Timberland Production zones and impacts will be less than significant.

### Forest Land Conversion

See discussion under the subheading “Conflict with Zoning or Cause Rezoning of Forest Land, Timberland, or Timberland Production Zones” above. No impacts are anticipated.

#### 4.1.3 Air Quality and Greenhouse Gas Emissions

The following issues related to Air Quality and Greenhouse Gas Emissions were determined to be less than significant during preparation of the IS/NOP. The analysis of other Air Quality and Greenhouse Gas Emissions issues is presented in Section 5.1 of the Draft PEIR.

#### Conflict with or Obstruct Implementation of the Applicable Air Quality Plan

The proposed Project site is within the South Coast Air Basin (Basin), which is in the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Air Quality Management Plan (AQMP) for the Basin was established by SCAQMD to set forth a comprehensive program that will lead the Basin into compliance with all federal and state air quality standards. To achieve compliance with these standards, the AQMP establishes control measures and related emission reduction estimates that are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for any given project is determined by demonstrating that such project is consistent compliance with local land use plans and/or population projections.

The proposed MDP Facilities are considered to be compatible with all zoning designations pursuant to Section 18.2.a.b of Riverside County Ordinance No. 348, which exempts public agency projects from zoning designations and with Title 9 Planning and Zoning of the MVMC, which does not prohibit storm water drainage facilities in any zoning district. Thus, implementation of the proposed Moreno MDP revisions will not conflict with or obstruct implementation of the AQMP. **For these reasons there will be no impacts to the AQMP.**

#### Objectionable Odors

The Project presents the potential for generation of objectionable odors in the form of diesel exhaust during construction in the immediate vicinity of the proposed MDP Facilities. However, these odors will be of short-term duration and will not result in permanent impacts to surrounding land uses or sensitive receptors in the MDP Watershed. **For these reasons, implementation of the Project will result in less than significant impacts relating to objectionable odors.**

#### 4.1.4 Cultural Resources

The following issues related to Cultural Resources were determined to be less than significant during preparation of the IS/NOP. The analysis of other Cultural Resource issues is presented in Section 5.3 of the Draft PEIR.

## Human Remains

There are no cemeteries located within the MDP Watershed (Google Earth). Due to the previously disturbed condition of most of the MDP Watershed, the discovery of human remains is unlikely. The proposed Project is not expected to disturb any human remains, including those interred outside of formal cemeteries. In the unlikely event that, during construction suspected human remains are uncovered, all activities in the vicinity of the remains shall cease and the contractor shall notify the County Coroner immediately, pursuant to California Health & Safety Code Section 7050.5 and California Resource Protection Code Section 5097.98. **Therefore, potential impacts to human remains are less than significant.**

### 4.1.5 Geology and Soils

The following issues related to Geology and Soils were determined to be less than significant during preparation of the IS/NOP.

#### Earthquake Fault

An Alquist-Priolo Earthquake Fault Zone that consists of the Claremont segment of the San Jacinto Fault Zone crosses the northeast portion of the proposed MDP Watershed (Leighton, p. 5). Proposed MDP Facilities that are within the Alquist-Priolo Fault Zone are portions of Line B, B 1, B 2, C, D 1, and D 5 storm drain facilities, and the Ironwood Debris Basin. Additionally, two separate Riverside County faults, the Reche Canyon and Claremont, cross the northern portion of the proposed MDP Watershed. Proposed MDP Facilities that are within the Reche Canyon Fault Zone are portions of Line K, an open channel and storm drain system, and portions of the Reche Canyon Debris Basin. No proposed MDP Facilities are located within the Claremont Fault Zone on the eastern portion of the MDP Watershed. However, just outside the Alquist-Priolo Fault Zone lies a Claremont Fault Line which crosses portions of Line B, B-3, and C storm drain facilities.

The Project itself does not contain structures that would be inhabited by humans; and thereby, will not expose persons directly to substantial adverse effects from ground shaking. Detention basin failure, as a result of ground shaking, could indirectly expose humans and structures to adverse effects such as flooding, if it were to occur during periods of high water in the basins. However, the probability is low due to the short duration of flood water storage within the basins (less than 72 hours) and the absence of large embankments to store large enough quantities of water to cause flooding.

In addition, the proposed Project Facilities will be designed and constructed to withstand expected ground shaking levels and potential soil instability. A geotechnical report will be prepared as part of the final design for the individual MDP Facilities. All recommended measures outlined by the geotechnical engineer in the geotechnical report will be incorporated into the final design and construction of the MDP Facilities. **Therefore, at a programmatic level, potential impacts to people or structures due to seismic hazards are considered less than significant.**

## Seismic Ground Shaking

See Section 4.1.5.1, above. Impacts will be less than significant.

## Liquefaction

According to the MVGP, liquefaction is not considered to be a local hazard since groundwater levels in Moreno Valley are far below the surface (MVGP p. 6-19). However, portions within the MDP Watershed are underlain with young alluvial fan deposits that lie within a moderate liquefaction hazard zone (Leighton, p. 6). The proposed Project Facilities will be designed and constructed to withstand expected ground failure, including liquefaction. Facility-specific geotechnical reports will be prepared as part of the final design for the individual Project Facilities. All recommended measures outlined by the geotechnical engineer in the geotechnical report will be incorporated into the final design and construction of the Project Facilities.

Additionally, the proposed Project does not provide habitable structures. The District's routine inspection and maintenance activities will ensure that the local Project Facilities are repaired if damage does occur during a seismic-related ground failure, including liquefaction. **Therefore, the Project is anticipated to have a less than significant impact.**

## Landslides

The Project site is relatively flat, with an elevation ranging of approximately 1,500 feet to 2,400 feet above mean sea level. Loose rocks might roll down mountain slopes during strong ground shaking, specifically the granitic boulders on the mountains located at the northern and southern margins of the MDP Watershed (MVGP, p. 6-19). However, the Project is not located on a hillside and will be installed at or below the ground surface. Regarding mudflows from the canyons, the two proposed debris basins will entrap mud, rocks, and sediments, within the Moreno MDP. This will allow only relatively desilted water to continue downstream within the Moreno MDP. Additionally, the proposed Project does not provide habitable structures. **Therefore, potential impacts to people or structures due to landslides or mudflows are anticipated to have a less than significant impact.**

## Soil Erosion

The proposed MDP Facilities are generally located at or below ground surface and would not entail substantial changes in topography or create unstable soil conditions. The primary components of the Project will reduce erosion. The proposed Project has the potential to result in the short-term loss of top soil during construction due to runoff and soil erosion. This will be minimized, however, by compliance with the National Pollutant Discharge Elimination System (NPDES) general construction permit, which requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared before construction activities and implemented during construction activities. **The SWPPP will incorporate applicable Best Management Practices (BMPs) to minimize the loss of topsoil or substantial erosion, thus, potential impacts are considered less than significant.**

### Unstable Geologic Unit or Soil

Based on published geologic maps, the Moreno MDP Watershed is underlain by several surficial deposits and/or bedrock units. The major surficial deposits and bedrock units that are most likely to be encountered are the following: young alluvial-fan deposits (Qyf), old alluvial-fan deposits (Qof), very old alluvial-fan deposits (Qvof), landslide deposits (Qls), San Timoteo formation (Tss), granitic crystalline rocks-undifferentiated (gr), and heterogeneous granitic rocks (Khg) (Leighton, pp. 2 and 3). The proposed Project Facilities are mostly underlain by young and old alluvial deposits (Leighton, Figure 2). Alluvial soils can be unstable in that they can be prone to liquefaction, landslides, lateral spreading, collapse, and subsidence. Lateral spreading, subsidence, and collapse are discussed in this section.

**Potential impacts regarding landslides and liquefaction are found to be less than significant as discussed in under the subheadings “Liquefaction and Landslides.”**

The phenomenon of liquefaction may also produce lateral spreading of soils adjacent to a body of water or watercourse (Lake Perris and other water retention basins). Lateral spreading is therefore considered a liquefaction-induced ground failure whereby block(s) of surficial, intact natural or artificial fill soils displace laterally, downslope, or towards a free face along a shear zone that has formed within the liquefied sediment. The displacement of the ground surface associated with this lateral spreading may be on the order of several inches to several feet at the top of the slope and may affect areas well beyond the top-of-slope. Developments located further from the lake, retention basins, or drainage courses are anticipated to be at less risk from lateral spreading (Leighton, p. 7).

Subsidence is a lowering or collapse of the ground. Ground fissuring typically develops along previous established planes of weakness such as active and possibly potentially active fault traces as well as along steep buried contacts between bedrock to recent alluvial soils. The active San Jacinto fault may develop fissuring along the fault trace during a significant seismic event or groundwater elevation change (Leighton, p. 6).

Collapsible soils are those that appear to be strong and stable in their natural (dry) state, but which can rapidly consolidate under wetting, generating large and often unexpected settlements. This collapse (or sometimes referred to as ‘hydro-collapse’) potential can be evaluated in the laboratory on undisturbed soil samples in accordance with ASTM Test Method D4546. Based on past projects in this area, the near surface alluvial soils (upper 10 to 20 feet) are potentially ‘hydro-collapsible’ (up to 10 percent collapse/vertical settlement). Therefore, the facility-specific geotechnical reports prepared during the design phase for the individual MDP Facilities that are located within areas containing upper/near surface alluvial fan deposits, shall include an investigation of the potential for ‘hydro-collapse’ within the upper 10 to 20 feet of soil and identify what, if any, measures or design considerations are required (Leighton, p. 8).

Therefore, the proposed MDP Facilities will be designed and constructed to withstand lateral spreading, subsidence, collapsible soils, and any other potential soil instability. Facility-specific geotechnical reports will be prepared as part of the final design for the individual MDP Facilities. All recommended measures outlined in the facility-specific geotechnical reports will be incorporated into the final design and



construction of the Project Facilities. **Therefore, at a programmatic level, potential impacts to life or property due to unstable soils are considered less than significant.**

### Expansive Soil

Expansive soils are those that expand when water is added, and shrink when they dry out. Based on past projects within specific areas of the Project, expansive soils may be encountered within the young and old alluvial deposits. The Expansion Index (EI) of such soils is expected to vary from one location to another. However, soils with an EI greater than 51 per ASTM Test Method D4829, can be found locally within the interbedded silt and clay layers and be a significant impact to drainage structures (lined channels or box culverts) if found at foundation or below grade levels (Leighton, p. 8).

However, because facility-specific geotechnical reports will be prepared during the design phase for the individual MDP Facilities and the recommendations of such geotechnical reports will be incorporated into the Facilities' designs, the proposed MDP Facilities will be designed and constructed to withstand expansive soil and potential soil instability. **Therefore, at a programmatic level, potential impacts to life or property due to expansive soil are considered less than significant.**

### Soils Incapable of Adequately Supporting Structures, Fill or Other Improvements

The proposed MDP Facilities consist of detention basins, debris basins, soft- and hard-bottomed channels, and underground storm drains. The proposed MDP Facilities do not include any other structures, fill, or other improvements that would require supporting soils. **Therefore, no impacts are anticipated.**

#### 4.1.6 Hazards and Hazardous Materials

The following issues related to Hazards and Hazardous Materials were determined to be less than significant during preparation of the IS/NOP.

#### Routine Transport

During construction and future maintenance, some potential hazardous materials such as fuel, herbicides and pesticides will be used. These materials will be used in accordance with standard safety measures and regulations. Such measures and regulations are under the jurisdiction of numerous federal, state, and local agencies. At the federal level, such agencies and legislation include Environmental Protection Agency; Occupational Safety and Health Administration; Resource Conservation and Recovery Act; Hazardous Materials Transportation Act; Hazardous and Solid Waste Amendments Act; Comprehensive Environmental Response, Compensation, and Liability Act; Superfund Amendments and Reauthorization Act; Emergency Planning and Community Right-to-Know; and Code of Federal Regulations Titles 10, 29, 40, and 49. At the state level, such agencies and legislations include, but are not necessarily limited to: State Occupational Safety and Health Administration; California Environmental Protection Agency; Department of Fish and Game; Department of Transportation; Department of Toxic Substances Control; Air Resources Board; Regional Water Quality Control Board; Office of Emergency Services; State Office of Environmental Health Hazard Assessment; Hazardous

Material Management Act; Hazardous Waste Control Law; Emergency Services Act; Hazardous Materials Storage and Emergency Response; Safe Drinking Water and Toxic Enforcement Act of 1986; and the California Code of Regulations. Lastly, at the local level there is the Riverside County Hazardous Waste Management Plan. **Therefore, there will not be a significant hazard to the public or environment from the proposed Project.**

### Release of Hazardous Materials

See the discussion under the subheading "Routine Transport," above. **Impacts will be less than significant.**

### Vicinity of a School

The MDP Watershed is within Moreno Valley Unified School District and Val Verde Unified School District (MVGP, Figure 2-3, School District Boundaries). Because of the size of the MDP Watershed, the proposed Project Facilities will be within one-quarter mile of five existing schools, as identified below on **Table 4-B – Schools Along/Adjacent Proposed MDP Facilities**. Only one of the MDP Facilities will be constructed outside of Moreno Valley, the Ironwood Debris Basin, which has no schools located within a one-quarter mile (Google Earth).

**Table 4-B – Schools Along/Adjacent Proposed MDP Facilities**

School	Location
Moreno Elementary School	26700 Cottonwood Avenue
Ridge Crest Elementary School	28500 John F. Kennedy Drive
Landmark Middle School	15261 Legendary Drive
Mountain View Middle School	13130 Morrison Street
Valley View High School	13135 Nason Street
Source: Moreno Valley General Plan Final Environmental Impact Report, Table 5.13-2 Moreno Valley Unified School District Schools and Table 5.13-3 Val Verde Unified School District Schools, pp. 5.13-8 and 5.13-9.	

**Since hazardous materials will be handled in accordance with applicable regulations as discussed in the response under the subheading "Routine Transport," above, potential impacts resulting from hazardous emissions, materials, and wastes will be less than significant.**

### Hazardous Materials Site

According to the environmental regulatory database search that was performed by EDR, dated September 20, 2011. Sites identified within one mile of the proposed Project were evaluated for their potential to be encountered and/or unearthed during construction of proposed MDP Facilities. Seventy (70) sites were recorded on 24 database lists, but often individual sites are included on multiple lists. Of the 70 recorded sites, 21 are along or adjacent to the proposed MDP Facilities, as described below in

**Table 4-C – Hazardous Materials Sites Along/Adjacent Proposed MDP Facilities.** EDR's full report listing all of the identified sites is included as Appendix B to the IS/NOP, which is Appendix A of this Draft PEIR.

**Table 4-C – Hazardous Materials Sites Along/Adjacent Proposed MDP Facilities**

Site Address	Federal, State, and Local Databases	Description
O' Connell Calvin Motorsports 28411 Black Oak St	HAZNET	This site had waste oil and mixed oil disposed of through a recycler program.
11-150 Redlands Blvd	ERNS and CHMIRS	25 gallons of waste oil found abandoned at a park on 9/29/00. Waste contained by Riverside Co. Fire Department.
Hud Intown Properties 11266 Weber Ave	HAZNET	This site had household waste disposed of through a recycler program.
29305 Highland Blvd	CDL	Site where an illegal drug lab was operated or drug lab equipment and/or materials were stored.
11630 Redlands Blvd	CHMIRS and CDL	Site where an illegal drug lab was operated. Three 55-gallons drums of assorted hazardous drug waste, chemicals and trash was cleaned up by a contractor.
Sunnymead Poultry Ranch 29170 Ironwood Ave	HIST CORTESE, LUST, and HAZNET	This site had waste oil and mixed oil disposed of through a recycler program. An underground storage tank leak was reported on 3/30/94 of potential contaminants of diesel and gasoline affecting soil. Case was closed with no further action letter on 8/19/94.
Delbert Waddell 12170 Theodore St	HAZNET	This site had tank bottom waste disposed of through a recycler program.
12264 Redlands Blvd	CDL	Site where an illegal drug lab was operated or drug lab equipment and/or materials were stored.
Leni Axup 28011 White Sand Trail	HAZNET	This site had waste oil, mixed oil, and liquids with halogenated organic compounds $\geq 1,000$ mg/l disposed of through a recycler program.
United Housing 12472 Prairie Wind Trail	HAZNET	This site had household waste disposed of through a recycler program.
Icne Contractors 28900 Spruce Ave	HAZNET	This site had unspecified aqueous solution disposed of through a recycler program.

Site Address	Federal, State, and Local Databases	Description
Kern Ranch 12520 Redlands Blvd	HAZNET	This site had asbestos containing waste and other inorganic solid waste disposed of through a recycler program.
Highland Fairview Properties 12520 Redlands Blvd	HAZNET	This site had off-specification, aged or surplus organics, unspecified organic liquid mixture, other organic solids, and unspecified aqueous solution disposed of through a recycler program.
28885 Fir St	CHMIRS	Drug lab bust by S.O. on 10/12/98. Drug lab waste was cleaned up by DTSC and S.O.
Eucalyptus High School #5 Site Eucalyptus Ave and Redlands Blvd	SCH and ENVIROSTOR	This site is a proposed or existing school and is being evaluated by DTSC for possible hazardous materials contaminations. Site entered into mitigation and brownfield reuse program addressing past use of agricultural orchards and row crops. School completed Preliminary Endangerment Assessment Report and Workplan receiving no further action on 02/06/07.
Eastern Municipal Water District 13400 Redlands Blvd	CA FID UST and SWEEPS UST	Has two active underground storage tanks since 10/29/92 containing motor oil. Additionally, an underground storage tank that holds waste oil since 10/29/92. No leaks reported.
Huston Ferguson Apiaries 27913 Cottonwood Ave	HAZNET	This site had unspecified organic liquid mixture disposed of through a recycler program.
Alessandro Blvd and Redlands Blvd	ERNS and CHMIRS	Two abandoned 5-gallon buckets found next to the road on 12/13/11. Waste cleaned up by County Health.
Easter Market at 29010 Alessandro Blvd	LUST, UST, SWEEPS UST, HAZNET, and CA FID UST	Has four active underground storage tanks since 10/29/92 containing two regular unleaded and two leaded fuel. No leaks reported. An underground storage tank leak was reported on 3/30/05 of potential contaminants of gasoline affecting soil. Case was completed and closed on 10/5/05. This site had other organic solids disposed of through a recycler program.
14101 Oliver St	CDL	Site where an illegal drug lab was operated or drug lab equipment and/or materials were stored.

Site Address	Federal, State, and Local Databases	Description
EF Aranda's Mobile Maintenance Mechanic 28993 Maltby Ave	HAZNET	This site had waste oil and mixed oil disposed of through a recycler program.
Dr Horton 27000 Cactus Ave	HAZNET	This site had latex waste disposed of through a recycler program.
Riverside County Regional Medical Center 26520 Cactus Ave	HAZNET, UST, RCRA-LQG, and FINDS	This hospital is a large quantity generator that generates 1,000 kg or more of hazardous waste during any calendar month. Hazardous waste includes barium, silver, a corrosive waste, and an ignitable waste. There are no reported violations found. Also, this site has photochemicals / photoprocessing waste, laboratory waste chemicals, unspecified organic liquid mixture, empty containers less than 30 gallons, off-specification, aged or surplus organics, and other waste disposed of through a recycler program. A record of one underground storage tank is listed; however, no mention of its contents or of a reported spill.
<p>DTSC = Department of Toxic Substances Control. S.O. = Special Operations.</p> <p>Federal Databases: ERNS = Emergency Response Notification System. FINDS = Facility Index System. RCRA-LQG = Resource Conservation and Recovery Act-Large Quantity Generators.</p> <p>State and Local Databases: CA FID UST = Facility Inventory Database. CDL = California Drug Labs. CHMIRS = California Hazardous Material Incident Report System. ENVIROSTOR = DTSC's Site Mitigation and Brownfields Reuse Program Database. HAZNET = Hazardous waste manifests received by DTSC. HIST CORTESE: List designated by DTSC, Integrated Waste Board, and State Water Resource Control Board. LUST = Leaking Underground Storage Tank Incident Reports. SCH = Proposed and existing school sites being evaluated by DTSC. SWEEPS UST = Statewide Environmental Evaluation and Planning System. UST = Underground Storage Tank.</p>		

Based on the information provided in the EDR report these sites do not pose a potential significant hazard to the public or environment. Most of records are listing of sites that have participated in hazardous waste recycling. Those sites with previous leaking storage tanks have been closed with no further action. Therefore, the proposed Project Facilities do not pass through a known contaminated site that would create a significant hazard to the public or the environment. The majority of the proposed Project will be constructed within rights-of-ways and other previously disturbed areas. **Therefore, there will not be a significant hazard to the public or environment from the proposed Project.**

**Vicinity of an Airport**

The closest public or private airport to the Project site is March Joint Air Reserve Base which is located approximately 2.5 miles west of the Project site. However, the Moreno Watershed lies outside of the

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

airport influence area boundary. Therefore, the Project would not result in a safety hazard for people working within the MDP Watershed. **No impacts are anticipated.**

### Vicinity of Private Airstrip

See the discussion under the subheading “Vicinity of an Airport,” above. **No impacts are anticipated.**

### Emergency Response/Evacuation Plan

Any potential hazard in Moreno Valley resulting from a manmade or natural disaster may result in the need for evacuation. The Emergency Management Office within the Moreno Valley Fire Department prepares the Emergency Operations Plan (EOP) and uses the Standardized Emergency Management System when responding to emergencies. The EOP identifies resources available for emergency response and establishes coordinated action plans for specific emergency situations including earthquake, fire, major rail and roadway accidents, flooding, hazardous materials incidents, terrorism, and civil disturbances, etc. (EOP, p. 5).

However, implementation of the proposed Project will not reconfigure current roadways that would result in inadequate emergency access. Construction of certain Project Facilities may require temporary closure of a travel lane; however, access will be maintained throughout the construction activities. Additionally, when the proposed Project is constructed in conjunction with the ultimate street improvements, the Project will provide protection from the 100-year flood discharge and alleviate the primary sources of flooding within the MDP Watershed. **Therefore, the proposed Project will not impair or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts will be less than significant.**

### Wildland Fires

Reche Canyon Debris Basin and Line K will be in a very high fire risk area and Ironwood Debris Basin in a substantial fire risk area as identified in the MVGP FEIR (**Figure 5.5-2, Floodplains and High Fire Hazard Areas**). However, the Project is primarily within urbanized areas and will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. Additionally, the Moreno MDP Facilities transport flood waters and will be impervious to damage from wildland fires. **Impacts will be less than significant.**

### 4.1.7 Hydrology and Water Quality

The following issues related to Hydrology and Water Quality were determined to be less than significant during preparation of the IS/NOP. The analysis of other Hydrology and Water Quality issues is presented in Section 5.4 of the Draft PEIR.

### Alter Drainage Pattern & Soil Erosion

The Project proposes two debris basins that will entrap mud, rocks, and sediments within the Moreno MDP. This will allow only relatively desilted water to continue downstream within the Moreno MDP. As discussed previously under the subheading “Soil Erosion,” the proposed Project has the potential to

result in the short-term loss of top soil during construction due to runoff and soil erosion. This will be minimized, however, by compliance with the NPDES General Construction Permit which requires that a SWPPP be prepared before construction activities and implemented during construction activities. **The SWPPP will incorporate applicable BMPs to minimize the loss of topsoil or substantial erosion; thus, potential impacts will be less than significant.**

### **Exceed the Capacity of Storm Water Drainage Systems**

The proposed Project will be designed to prevent the overflow of existing and proposed MDP Facilities through the design and construction of new and/or revised facilities. **Impacts will be less than significant.**

### **Place Housing Within a 100-Year Flood Hazard Area**

No housing is proposed as part of the Project; therefore, no impacts are anticipated.

### **Failure of a Levee or Dam**

Dam inundation is a potential flood hazard within portions of the Moreno Valley planning area. This condition is based on the assumption of instantaneous failure of a dam with the reservoir at or near its full capacity. Two locations of concern are Poorman Reservoir (Pigeon Pass Reservoir) and Lake Perris. Failure of the dam at Poorman Reservoir could result in extensive flooding downstream. However, the reservoir does not retain water throughout the year and the risk of flooding due to dam failure is limited to the period during and immediately after major storms. (MVGP FEIR, p. 5.5-6) Failure of the dam at Lake Perris would only affect a very small area south of Nandina Avenue along the Perris Valley Storm Drain and the Mystic Lake area in the southeast corner of the planning area (MVGP FEIR, p. 5.5-4). Both of these locations are outside of the Moreno Watershed.

Additionally, the primary purpose of the proposed Project is to control flooding associated with storm water runoff within the MDP Watershed. The proposed basins are expected to be primarily constructed below the existing ground surface. When embankments are required, they will be designed and constructed in accordance with standard engineering and seismic criteria to minimize the risk of failures. The proposed Project does not include construction of a levee or dam. Standard inspection and maintenance activities will ensure that any damaged facilities are repaired. Finally, the proposed basins would mostly be incised, with a maximum embankment height of approximately six feet, and would only impound floodwaters temporarily during large and infrequent storm events. Moreover, floodwaters in contact with that portion of the basin embankment would have a maximum drawdown time of approximately 24-hours. Thus, the likelihood of flooding due to a failure from an earthquake while the basins contain storm water is remote, since the bulk of storm water would be below ground level.

**Potential impacts to people or structures from flooding as a result of a levee or dam failure is less than significant.**

### **Inundation by Seiche, Tsunami or Mudflow**

The Project is not located within an area that would be subjected to seiche, tsunami, or mudflow. As discussed under the subheading “Failure of a Levee or Dam,” above, the proposed basins will only store floodwaters temporarily during large and infrequent storm events thus limiting the potential for inundation that would impact people or structures. **Additionally, the proposed basins will be designed and constructed to District standards, which require slopes adjacent to storm water impoundment areas to be stable during storm events. Impacts will be less than significant.**

#### **4.1.8 Land Use and Planning**

The following issues related to Land Use and Planning were determined to be less than significant during preparation of the IS/NOP.

##### **Divide Established Community**

Underground storm drains by their very nature, do not divide communities. While open channels can divide communities, crossings for traffic, pedestrians, and wildlife will be provided to retain the connections from one side of the channel to the other. For these reasons, no impacts are anticipated.

##### **Conflict with Land Use Plan, Policy or Regulation**

The MDP Watershed lies within an area designated by MVGP as Residential (R1, R2, R3, R5, R10, R15, R5/15, and R20), Rural Residential, Hillside Residential, Residential/Office, Office, Commercial, Business Park/Light Industrial, Open Space, Floodplain, and Public Facilities land uses. The MDP Watershed lies within an area designated by Riverside County as Rural Residential, Rural Mountainous, Rural Community-Very Low Density Residential, Conservation Habitat, Open Space Rural, and Open Space Recreation land use designations. Installation of the proposed MDP Facilities would not affect the surrounding land use designations or other policies or regulations. In addition, Riverside County Ordinance No. 348, Section 18.2a(b), exempts public agency projects, such as this proposed Project, from County zoning regulations and the MVMC does not prohibit infrastructure in any zoning district. **For these reasons, no impacts are anticipated.**

#### **4.1.9 Mineral Resources**

The following issues related to Mineral Resources were determined to be less than significant during preparation of the IS/NOP.

##### **Known Mineral Resource**

According to the Riverside County General Plan, the proposed MDP Watershed is located within an area designated as Mineral Resource Zone-3 (MRZ-3), as determined by the State Mining and Geology Board (SMGB). This mineral resource zone includes areas where the available geologic information indicates that mineral deposits exist, or are likely to exist; however, the significance of the deposit is undetermined. According to the MVGP, the planning area does not have significant mineral resources (MVGP, p. 5.14-1). Additionally, there is only one inactive sand and gravel quarry on record within Moreno Valley, the Jack Rabbit Canyon Quarry near Quail Ranch Golf Course which is outside the MDP



Watershed (MVGP, pp. 4-4 and 7-14). The proposed Project Facilities are primarily within the road rights-of-way located at or below ground surface and will not preclude significant area from being mined, if resources occur. **The proposed Project is not located on a known important mineral resource recovery site; therefore, no impacts are anticipated.**

### Locally Important Mineral Resource

See discussion in Section 4.1.9.1, above. **No impacts are anticipated.**

#### 4.1.10 Noise

The following issues related to Noise were determined to be less than significant during preparation of the IS/NOP. The analysis of other Noise issues is presented in Section 5.5 of the Draft PEIR.

#### Permanent Ambient Noise

The increased noise levels associated with construction activities will not be permanent. Maintenance activities will be infrequent and short-term in nature and would not permanently increase noise levels in the MDP Watershed. Therefore, operation of the proposed Project will not create a substantial permanent increase in ambient noise above levels which already exist without the Project. **Impacts will be less than significant.**

#### Vicinity of Airport Plan

The MDP Watershed is not located within the vicinity (or within two miles) of a public airport or public use airport and lies outside of the airport influence area boundary. Additionally, as the Project will not result in the construction of new places of employment or residences, the Project will not involve placing people in a noisy environment near an airport or private airstrip. **For these reasons, no impact will occur.**

#### Vicinity of Private Airstrip

The closest airport is March Joint Air Reserve Base which is located approximately 2.5 miles west of the MDP Watershed. **The proposed Project is not located within two miles of a private airstrip; therefore, no impact will occur.**

#### 4.1.11 Population and Housing

The following issues related to Population and Housing were determined to be less than significant during preparation of the IS/NOP.

#### Induce Population Growth

Implementation of the proposed Project will not directly induce substantial population growth, as it does not include the construction of homes or businesses. A project could indirectly induce growth by removing barriers to growth, by creating a condition that attracts additional population or new economic activity, or by providing a catalyst for future unrelated growth in an area. While a project may have a potential to induce growth, it does not automatically result in growth. Growth can only happen

through capital investment in new economic opportunities by the public or private sectors. The land use policies established by Moreno Valley will regulate growth in the MDP Watershed. Growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if can be demonstrated that the potential growth significantly affects the environment in some other way.

Implementation of the MVGP land use policies and proposed developments will increase the need for storm drainage facilities and infrastructure contained in the proposed Project. The proposed MDP Facilities have been designed to convey storm water flows from areas planned for urban development within Moreno Valley. The MDP Watershed currently experiences periodic flooding due to the relatively flat topography of the area, and the inadequacy of the existing Moreno MDP Facilities. The proposed Project includes Project Facilities designed to attenuate peak-flow rates and create a more efficient storm water drainage system. Though the Project would alter the flow velocity and volume of storm water flows, the proposed Moreno MDP will result in decreased flood potential in the MDP Watershed. This is because the Moreno MDP Facilities have been sized in a comprehensive manner that takes into account the existing and proposed land uses within the proposed Moreno MDP Watershed. When constructed in conjunction with the ultimate street improvements, the Project will provide protection from the 100-year flood discharge and alleviate the primary sources of flooding within the Moreno MDP Watershed.

Additionally, the MVGP FEIR addressed potential impacts involving growth inducement from the implementation of policies and land use designations set forth in the MVGP. It was concluded that adoption and implementation of the MVGP would not indirectly induce substantial population growth through increased residential and non-residential development. This is because, the rate of population and housing growth resulting from the implementation of the MVGP, “would not differ substantially from recently experienced growth rates.” (MVGP FEIR, p. 5.12-2.) **Therefore, potential indirect impacts to population growth within the Moreno Watershed are considered less than significant.**

### **Displace Existing Housing**

The Project does not propose the displacement of any persons or housing, or necessitate the construction of replacement housing elsewhere. **No impacts are anticipated.**

### **Displace People**

See discussion under the subheading “Displace Existing Housing,” above. **For these reasons, no impacts are anticipated.**

### **4.1.12 Public Services**

The following issues related to Public Services were determined to be less than significant during preparation of the IS/NOP.

### Fire Protection

The nature of this Project generally does not require fire protection and will not necessitate the construction of new facilities or increase the demand on fire services. **Therefore, no impacts are anticipated.**

### Police Protection

The nature of this Project generally does not require police protection and will not necessitate the construction of new facilities or increase the demand on police protection services. **Therefore, no impacts are anticipated.**

### Schools

The nature of this Project generally does not require school services and will not necessitate the construction of new facilities or increase the demand on schools. **Therefore, no impacts are anticipated.**

### Parks

The nature of this Project generally does not require park services and will not necessitate the construction of new facilities or increase the demand on park services. Although, proposed MDP Facilities are within one-quarter mile of five parks, as identified below on **Table 4-D – Parks Along/Adjacent Proposed MDP Facilities** (MVGP FEIR and Google Earth), MDP facilities are not proposed to cross these parks. **Therefore, no impacts are anticipated.**

**Table 4-D – Parks Along/Adjacent Proposed MDP Facilities**

Park	Location
Morrison Park	26667 Dracaea Ave.
Moreno Valley Equestrian Park and Nature Center	11150 Redlands Blvd.
Ridge Crest Park	28506 John F. Kennedy Dr.
Vista Lomas Park	26700 Iris Ave.
Celebration Park	14875 Caliente Dr.
Source: Moreno Valley General Plan Final Environmental Impact Report, Table 5.13-4 Existing Parks and Recreational Facilities, pp. 5.13-13 and 5.13-14.	

### Other Public Facilities

There are no other public facilities that would be adversely impacted by implementation of the proposed Project. **Therefore, no impacts are anticipated.**

#### 4.1.13 Recreation

The following issues related to Recreation were determined to be less than significant during preparation of the IS/NOP.

**Increased Use of Existing Facilities**

The proposed Project does not involve new housing or employment opportunities that would directly generate users which would result in an increased use of existing parks or recreational facilities.

**Therefore, no impacts are anticipated.**

**Construction/Expansion of New Facilities**

The proposed Project does not include recreational facilities or involve the construction of housing or creation of employment opportunities that would directly generate users that would result in a need for construction or expansion of recreational facilities **Therefore, no impacts are anticipated.**

**4.1.14 Transportation and Traffic**

The following issues related to Transportation and Traffic were determined to be less than significant during preparation of the IS/NOP.

**Conflict with an Adopted Plan**

The MVGP Circulation Element identifies Level of Services standards “C” and “D” within the City of Moreno Valley roadway network. The exceptions to this standard are primarily located on Perris Blvd., Cactus Ave., and Frederick St./Pigeon Pass Rd. in the vicinity of SR 60 (MVGP, pp. 5-3–5-5).

The Riverside Transit Agency (RTA) has existing bus routes along Eucalyptus Avenue, Alessandro Avenue, Cactus Avenue, Iris Avenue, Nason Street and Moreno Beach Boulevard, portions of which lie within the Moreno Watershed. Currently, the locations of facilities in the MDP are conceptual. The Riverside County Flood Control District, Moreno Valley, and/or future developers of the Project Facilities will coordinate with the RTA during the final design stages of the Project Facilities. The MVGP does not identify any service standards for public transit or bikeway systems (MVGP, pp. 5-3–5-5).

The proposed Project is not a traffic-generating use. Temporary truck traffic will be incrementally increased on area roadways during the construction period. Ongoing maintenance will involve infrequent visits to the site, likely utilizing a light truck; however, this will not contribute to any significant increase in traffic on area roadways. Since the Project will not cause an increase in traffic that is considered substantial in relation to the existing traffic load and capacity of the street system, less than significant impacts are anticipated. Therefore, the Project does not include any factor that would cause a conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system. This includes all modes of transportation, taking into account mass transit and non-motorized methods of travel. **Impacts will be less than significant.**

**Conflict with an Adopted Congestion Management Program**

As described in Section 4.1.14.1, the MVGP Circulation Element identifies Level of Services standards “C” and “D” within the city of Moreno Valley roadway network (MVGP, pp. 5-4–5-5).

The city of Moreno Valley complies with the 2010 Congestion Management Program (CMP) that has been put in place by the Riverside County Transportation Commission (RCTC) (MVGP, p. 5-3). A portion of the proposed Project (Lines G-3, G-4, and F-2) is planned to be constructed near a CMP designated State Highway facility; however, this will not affect traffic along the highway.

There are no components of the proposed Project that would cause a substantial permanent increase in traffic, which would result in an individual or cumulative exceedance of an established level of service standard. There will be a temporary increase in trips associated with construction of the Project Facilities, and there will be a minor increase in trips associated with ongoing maintenance of the Project Facilities. Therefore, with respect to a Project-specific exceedance, either individually or cumulatively, of an established level of service standard, less than significant impacts are expected. Additionally, for the same reasons, the proposed Project will not conflict with the CMP, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways will occur as a result of the proposed Project.

**Impacts will be less than significant.**

### Design Feature Hazards

The proposed Project does not include any component that would alter existing roadway design features. The proposed Project does not include any component that would introduce new hazards to design features since the Project does not propose any new roadways. The Project is not proposing a new use that could introduce incompatible elements to area roadways. **Therefore, with respect to substantially increasing hazards due to a design feature or incompatible uses, no impact is anticipated.**

### Inadequate Emergency Access

Construction of the proposed Project will not reconfigure current roadways that would result in inadequate emergency access. Construction of certain Project Facilities may require temporary closure of a travel lane; however, access will be maintained throughout the construction activities. **Therefore, impacts will be less than significant.**

### Inadequate Parking

Adequate construction parking will be provided through construction staging areas to accommodate employee and construction vehicles. Once construction is completed the Project does not need parking. **Therefore, no impacts are anticipated.**

### Alternative Transportation

The proposed Project will not reconfigure any roadways or alternative transportation services. Proposed Project Facilities are within 100 feet of four Riverside Transit Agency (RTA) bus routes, Route 20, 35, 41, and 210 (RTA). Although construction of Project Facilities may require temporary closure of a traffic lane, such closure would be temporary and road access would be maintained or a detour provided. If access to a RTA bus route will be affected, then the party constricting the facility (e.g., District, Moreno

Valley, and/or private developer) would be required to coordinate with RTA in advance to maintain service in the area. **Therefore, impacts to alternative transportation services from the Project are considered less than significant.**

#### 4.1.15 Utilities and Service Systems

The following issues related to Utilities and Service Systems were determined to be less than significant during preparation of the IS/NOP.

##### Electricity

The nature of this Project generally does not require electricity services and will not necessitate the construction of new facilities or increase the demand for electricity services. **Therefore, no impacts are anticipated.**

##### Natural Gas

The nature of this Project generally does not require natural gas services and will not necessitate the construction of new facilities or increase the demand for natural gas services. **Therefore, no impacts are anticipated.**

##### Communication System

The nature of this Project generally does not require communication system services and will not necessitate the construction of new facilities or increase the demand for communication system services. **Therefore, no impacts are anticipated.**

##### Street Lighting

The nature of this Project generally does not require street lighting services and will not necessitate the construction of new facilities or increase the demand for street lighting services. **Therefore, no impacts are anticipated.**

##### Public Facilities

There are no other public facilities that would be adversely impacted by implementation of the proposed Project. **Therefore, no impacts are anticipated.**

##### New Storm Water Drainage Facilities

This Project is the result of the Moreno Watershed developing with a much higher density than originally anticipated, therefore, prompting the Flood Control and Water Conservation District to revise the master plan adopted in April 1991. The potential environmental impacts (such as those to biological resources, air quality, cultural resources) from implementation of the proposed Project are addressed within each respective issue in this Draft PEIR.

The construction of new or expanded non-Project Facilities may be needed. However, because the location, type, and size of such non-Project Facilities are not known at this time, they cannot be

addressed in this Draft PEIR. A separate CEQA review will be required for any non-Project Facilities that will connect to the proposed Project Facilities in the future. **Therefore, impacts are less than significant.**

### Sufficient Water Supplies

The proposed Project does not involve activities that will require new or expanded permanent water supplies. Construction of the proposed Project Facilities will necessitate short-term water use in order to provide for dust control. **Therefore, impacts are less than significant.**

### Adequate Wastewater Treatment Capacity

The proposed Project would not generate wastewater. No new wastewater facilities are required as a result of the proposed Project. **Therefore, no impacts are anticipated.**

### Sufficient Landfill Capacity

The proposed Project would not generate solid waste and will not require landfill service on a long-term basis. Construction waste will be limited to trash generated by construction crews plus minimal debris created during maintenance of Project Facilities. Demolition of existing structure may be necessary. Local landfills that have sufficient capacity to accept construction materials include the Riverside County Waste Management Department's Badlands Landfill, located approximately 1.5 miles north of State Route 60 near Ironwood Avenue and Theodore Street (MVGP FEIR, p. 5.13-35). The Badlands Landfill currently has a permitted maximum disposal capacity of 4,000 tons per day (CalRecycle Badlands) and received approximately 1,638 tons of waste per day in October 2011 (CalRecycle Badlands Tonnage). The remaining estimated capacity at Badlands Landfill is 43.9 percent with an expected closure date in 2024 (CalRecycle Badlands). Additionally, other County landfills in the area such as El Sobrante and Lambs Canyon Landfill can also serve the Project (MVGP FEIR, p. 5.13-35). **For these reasons impacts would be less than significant.**

### Solid Waste Regulations

As discussed above, the proposed Project will not generate large quantities of solid waste on a long-term basis. The disposal of construction waste will comply with all federal, state, and local status and regulations related to solid waste. Potential impacts will be less than significant.

## 4.2 Notice of Preparation Comment Letters

The public review period for the IS/NOP began on April 3, 2012, and ended on May 2, 2012; and a public scoping meeting was held on April 19, 2012, at Moreno Valley City Council Chambers, 14177 Frederick Street, Moreno Valley, California 92552. The agencies and interested parties that commented on the IS/NOP or at the scoping meetings, and a brief summary of the issues raised are presented in **Table 4-E – Comments Received in Response to the Notice of Preparation**. Copies of the comment letters are included in Appendix A.

**Table 4-E –Comments Received in Response to the Notice of Preparation**

Commenter	Location in Draft PEIR where Comment is Addressed
<i>Written comments received on the IS/NOP</i>	
California Department of Fish and Wildlife (CDFW) <sup>2</sup>	CDFW's concerns regarding biological resources are addressed in Section 5.2 – Biological Resources.  Cumulative impacts are analyzed in Section 5.2 – Biological Resources and Section 6.1 – Other CEQA Topics, Cumulative Impact Analysis. An alternatives analysis is discussed in Section 7 – Alternatives to the Proposed Project.
California Department of Toxic Substances Control (DTSC)	As discussed in Section 4.1.6 under the subheading "Hazardous Materials Sites," a search of environmental regulatory databases was completed for the Project as part of the IS/NOP and none of the proposed Project Facilities pass through a known or suspected contaminated site. Any hazardous material will be handled in accordance with all applicable regulations. No buildings are expected to be demolished as part of the Project.  Issues related to hazards and hazardous materials were determined to be less than significant during preparation of the IS/NOP and are not discussed further in the Draft PEIR.
California Department of Transportation (Caltrans)	Drainage is addressed in Section 5.4 – Hydrology and Water Quality. Applicable Encroachment permits and/or traffic control plans required from Caltrans are identified in Section <del>3.4.1</del> <u>3.6</u> – Required Permits and Approvals.
Federal Emergency Management Agency (FEMA)	The requested discussion regarding floodplain requirements is included in Section 5.4 – Hydrology and Water Quality.
Governor's Office of Planning and Research	There are no comments that required discussion in the Draft PEIR.
Metropolitan Water District of Southern California	Because Metropolitan's facilities are located outside of the Moreno MDP Watershed, there will be no impact to Metropolitan as a result of Project implementation. This issue will not be discussed further in the Draft PEIR.
Native American Heritage Commission (NAHC)	NAHC's concerns are discussed in Section 5.3 – Cultural Resources.
Soboba Band of Luiseño Indians	Soboba Band of Luiseño Indians concerns are discussed in Section 5.3 – Cultural Resources.

<sup>2</sup> Effective January 1, 2013, the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW), although its services and purpose has not changed. This document includes several references to CDFG and the Fish and Game Code, all of which coincide with the services, purpose and mission of the CDFW. Because applicable statutes and the CEQA Checklist have not yet been updated, this document and related technical reports refers to the CDFW as the CDFG.



Commenter	Location in Draft PEIR where Comment is Addressed
South Coast Air Quality Management District (SCAQMD)	The air quality/greenhouse gas analysis was prepared per SCAQMD methodology and is included in Appendix B of the Draft PEIR. The results of this analysis are summarized in Section 5.1 – Air Quality and Greenhouse Gas Emissions.  SCAQMD will be provided a copy of the Draft PEIR along with electronic versions of the modeling when the document is released for public comment. SCAQMD’s concerns are addressed in Section 5.1 – Air Quality.
Southern California Association of Governments (SCAG)	The regional significance of the Project is discussed in Section 2.5.1 – Introduction, Environmental Procedures.  The side-by-side comparison of RTP and CGV policies and the projects consistency, non-consistency, or non-applicability is provided in Section 6.5 – Other CEQA Topics, Consistency with Regional Plans.
<b>Comments received at the April 19, 2012, scoping meetings</b>	
Riverside County Department of Environmental Health – Vector Control	The discussion regarding vectors and flood control facilities is included in Section 4.3 – Areas of Controversy, below.
Roger Turner	These comments are addressed in Section 5.4 – Hydrology and Water Quality.
<b>Late Comments</b>	
Devlin Engineering <sup>3</sup> (on behalf of Multivac, Inc., the owner of property located at the northwest corner of Cactus Avenue and Redlands Boulevard)	The circulation of the IS/NOP is discussed in Section 1.1.2, and includes citations to the appropriate sections of the State <i>CEQA Guidelines</i> . The circulation was adequate and achieved legal requirements of the law.  The noticing requirements for review of the Draft PEIR and the District’s purpose in preparing master drainage plans is discussed in Section 4.3 – Areas of Controversy.  A discussion of other locations considered for the Cactus Basin is included in Section 7 – Alternatives to the Proposed Project.

**4.3 Areas of Controversy**

Three areas of controversy were identified during the NOP and public scoping process: mosquito abatement in unlined channels, CEQA notification, and the location of the Cactus Basin.

**Mosquito Abatement in Unlined Channels**

At the Agency scoping meeting held on April 19, 2012, at the District’s office, representatives of the Riverside County Department of Environmental Health’s Vector Control Program conveyed their concern regarding the Project’s proposed earthen Facilities, which can result in ponding that in turn attracts mosquitoes. The Vector Control Program representatives also raised the issue of the proposed earthen Facilities allowing for vegetation growth to occur, which requires increase in maintenance, pesticide use,

<sup>3</sup> The letter from Devlin Engineering is dated March 21, 2013 and includes as an attachment a copy of a letter with the same date addressed to the city of Moreno Valley regarding the World Logistics Center Draft EIR. The letter to Moreno Valley does not include comments regarding the contents of the Draft PEIR; therefore that letter is not addressed in this Draft PEIR.

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

and weed abatement. The Vector Control Program representatives expressed a preference for concrete-lined facilities, as these facilities are easier to maintain. Although from an engineering, economic, and maintenance perspective, a concrete-lined channel is more efficient than an unlined (soft bottom) channel, in recognition of regulatory requirements and potential environmental impacts regarding water quality, the Project includes soft bottomed channels.

In order to balance the need for effective vector control and comply with regulatory requirements regarding water quality, the California Department of Public Health and the Mosquito and Vector Control Association of California has collaborated to produce *Best Management Practices (BMPs) for Mosquito Control in California* (most recently published in July 2012). This document contains the recommendations of the California Department of Public Health and the Mosquito and Vector Control Association of California and sets forth actions to reduce mosquito production from permanent water sources, reduce or eliminate mosquito production from temporary water sources, and to reduce the potential for disease transmission to humans on their property. Specifically, these BMPs can reduce mosquito populations through a variety of means including (CDPH, pp. ii, iv):

- Reducing or eliminating breeding sites;
- Increasing the efficacy of biological control; and
- Decrease the amount of pesticides applied while increasing the efficacy of chemical control measures.

Federal and state environmental regulations require mitigation of the harmful effects of runoff water storms, irrigation, or other sources before entering natural waterways from point and non-point sources. Mitigation may include water capture, slowing flow velocity, reducing volume, and removal of pollutants. The size and variability of storm water infrastructure, inconsistent quantity and timing of water flows, and propensity to carry and accumulate sediment, trash, and debris, make these systems highly conducive to holding areas of standing water ideal for production of mosquitoes. Identification of the potential mosquito sources (often belowground) found within storm water infrastructure is often more difficult than the solutions needed to minimize mosquitoes.

The proposed MDP Facilities will be designed and maintained to incorporate the following recommended BMPs applicable to storm water management and associated infrastructure (CDPH, pp. 14-17):

#### **General Storm Water Management Mosquito Control**

- Design and maintain systems to fully discharge captured water in 96 hours or less.
- Include access for maintenance in system design.

#### **Storm Water Conveyance**

- Provide proper grades along conveyance structures to ensure that water flows freely.

**Storm Water Storage and Infiltration Systems (Aboveground)**

- Design structures so that they do not hold standing water for more than 96 hours to prevent mosquito development. Features to prevent or reduce the possibility of clogged discharge orifices (e.g., debris screens) should be incorporated into the design.
- Provide a uniform grade between the inlets and outlets to ensure that all water is discharged in 96 hours or less. Routine inspection and maintenance are crucial to ensuring the grade remains as designed.
- Avoid the use of electric pumps. They are subject to failure and often require permanent-water sumps. Structures that do not require pumping should be favored over those that have this requirement.
- Design distribution pumping and containment basins with adequate slopes to drain fully. The design slope should take into consideration buildup of sediment between maintenance periods.

**General Access Requirements for Storm Water Treatment Structures**

- All storm water treatment structures should be easily and safely accessible without the need for special requirements (e.g., Occupational Safety and Health Administration requirements for “confined space”). This will allow for monitoring and, if necessary, abatement of mosquitoes.
- Control vegetation (by removal, thinning, or mowing) periodically to prevent barriers to access.

Most of the open channel facilities as identified in the 1991 Moreno MDP are already constructed or currently in the plan check process. Unlined channels proposed by the Project include: Line F from approximately 350 feet south of Eucalyptus Avenue continuing south to the Cactus Basin; Line G from its confluence with existing Line G-6 southwest to Quincy Street and continuing south to Cactus Avenue; Line G-7 from the outlet of the Quincy Basin south of SR 60 continuing south to its confluence with Line G. The 1991 Moreno MDP identified Line K as a concrete trapezoidal channel; however, the Project proposes this channel section as a soft bottom channel.

These above-listed BMPs will assist with and facilitate vector control in Riverside County, specifically with the proposed MDP Facilities. It should also be noted that there is an environmental advantage to the earthen Facilities, or soft bottom, proposed by the Moreno MDP revision. These types of facilities are more environmentally-friendly alternatives that allow greater infiltration and better trapping of water pollutants such as sediment, nutrients, trace metals, oxygen-demanding substances, bacteria, oil and grease, and pathogens. The generated on-site flow from the Moreno Watershed will ultimately be discharged into Canyon Lake and Lake Elsinore, which do not meet water quality standards associated with its beneficial uses. Overflows from Lake Elsinore go into Temescal Creek, which then flow to Santa Ana River Reach 3. Canyon Lake is impaired for nutrients and pathogens, Lake Elsinore is impaired for nutrients, pathogens, and oxygen-demanding substances, and Santa Ana River Reach 3 is impaired for pathogens. For this reason, the proposed Moreno MDP Revision has been designed to not only address flood control but as water quality treatment to the maximum extent practicable for pathogens and

nutrients, which is assisted by the development of earthen Project Facilities. Further, the greater infiltration will increase groundwater recharge in the area, which is another environmental benefit.

Thus, while it is recognized the county's Department of Environmental Health's Vector Control Program prefers concrete lined facilities, implementation of appropriate and applicable BMPs will facilitate vector control needs in the Moreno Watershed and elsewhere, which is the objective of the Vector Control Program. The incorporation and development of the earthen, soft bottom channels are exceedingly important to achieving water quality goals and increasing groundwater supply, and therefore, are necessary design considerations and remain part of the proposed MDP Revision.

### CEQA Notification

It is the opinion of Devlin that notification should be provided to each "property owner affected by the project" when the Draft PEIR is available for review because publishing the notice in the paper is "completely inadequate."

The public review process for Draft EIRs is set forth in Section 15087 of the State *CEQA Guidelines*. With regards to notice, Section 15087(a) states (emphasis added), "...Notice shall be mailed to the last known name and address of all organizations and individuals who have previously requested such notice in writing, and shall also be given by at least one of the following procedures:

- 1) Publication at least one time by the public agency in a newspaper of general circulation in the area affected by the proposed project. If more than one area is affected, the notice shall be published in the newspaper of largest circulation from among the newspapers of general circulation in those areas.
- 2) Posting of notice by the public agency on and off the site in the area where the project is to be located.
- 3) Direct mailing to the owners and occupants of property contiguous to the parcel or parcels on which the project is located. Owners of such property shall be identified as shown on the latest equalized assessment roll.

The District provided notice of availability of the Draft PEIR by publication in the Press Enterprise, which is a newspaper of general circulation in Moreno Valley.

### District's Purpose in Preparing a Master Drainage Plan

A master drainage plan addresses the current and future drainage needs of a given community. The boundary of the plan usually follows regional watershed limits. The proposed facilities may include channels, storm drains, levees, basins, dams, wetlands or any other conveyance capable of economically relieving flooding problems within the plan area. The plan includes an estimate of facility capacity, sizes and costs. (RCFCWCD MDP/ADP)

MDP's are prepared for a variety of purposes. First, the plans provide a guide for the orderly development of the County. Second, they provide an estimate of costs to resolve flooding issues within a community. These plans are used by the District's Management, Zone Commissioners and Board of

Supervisors to determine Capital Project expenditures for each budget year. Finally, the plans can be used to establish Area Drainage Plan fees for a given community, which prevent existing taxpayers from having to shoulder the burden of land development costs.

### Identification of a Conceptual Basin Location Constitutes Taking without Compensation

The MDP Revision is a long range planning document; therefore, due to the conceptual nature of the MDP Revision; the extended timeline expected to actually build out District Facilities; and the fact that many Facilities may never actually come to fruition, it is far too speculative at this time to address any issues related to property acquisition for any individual properties. Additionally, if easements are required and/or property acquisition is required to construct any Facility, the CEQA document for the construction of said Facility will address any environmental impacts related to any required easements and/or property acquisitions. If District easements and/or property acquisition is required, the District will follow all applicable federal, state and local laws and regulations.

### Alternative Locations for the Cactus Basin

Devlin is not in agreement with the location of the Cactus Basin as shown on the Moreno MDP Revision (**Figure 3-2 – Proposed Project**) and opines that the location was requested by Moreno Valley to facilitate the World Logistics Center Project. Devlin suggested the following locations for this basin: keep the existing location at the northeast corner of Alessandro Boulevard/Merwin Street, south of Alessandro Boulevard and north of Brodiaea Avenue (on the World Logistics Center property), and a location bounded on the east by Redlands Boulevard, on the west by Wilmont Street, on the south by Cactus Avenue, and on the north by Brodiaea Avenue. Alternative basin locations are discussed in Section 7 – Alternatives to the Proposed Project.

## 4.4 Effects Found to be Less Than Significant as Part of the Draft PEIR Process

There are no environmental factors with effects found to be less than significant as part of the Draft PEIR process. All issues addressed evaluated in the Draft PEIR were determined to be less than significant with mitigation as discussed below.

### 4.4.1 Biological Resources

As discussed in Section 5.2, the Project's impacts will be reduced to less than significant based on compliance with Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and implementation of identified mitigation measures. Implementation of mitigation measures

Implementation of mitigation measure **MM BIO 1** will require general biological resources assessments for Project Facilities not constructed as part of private development projects for which a biological resources assessment has been conducted; **MM BIO 2** will require individual projects to conduct habitat assessments, including focused burrow surveys; **MM BIO 3** will require individual projects to conduct pre-construction surveys before ground disturbance and avoid take of active nests; **MM BIO 4** will require project-specific riparian/riverine surveys; **MM BIO 5** will require individual projects within areas of suitable riparian habitat to conduct protocol presence/absence surveys for the least Bell's vireo and require additional measures for positive surveys; **MM BIO 6** will require a qualified biologist to conduct

presence/absence surveys for listed fairy shrimp within potentially suitable habitat and require additional measures for positive surveys; **MM BIO 7** will require individual projects located within the MSHCP Los Angeles pocket mouse survey area to conduct a habitat assessment and require additional measures for positive surveys; **MM BIO 8** will require facility-specific jurisdictional delineations to determine whether features will be subject to the jurisdictions of the United States Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Game; and **MM BIO 9** will require seasonal avoidance of vegetation removal and/or nesting bird surveys to ensure that migratory birds (and their nests) will not be directly harmed. **Therefore, the Project will be in compliance with federal, state, and local laws, including MSHCP and CEQA, and potential impacts related to biological resources will be less than significant with mitigation.**

#### 4.4.2 Cultural Resources

As discussed in Section 5.3, the Project's impacts related to historic and archaeological resources were found to be less than significant within or adjacent to proposed Project Facilities. However, the proposed Project Facilities are conceptual at this time. The proposed MDP Facilities depicted in the Moreno MDP can change as more detailed information becomes available during the final design process. For example, the locations of underground utilities, new development patterns, right-of-way availability, or the results of subsequent focused biological surveys may necessitate a shift in alignment or change in facility type. Subsequent CEQA analysis would be required if the proposed MDP Facilities were to undergo changes in areas not covered by the cultural study.

Mitigation measure **MM CR 1**, requires the proponent for any specific proposed Project Facility to notify local Native American tribes before ground-disturbing activities and may allow tribal monitors to be present during grading, excavation, and other ground-disturbing activities. Mitigation measures **MM CR 2** and **MM CR 3**, include provisions for the accidental discovery of archaeological resources and human remains.

No unique geologic feature is known to exist and no fossils have been documented within or adjacent to the proposed Project Facilities. However, the Project footprint is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Ground-disturbing activities resulting from construction of the proposed Project could damage or destroy previously undocumented unique fossils, if located within the proposed Project Facilities. Mitigation measures **MM CR 4** through **MM CR 7**, outline specific measures that will be taken if certain soil types are present that support paleontological resources or any artifacts deemed to be rare, substantial, or otherwise, unique are unearthed during construction activities. **Therefore, potentially significant impacts on historical, archaeological, and paleontological resources will be less than significant with mitigation.**

#### 4.4.3 Hydrology and Water Quality

As discussed in Section 5.4, construction of the Project Facilities must comply with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from polluted storm water runoff. Site-specific projects are considered "new development and significant redevelopment projects" and are required to comply with the provisions of

the MS4 permit by preparing a site-specific SWPPP and WQMP. However, because Facility-specific projects entail only the construction of Moreno MDP Facilities, only a Facility-specific SWPPP is required. A WQMP is not required for MDP Facilities constructed as Facility-specific projects. In the unlikely event that a Facility-specific project entails less than one acre of disturbance and does not require preparation of a Facility-specific SWPPP, mitigation measure **MM HYD 1** will be implemented, which requires the preparation of an erosion control plan to identify necessary erosion control BMPs. Further, to avoid the potential for a specific MDP Facility to not operate as intended due to the timing or phasing of the MDP Facilities, **MM HYD 2**, which requires an adequate outlet system is available, will be implemented to ensure specific Facilities will operate adequately in conveying storm flows and runoff. **Therefore, potentially significant impacts on hydrology and water quality will be less than significant with mitigation.**

#### 4.4.4 Noise

As discussed in Section 5.5, the Project will incorporate mitigation measures to assure construction- and maintenance-related noise impacts resulting from Project implementation will not be substantial or significant. Mitigation measure **MM NOI 1** requires preparation of a Facility-specific construction noise analysis that includes an evaluation of groundborne vibration before the construction of any proposed Project Facility that: (i) is not being constructed as part of a private development project for which a Facility-specific construction noise analysis that includes an evaluation of groundborne vibration has been prepared and (ii) will entail construction less than 50 feet from an occupied residence. Mitigation measures **MM NOI 2** through **MM NOI 6**, are related to temporary construction-sourced noise. **MM NOI 2** limits the times during which construction may occur to the daytime hours during which humans are less sensitive. It also requires maximum possible setbacks from equipment and receivers. **MM NOI 3** requires that all utilized construction equipment has properly working factory-installed noise reduction device. **MM NOI 4** requires written notification be provided to all landowners, tenants, business operators, and residents within 50 feet of the construction site 30 days before the start of construction. **MM NOI 5** requires the use electricity from power poles instead of diesel- or gasoline-powered generators when technically feasible. **MM NOI 6** prohibits idling of vehicles and construction equipment in excess of three minutes, which will reduce the amount of noise generated by vehicles and equipment when not in use. **Therefore, potentially significant noise impacts will be less than significant with mitigation.**

#### 4.5 References

In addition to other documents, the following references were used in the preparation of this section of this Draft PEIR:

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- Ormsby, Chris, City of Moreno Valley Planning Department. Personal communication (via email to Jenny Cleary on August 1, 2012. [Cited as MV Planning]
- Riverside County Flood Control and Water Conservation District, *Master Drainage Plan and Area Drainage Plan*. (Available at <http://rcflood.org/MasterPlan.aspx>, accessed March 27, 2014.) [Cited as RCFCWCD MDP/ADP]
- Riverside Transit Agency, *2012-01 System Map*. (Available at [http://www.riversidetransit.com/home/images/stories/DOWNLOADS/PUBLICATIONS/SYSTEM\\_MAPS/2012-01%20System%20Map.pdf](http://www.riversidetransit.com/home/images/stories/DOWNLOADS/PUBLICATIONS/SYSTEM_MAPS/2012-01%20System%20Map.pdf), accessed December 2011.)



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## Section 5 – Potentially Significant Environmental Effects

CEQA requires consideration and discussion of significant environmental effects. Sections 15126–15126.2 of the *CEQA Guidelines* states, “All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation...an EIR shall identify and focus on the significant environmental effects of the proposed project.”

This section will address each environmental effect that was determined to be potentially significant during preparation of the Notice of Preparation prepared for this project (Appendix A). Each effect is organized into an issue area; those that will be analyzed are listed below:

- Air Quality and Greenhouse Gas Emissions
- Biological Resources
- Cultural Resources
- Hydrology and Water Quality
- Noise

The impact analyses of these environmental issues are discussed in Sections 5.1 through 5.5 of the Draft PEIR. Those issue areas that have less than significant adverse environmental effects without mitigation measures are discussed in **Section 4 – Environmental Effects Found Not to be Significant** of this Draft PEIR.

### Technical Studies

Technical studies in the areas of air quality, biological resources, cultural resources, and hydrology were produced providing detailed technical analyses that were used in this Draft PEIR. These documents are identified in **Section 2.6.3 – Project Technical Studies and Supporting Analyses**, and included as technical appendices on a CD attached to the Draft PEIR.

### Analysis Format

The Draft PEIR assesses how the proposed Project would impact these issue areas. Each environmental issue addressed in this Draft PEIR is presented in terms of the following subsections:

- **Setting:** Provides information describing the existing setting on or surrounding the Project site which may be subject to change as a result of the implementation of the Project. This setting describes the conditions that existed at the time the NOP was sent to responsible agencies and the State Clearinghouse.
- **Related Regulations:** Provides a discussion of the applicable regulations with respect to each environmental issue.
- **Significance Thresholds Criteria:** Provides criteria for determining the significance of Project impacts for each environmental issue.

- **Project Design Considerations:** Provides a discussion of the Project design considerations and features with respect to each environmental issue.
- **Environmental Impacts Before Mitigation:** Provides a discussion of the characteristics of the proposed Project that may have an effect on the environment; analyzes the nature and extent to which the proposed Project is expected to change the existing environment, and whether or not the Project impacts meet or exceed the levels of significance thresholds.
- **Proposed Mitigation Measures:** Identifies mitigation measures to reduce significant adverse impacts to the extent feasible.
- **Environmental Effects After Mitigation Measures are Implemented:** Provides a discussion of significant adverse environmental impacts that cannot be feasibly mitigated or avoided, significant adverse environmental impacts that can be feasibly mitigated or avoided, adverse environmental impacts that are not significant, and beneficial impacts.
- **Cumulative Environmental Effects after Mitigation Measures are Implemented:** Provides a discussion of cumulative environmental impacts resulting from implementation of the Project in conjunction with other future projects.

## 5.1 Air Quality and Greenhouse Gas Emissions

This section of the Draft PEIR evaluates Project-related impacts to air quality and greenhouse gas (GHG) emissions and is based on the *Air Quality and Greenhouse Gas Impact Analysis for the Moreno Master Drainage Plan Revision* (AQIA). The AQIA was conducted within the context of the California Environmental Quality Act (CEQA; California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *CEQA Air Quality Handbook* (1993) prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts to air quality. As recommended by SCAQMD and District staff, the California Emissions Estimator Model (CalEEMod™) version 2011.1.1 computer program was used to quantify Project-related emissions.

The following impact areas were found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A):

- Conflicting with or obstructing of implementation of the applicable air quality plan; and
- Creation of objectionable odors affecting a substantial number of people;

The following discussion addresses potential impacts related to:

- Violation of any air quality standard or contributing substantially to an existing or projected air quality violation;
- Cumulatively considerable net increases of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (*including releasing emissions which exceed quantitative thresholds for ozone precursor*);
- Exposure of sensitive receptors to substantial pollutant concentrations;
- Generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflicting with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

**As discussed in this section, the Project's potential to have a substantial adverse effect to air quality (both Project-specific and cumulative) is considered to be significant and a Statement of Overriding Considerations will be required prior to Project approval.**

### 5.1.1 Setting

#### Physical Setting

The proposed Project is located within the South Coast Air Basin (Basin), which is under the jurisdiction of the SCAQMD. The Basin consists of Orange County, coastal and mountain portions of Los Angeles County, as well as Riverside and San Bernardino counties (SCAQMD 1993, p. 2-1). Regional and local air quality within the Basin is affected by topography, atmospheric inversions, and dominant onshore flows. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto Mountains form natural

horizontal barriers to the dispersion of air contaminants. The presence of atmospheric inversions limits the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal pattern of decreasing temperature with increasing altitude; however, at some elevations, the trend reverses and temperature begins to increase as altitude increases. This transition to increasing temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical dispersion of pollutants. (SCAQMD 1993, p. A8-2.)

Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas to inland areas, which is most evident with the photochemical pollutants such as ozone formed under reactions with sunlight. (SCAQMD 1993, pp. A8-1–A8-2.)

### Climate

Terrain and geographical location determine climate in the Basin. The Project site lies within the terrain south of the San Gabriel and San Bernardino Mountains and north of the Santa Ana Mountains. The climate in the Basin is typical of southern California's Mediterranean climate, which is characterized by dry, warm summers and mild winters. Winters typically have infrequent rainfall, light winds, and frequent early morning fog and clouds that turn to hazy afternoon sunshine. (SCAQMD 1993, pp. A8-1–A8-2.)

The following factors govern microclimate differences among inland locations within the Basin: (1) distance of the mean air trajectory from the site to the ocean; (2) site elevation; (3) existence of any intervening terrain that may affect airflow or moisture content; and (4) proximity to canyons or mountain passes. As a general rule, locations farthest inland from the ocean have the hottest summer afternoons, the lowest rainfall, and the least amount of fog and clouds. Foothill communities in the Basin have greater levels of precipitation, cooler summer afternoons, and may be exposed to wind funneling through nearby canyons during Santa Ana winds. Terrain will generally steer local wind patterns. (SCAQMD 1993, pp. A8-1–A8-2.)

The Project site is located in the city of Moreno Valley and unincorporated Riverside County (**Figure 3-1 – Vicinity Map**), within the western portion of Riverside County in the Basin.

### Precipitation and Temperature

Annual average temperatures in the Basin are typically in the low to mid-60 degrees Fahrenheit. Temperatures above 100 degrees are recorded for all portions of the Basin during the summer months. (SCAQMD 1993, p. A8-1.)

The rainy season in the Basin is November to April. Summer rainfall can occur as widely scattered thunderstorms near the coast and in the mountainous regions in the eastern Basin. Rainfall averages vary over the Basin. The city of Riverside averages 9 inches of rainfall; the city of Corona averages 12.7

inches, while the city of Los Angeles averages 14 inches. Rainy days vary from 5 to 10 percent of all days in the Basin, with the most frequent occurrences of rainfall near the coast. (SCAQMD 1993, p. A8-1.)

### **Winds**

The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to the inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. Air stagnation may occur in the early evening and early morning during periods of transition between day and nighttime flows.

Approximately 5 to 10 times a year, the site vicinity experiences strong, hot, dry desert winds known as the Santa Ana winds. These winds, associated with atmospheric high pressure, originate in the upper deserts and are channeled through the passes of the San Bernardino Mountains and into the inland valleys. Santa Ana winds can last for a period of hours or days, and gusts of over 60 miles per hour have been recorded.

High winds, such as the Santa Ana winds, affect dust generation characteristics and create the potential for off-site air quality impacts, especially with respect to airborne nuisance and particulate emissions. Local winds in the Project area are also an important meteorological parameter because they control the initial rate of dilution of locally generated air pollutant emissions.

### **Categories of Emission Sources**

Air pollutant emissions sources are typically grouped into two categories: stationary and mobile sources. These emission categories are defined and discussed in the following subsections.

#### **Stationary Sources**

Stationary sources are divided into two major subcategories: point and area sources. Point sources consist of a single emission source with an identified location at a facility. A single facility could have multiple point sources located on site. Stationary point sources are usually associated with manufacturing and industrial processes. Examples of point sources include boilers or other types of combustion equipment at oil refineries, electric power plants, etc. Area sources are small emission sources that are widely distributed, but are cumulatively substantial because there may be a large number of sources. Examples include residential water heaters; painting operations; lawn mowers; agricultural fields; landfills; and consumer products, such as barbecue lighter fluid and hair spray. (SCAQMD 1993, p. 1-1.)

#### **Mobile Sources**

Mobile sources are motorized vehicles which are classified as either on-road or off-road. On-road mobile sources typically include automobiles and trucks that operate on public roadways. Off-road mobile sources include aircraft, ships, trains, and self-propelled construction equipment that operate off of public roadways. Mobile source emissions are accounted for as both direct source emissions (those directly emitted by the individual source) and indirect source emissions, which are sources that by themselves do not emit air contaminants but indirectly cause the generation of air pollutants by

attracting vehicles. Examples of indirect sources include office complexes, commercial and government centers, sports and recreational complexes, and residential developments. (SCAQMD 1993, p. 1-2.)

## Air Pollution Constituents

### Criteria Pollutants

Air pollutants are classified as either primary or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere. Examples of primary pollutants include carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>) and nitric oxide (NO),<sup>1</sup> sulfur dioxide (SO<sub>2</sub>), particulates (PM-10 and PM-2.5) and various hydrocarbons (HC) or volatile organic compounds (VOC), which are also referred to as reactive organic gases (ROG). The predominant source of air emissions expected to be generated by the proposed Project is vehicle emissions. Motor vehicles primarily emit CO, NO<sub>x</sub>, and VOC/ROG/HC.

Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. An example of a secondary pollutant is ozone (O<sub>3</sub>), which is one of the products formed when NO<sub>x</sub> reacts with HC in the presence of sunlight. Other secondary pollutants include photochemical aerosols. Secondary pollutants such as ozone represent major air quality problems in the Basin.

The Federal Clean Air Act of 1970 established the National Ambient Air Quality Standards (NAAQS). Six "criteria" air pollutants were identified using specific medical evidence available at that time, and NAAQS were established for those chemicals. The State of California has adopted the same six chemicals as criteria pollutants, but has established different allowable levels. The six criteria pollutants are: carbon monoxide, nitrogen dioxide, ozone, lead, particulates less than 10 microns in size, and sulfur dioxide. The following is a further discussion of the criteria pollutants, as well as volatile organic compounds.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing substances. Concentrations of CO are generally higher during the winter months when meteorological conditions favor the build-up of primary pollutants. (USEPA 2005, Homepage) Automobiles are the major source of CO in the Basin, although various industrial processes also emit CO through incomplete combustion of fuels. In high concentrations, CO can cause serious health problems in humans by limiting the red blood cells' ability to carry oxygen (SCAQMD 1993, p. 3-2).
- **Oxides of Nitrogen (NO<sub>x</sub>)** contribute to air pollution include nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>). NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO<sub>2</sub> is a reddish-brown gas formed by the combination of NO with oxygen. Combustion in motor vehicle engines, power plants, refineries, and other industrial operations, as well as ships, railroads, and aircraft, are the primary sources of NO<sub>x</sub>. NO<sub>2</sub> at atmospheric concentrations is a potential irritant and can cause

<sup>1</sup> NO<sub>2</sub> and NO are collectively known as oxides of nitrogen (NO<sub>x</sub>).

coughing in healthy people, can alter respiratory responsiveness and pulmonary functions in people with preexisting respiratory illness, and potentially lead to increased levels of respiratory illness in children (USEPA 2005, Homepage).

- **Ozone (O<sub>3</sub>)** is a colorless toxic gas that irritates the lungs and damages materials and vegetation. During the summer's long daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between NO<sub>2</sub> and VOC which results in the formation of O<sub>3</sub>. Conditions that lead to high levels of O<sub>3</sub> are adequate sunshine, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer (all of which are characteristic of western Riverside County). Ozone represents the worst air pollution-related health threat in the Basin as it affects people with preexisting respiratory illness as well as reduces lung function in healthy people. Studies have shown that children living within the Basin experience a 10–15 percent reduction in lung function (SCAQMD 1993, p. 3-2).
- **Atmospheric Particulate Matter (PM)** is made up of fine solid and liquid particles, such as soot, dust, aerosols, fumes, and mists. PM-10 consists of particulate matter that is 10 microns or less in diameter, and PM-2.5 consists of particulate matter of 2.5 microns or less in size. Both PM-10 and PM-2.5 can be inhaled into the deepest part of the lung, contributing to health effects. The presence of these fine particles by themselves cause lung damage and interfere with the body's ability to clear its respiratory tract. These particles can also act as a carrier of other toxic substances. (SCAQMD 1993, p. 3-3.)

Sources contributing to particulate matter pollution include road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates the largest component of PM-10 particles in the area comes from dust (unpaved roads, unpaved yards, agricultural lands, and vacant land that has been disked). PM-2.5 particles are mostly manmade particles resulting from combustion sources. According to SCAQMD, one component of PM-2.5 pollution in Riverside comes from ammonium nitrate (NH<sub>4</sub>NO<sub>3</sub>) particulates. NO<sub>x</sub>, emitted throughout the Basin by vehicles, reacts with ammonia produced from livestock and horses to form ammonium nitrate. Organic carbon particles generated from paints, degreasers, and vehicles are another component of PM-2.5 pollution. The last notable constituent of PM-2.5 sources is elemental carbon, which is used as a surrogate for diesel particulates.

- **Sulfur dioxide (SO<sub>2</sub>)** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. SO<sub>2</sub> can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO<sub>2</sub> can cause symptoms such as shortness of breath and wheezing; and, with long-term exposure, lead to the exacerbation of existing cardiovascular disease and respiratory illnesses (USEPA 2005, Homepage). Although SO<sub>2</sub> concentrations have been reduced to levels well below state and federal standards, further reductions in SO<sub>2</sub> emissions are needed because SO<sub>2</sub> is a precursor to sulfate and PM-10.



- **Lead (Pb)** concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Health effects associated with lead include neurological impairments, mental retardation, and behavioral disorders. At low levels, lead can damage the nervous systems of fetuses and result in lowered IQ levels in children (USEPA 2005, Homepage). Although special monitoring sites immediately downwind of lead sources recorded very localized violations of the state standard in 1994, no violations have been recorded at these stations since 1996. Unleaded gasoline has greatly contributed to the reduction in lead emissions in the Basin. Since the proposed Project will not involve leaded gasoline, or other sources of lead emissions, this criteria pollutant is not expected to increase with Project implementation.
- **Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC)** are not classified as criteria pollutants and as such do not have any state or federal ambient air quality standards. VOCs are regulated; however, a reduction in VOC emissions reduces certain chemical reactions which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM-10 and lower visibility levels. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOCs because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere, even at low concentrations, are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, is a hydrocarbon component of VOC emissions that is known to be a human carcinogen. (SCAQMD 2005, p. 1-5.)

### Toxic Air Contaminants

Toxic air contaminants (TACs) are chemicals generally referred to as “non-criteria” air pollutants which are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. There are hundreds of air toxics, and exposure to these pollutants can cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. Effects on human health may be both chronic (i.e., of long duration) or acute (i.e., severe but of short duration). Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects can include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects usually result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which typically requires a latency period of 10-30 years after exposure to develop.

### Greenhouse Gas Emissions and Climate Change

Some gases in the atmosphere affect the Earth’s heat balance by absorbing infrared radiation. This layer of gases in the atmosphere functions much the same as glass in a greenhouse (i.e., both prevent the escape of heat). This is why global warming is also known as the “greenhouse effect.” Increased emissions of these gases, due to combustion of fossil fuels and other activities, have increased the greenhouse effect, leading to global warming and other climate changes. Gases responsible for global

climate change in the South Coast Air Basin (Basin) and their relative contribution to the overall warming effect are carbon dioxide (55 percent), chlorofluorocarbons (CFCs) (24 percent), methane (15 percent), and nitrous oxide (6 percent) (SCAQMD 2005, p. 1-8). It is widely accepted that continued increases in GHG will contribute to global climate change, although there is uncertainty concerning the magnitude and timing of future emissions and the resultant warming trend (SCAQMD 2005, p. 1-8). Human activities associated with industrial/manufacturing, utilities, transportation, residential, and agricultural sectors contribute to these GHG (CEC 2006a, p. 7). According to a report published by the California Energy Commission in December of 2006, transportation was responsible for 41 percent of the state's GHG emissions, followed by electricity generation for the most recent reporting year, 2004 (CEC 2006a, p. 8). In November 2007, CARB reported that transportation was 38 percent of the state's GHG emissions, followed by electricity generation for 2004 (CARB 2007, p. 7). Emissions of carbon dioxide (CO<sub>2</sub>) and nitrous oxide (N<sub>2</sub>O) are byproducts of fossil fuel combustion (CARB 2007, p. 15). Methane (CH<sub>4</sub>), a highly potent GHG, results from off-gassing associated with agricultural practices, landfills, and wastewater treatment (CARB 2007, pp. 19–22; IPCC 2007, p. 593).

“Stratospheric ozone depletion” refers to the slow destruction of naturally occurring ozone, which lies in the upper atmosphere (called the stratosphere) and which protects Earth from the damaging effects of solar ultraviolet radiation. Certain compounds, including CFCs, halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds, accumulate in the lower atmosphere and then gradually migrate into the stratosphere. In the stratosphere, these compounds participate in complex chemical reactions to destroy the upper ozone layer. Destruction of the ozone layer increases the penetration of ultraviolet radiation to the Earth's surface, a known risk factor that can increase the incidence of skin cancers and cataracts, contribute to crop and fish damage, and further degrade air quality (SCAQMD 2005, p. 1-8).

GHG and ozone-depleting gases include, but are not limited to, the following:

- **Carbon dioxide** – Carbon dioxide results from fossil fuel combustion in stationary and mobile sources. It contributes to the greenhouse effect, but not to stratospheric ozone depletion. In 2004, carbon dioxide accounted for approximately 84 percent of total GHG emissions in the state (CEC 2006a, p. 5). In the South Coast Air Basin (Basin), approximately 48 percent of carbon dioxide emissions come from transportation, residential, and utility sources which contribute approximately 13 percent each, 20 percent come from industry, and the remainder comes from a variety of other sources (SCAQMD 2005, p. 1-8).
- **Methane (CH<sub>4</sub>)** – Atmospheric methane is emitted from both non-biogenic and biogenic sources. Non-biogenic sources include fossil fuel mining and burning, biomass burning, waste treatment, geologic sources, and leaks in natural gas pipelines. Biogenic sources include wetlands, rice agriculture, livestock, landfills, forest, oceans, and termites. Methane sources can also be divided into anthropogenic and natural. Anthropogenic sources include rice agriculture, livestock, landfills, and waste treatment, some biomass burning, and fossil fuel combustion. Natural sources are wetlands, oceans, forests, fire, termites, and geological sources. Anthropogenic sources currently account for more than 60 percent of the total global emissions. (IPCC 2007, p. 593) It is a GHG and

traps heat 40–70 times more effectively than carbon dioxide. In the Basin, more than 50 percent of human-induced methane emissions come from natural gas pipelines, while landfills contribute 24 percent. Methane emissions from landfills are reduced by SCAQMD Rule 1150.1 – Control of Gaseous Emissions from Active Landfills. Methane emissions from petroleum sources are reduced by a number of rules in SCAQMD Regulation XI that control fugitive emissions from petroleum production, refining, and distribution. (SCAQMD 2005, p. 1-9.)

- **Other regulated greenhouse gases include Nitrous Oxide, Sulfur Hexafluoride, Hydrofluorocarbons, and Perfluorocarbons** – These gases all possess heat-trapping potentials hundreds to thousands of times more effective than carbon dioxide. Emission sources of nitrous oxide gases include, but are not limited to, waste combustion, wastewater treatment, fossil fuel combustion, and fertilizer production. Because the volume of emissions is small, the net effect of nitrous oxide emissions relative to carbon dioxide or methane is relatively small. Sulfur hexafluoride, hydrofluorocarbon, and perfluorocarbon emissions occur at even lower rates.
- **Chlorofluorocarbons** – CFCs are emitted from blowing agents used in producing foam insulation. They are also used in air conditioners and refrigerators and as solvents to clean electronic microcircuits. CFCs are primary contributors to stratospheric ozone depletion and to climate change. Sixty-three percent of CFC emissions in the Basin come from the industrial sector. Federal regulations require service practices that maximize recycling of ozone-depleting compounds (CFCs, hydro-chlorofluorocarbons and their blends) during the servicing and disposal of air-conditioning and refrigeration equipment. SCAQMD Rule 1415 – Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems requires CFC refrigerants to be reclaimed or recycled from stationary refrigeration and air conditioning systems. SCAQMD Rule 1405 – Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigant Processes requires recovery of reclamation of CFCs at certain commercial facilities and eliminates the use of some CFCs in the sterilization processes. Some CFCs are classified as TACs and regulated by SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants and SCAQMD Rule 1402 Control of Toxic Air Contaminants from Existing Sources. (SCAQMD 2005, p. 1-8 through 1-9.)
- **Halons** – These compounds are used in fire extinguishers and behave as both ozone-depleting and greenhouse gases. Halon production ended in the United States in 1993. SCAQMD Rule 1418—Halon Emissions from Fire Extinguishing Equipment requires the recovery and recycling of halons used in fire extinguishing systems and prohibits the sale of halon in small fire extinguishers. (SCAQMD 2005, p. 1-9.)
- **Hydro-chlorofluorocarbons** – HCFCs are solvents, similar in use and chemical composition to CFCs. The hydrogen component makes HCFCs more chemically reactive than CFCs, allowing them to break down more quickly in the atmosphere. These compounds deplete the stratospheric ozone layer, but to a much lesser extent than CFCs. HCFCs are regulated under the same SCAQMD rules as CFCs (SCAQMD 2005, p. 1-9).
- **1,1,1-trichloroethane or methyl chloroform (TCA)** – TCA is a solvent and cleaning agent commonly used by manufacturers. It is less destructive on the environment than CFCs or HCFCs, but its

continued use will contribute to global climate change and ozone depletion. TCA is a synthetic chemical that does not occur naturally in the environment. No TCA is supposed to be manufactured for domestic use in the United States after January 1, 2002 because it affects the ozone layer. TCA had many industrial and household uses, including use as a solvent to dissolve other substances, such as glues and paints; to remove oil or grease from manufactured metal parts; and as an ingredient of household products such as spot cleaners, glues, and aerosol sprays. SCAQMD regulates this compound as a toxic air contaminant under Rules 1401 and 1402. (SCAQMD 2005, p. 1-9.)

### Global Warming Potentials

Individual GHGs have varying global warming potential and atmospheric lifetimes. The Intergovernmental Panel on Climate Change (IPCC) developed the Global Warming Potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of individual GHGs is determined through a comparison with the GWP of CO<sub>2</sub>. CO<sub>2</sub> has a GWP of one. CH<sub>4</sub> has a GWP of 21, meaning that on a molecule by molecule basis, CH<sub>4</sub> has 21 times the global warming potential of CO<sub>2</sub>. CO<sub>2</sub> equivalents (CO<sub>2</sub>E) are the emissions of a GHG multiplied by the GWP. The CalEEMod program calculates the CO<sub>2</sub>E based on the GWPs reported in the IPCC Second Assessment Report (IPCC 1995, p. 22). **Table 5.1-A** shows the GWP and atmospheric lifetimes of various GHGs with relatively long atmospheric lifetimes from the IPCC 1995 report.

**Table 5.1-A – Global Warming Potentials and Atmospheric Lifetimes**

Gas	Atmospheric Lifetime	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide (CO <sub>2</sub> )	50-200	1
Methane (CH <sub>4</sub> )	12±3	21
Nitrous Oxide (N <sub>2</sub> O)	120	310
Hydrofluorocarbons (HFCs)		
HFC-23	264	11,700
HFC-32	5.6	650
HFC-125	32.6	2,800
HFC-134a	14.6	1,300
HFC-143a	48.3	3,800
Perfluoromethane (CF <sub>4</sub> )	50,000	6,500
Perfluoroethane (C <sub>2</sub> F <sub>6</sub> )	10,000	9,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	23,900
Source: IPCC 1995, Table 4		

### GHG Effects

As emissions of GHGs increase, temperatures in California are projected to rise significantly over the twenty-first century. The modeled magnitudes of the warming vary because of uncertainties in future emissions and in the climate sensitivity. According to the California Climate Change Center (CEC 2005, p. 7), there are three projected warming scenarios referred to as the low, medium, and high range. These expected increases from 2000 to 2100 vary from approximately 1.7°C–3.0°C (3.0°F–5.4°F) in the lower

range of projected warming, 3.1°C–4.3°C (5.5°F–7.8°F) in the medium range, and 4.4°C–5.8°C (8.0°F–10.4°F) in the higher range. To comprehend the magnitude of these projected temperature changes, over the next century, the lower range of projected temperature rise is slightly larger than the difference in annual mean temperature between Monterey and Salinas, which is 2.5°F, and the upper range of projected warming is greater than the temperature difference between San Francisco and San Jose, which is 7.4°F.

Other resource areas could be affected as a result of GHGs. For example, increased global average temperature will cause increases to ocean temperatures and the Pacific Ocean strongly influences the climate within California. As the temperature of the ocean warms, it is anticipated that rain will fall instead of snow in the Sierra Nevada during the wet season. Snowpack in the Sierra Nevada provides both water supply (runoff) and storage (within the snowpack before melting), which is a major source of supply for the state. According to a California Energy Commission report, the snowpack portion of the supply could potentially decline by 70–90 percent by the end of the 21st century (CEC 2006b, p. 6). This phenomenon could lead to significant challenges securing an adequate water supply for a growing population.

Some models indicate that the increased ocean temperature could result in increased moisture into the state; however, since this would likely increasingly come in the form of rain rather than snow in the high elevations, increased precipitation could lead to increased potential for flood events, placing more pressure on California’s levee/flood control system. Sea level has risen approximately 7 inches during the last century and, according to the CEC report, it is predicted to rise an additional 22–35 inches by 2100, depending on the future GHG emissions levels (CEC 2006b, p. 12), further straining the state’s water conveyance infrastructure.

Another impact of climate change is increased fire hazard. Fire is an important natural disturbance within many California ecosystems that promotes vegetation and wildlife diversity, releases nutrients, and eliminates heavy fuel accumulations that can lead to catastrophic burns. The changing climate could alter fire regimes in ways that could have social, economic, and ecological consequences. (CEC 2005, p. 22) As the existing climate throughout California changes over time, mass migration of species, or worse, failure of species to migrate in time to adapt to the changes in climate, could also result.

Many factors contribute to an area being at risk or structural fire in terms of the local fire departments’ capabilities to control them, including the construction size and type, built-in protection, density of construction, street widths, and occupancy size. Sources of wildfire risk in the Project area includes Reche canyon to the northwest and Lake Perris to the south. According to Figure 5.5-2, Floodplains and High Fire Hazard Areas of the *City of Moreno Valley General Plan FEIR* (MVGP FEIR), some Moreno MDP Facilities will be located within a high fire risk or substantial fire risk area while the majority of Facilities will be within urbanized areas. As stated in the IS/NOP (Appendix A), the Moreno MDP Facilities transport flood waters and will be impervious to damage from wildland fires.

Due to its weather, topography, and native vegetation, nearly all Southern California is at some risk from wildland fires also called wildfires. The extended droughts characteristic of California’s Mediterranean

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

climate result in large areas of dry vegetation that provide fuel for wildland fires which can spread into urban areas. Wildland-urban fires occur when a fire burning in wildland vegetation gets close enough to ignite urban structures. Areas of dense, dry vegetation, particularly in canyon areas and hillsides, pose the greatest wildland fire potential.

Conservative estimates indicate the risk of large statewide wildfires, characterized as approximately 500 acres, would rise almost 35 percent by 2050 and 55 percent by 2100 under the medium temperature described previously. Under the low warming range, the increased risk of wildfires is nearly cut in half. (CEC 2005, p. 22.)

Wildfires affect public safety and have the potential to significantly impact public health through smoke inhalation. For example, a survey of 26 percent of all tribal households on the Hoopa Valley National Indian Reservation in northern California showed a 52 percent increase in medical visits for respiratory problems during a large fire in 1999, compared to the same period of 1998. More than 60 percent of those surveyed reported an increase in respiratory symptoms during the smoke episode, and 20 percent continued to report increased respiratory symptoms two weeks after the smoke cleared. The projected increases in fire season severity could lead to more “bad air” days. However, quantitative estimation of the impacts of future wildfire events is extremely difficult. The impacts of any fire are unique to that event, and are influenced not only by the magnitude, intensity, and duration of the fire, but also the proximity of the smoke plume to a population. (CEC 2005, p. 30.)

Climate change will affect the health of Californians by increasing the frequency, duration, and intensity of ambient conditions conducive to air pollution formation, oppressive heat, and wildfires. Not only are average temperatures expected to increase, but the projected increase in extreme temperatures is also expected to increase which can cause the most serious health impacts. The modeled warming scenarios indicate that the number of extremely hot and extremely cold days will increase by 2100. For Riverside/San Bernardino metropolitan areas, the number of extremely hot days will increase approximately 40 to 80 days per year under the lower and higher warming scenarios, respectively. Recent studies suggest that no capacity for future adaptation to extreme heat is seen in San Bernardino/Riverside metropolitan areas. The results the San Bernardino/Riverside metropolitan areas actually indicate increased sensitivity during the hottest summers, which is counterintuitive to what might be expected in hot inland urban areas. Current investigations are underway seeking alternative explanations by taking greater account of socioeconomic factors (such as the availability of air conditioning, age structure of the population, and the housing stock) that might explain these non-intuitive results. If, for example, the San Bernardino/Riverside metropolitan area has a lesser proportion of air conditioned residents than other hot inland urban areas, increased heat could create an indoor environment that is almost intolerable and could lead to greater numbers of deaths. It is clear that a thorough investigation of these socio-economic issues is necessary to understand the increased sensitivity of San Bernardino/Riverside metropolitan area residents to heat during the hottest summers. (CEC 2006c, p. 6.)

#### **GHG Inventory**

Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, global climate change is a global problem and GHGs are global pollutants. Impacts of GHG emissions are a function of

their total atmospheric concentration and most GHGs are globally well mixed atmospheric constituents. This means that in contrast to the situation for criteria pollutants, the location of a particular GHG emission does not change its environmental impact.

Globally, for the years 2000 through 2005, the annual average emissions of fossil fuel-related carbon dioxide was 26.4 gigatons of CO<sub>2</sub> (one gigaton equals one billion MT) per year (IPCC 2007, Summary for Policy Makers p. 2). It should also be noted that the annual total U.S. emissions of GHG dropped 1.5 percent in 2006 from 7,181 million MT to 7,075 million MT due to warmer weather and decreased energy demand, according to the Energy Information Administration (EIA, p. 1). During the same timeframe, the U.S. economic output increased 2.9 percent (EIA, p. 2). This decline results in a GHG intensity reduction of 4.2 percent as a measure of gross domestic product (EIA, p. 2).

Worldwide, California is the 12<sup>th</sup> to 16<sup>th</sup> largest emitter of CO<sub>2</sub>, and is responsible for approximately two percent of the world's CO<sub>2</sub> emissions (CEC 2006a, p. i). In 2004, the most recent year for which statewide data is available, the CEC reported that California produced 492 million gross metric tonnes (one metric tonne equals 2,205 pounds) of carbon dioxide-equivalent (CEC 2006a, p. 5).

In January 2007, Assembly Bill 1803 transferred responsibility for developing and maintaining the state's GHG inventory from the California Energy Commission (CEC) to CARB. Using the CEC GHG inventory as a starting point, CARB staff determined the state's 1990 GHG emissions level by conducting a comprehensive review of all GHG emitting sectors. The seven sectors are: Transportation, Electricity Generation, Industrial, Residential, Agriculture, Commercial, and Forestry.

In November 2007, the CARB released its staff report establishing a statewide 1990 GHG emission level and a 2020 emission limit (CARB 2007). As part of this staff report, CARB staff recommended an amount of 427 million metric tonnes of carbon dioxide equivalent (MMTCO<sub>2</sub>e) as the total statewide GHG 1990 emissions level and 2020 emissions limit (CARB 2007, p. 2). The Board approved the 2020 limit on December 6, 2007. This limit is an aggregated statewide limit, rather than sector- or facility-specific. The staff report also included the statewide GHG emissions for 2004, which was 480 MMTCO<sub>2</sub>e (CARB 2007, p. 7).

While the inventory data numbers from the CEC and CARB are similar for 2004, these estimates have important differences. Emissions from individual sectors differ between CEC and CARB estimates by up to 30 percent due to updated data, methodologies, and differences in included and excluded emissions. Staff at CARB treated carbon stored in landfills differently than CEC by separately tracking stored carbon instead of considering it an emission sink within a landfill. In addition, the CARB estimate only includes intrastate aviation, whereas the CEC estimates include both interstate and intrastate flights. Staff also included emissions from international shipping and related port activities in California waters, whereas the CEC excluded all emissions from international ships. (CARB 2007, p. 9.)

### Monitored Air Quality

The Project area is located within SCAQMD Source Receptor Area (SRA) 24. The most recent published data for the SRA 24 is presented in **Table 5.1-B – Air Quality Monitoring Summary – 2002–2011 (SRA**

**24).** This data indicates that the baseline air quality conditions in the Project area include occasional events of very unhealthy air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area. It is encouraging to note that ozone levels have decreased in the last few years with approximately one-fifth or less days each year experiencing a violation of the state hourly ozone standard since 2000. Locally, no second stage alert (0.35 ppm/hour) has been called by SCAQMD in the last twenty years. In fact, the last second stage alert was in 1988 in Upland.

The California Air Resources Board (CARB) established a new 8-hour average California ozone standard of 0.07 ppm, effective May 17, 2006. The federal 1-hour ozone standard was revoked and replaced by the 8-hour average ozone standard of 0.08 ppm, effective in June 2005. The federal 8-hour ozone standard was recently revised from 0.08 ppm to 0.075 ppm and became effective on May 27, 2008.

The California NO<sub>2</sub> standards were amended and lowered the 1-hour standard from 0.25 ppm to 0.18 ppm and established a new annual standard of 0.030 ppm. The new standards became effective on March 20, 2008. A new federal 1-hour NO<sub>2</sub> standard of 0.100 ppm was established and became effective January 22, 2010.

Monitoring for PM-2.5 did not begin until 1999. Since then, the annual standard has been consistently exceeded as shown in **Table 5.1-B**. The 1997 federal annual average standard for PM-2.5 (15 micrograms per cubic meter [ $\mu\text{g}/\text{m}^3$ ]) was upheld by the U.S. Supreme Court in February 2001. Effective in December 2006, the federal 24-hour PM-2.5 standard was revised from 65  $\mu\text{g}/\text{m}^3$  to 35  $\mu\text{g}/\text{m}^3$ . The state annual average standard for PM-2.5 (12  $\mu\text{g}/\text{m}^3$ ) was finalized in 2003 and became effective on July 5, 2003. Additionally, the federal annual PM-10 standard was revoked in December 2006.

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**Table 5.1-B – Air Quality Monitoring Summary – 2002–2011 (SRA 24)**

	Pollutant/Standard Source: SCAQMD	Monitoring Year									
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
No. Days Exceeded	<b>Ozone:</b>										
	Health Advisory - 0.15 ppm	1	1	0	0	3	0	0	0	0	0
	California Standard:										
	1-Hour - 0.09 ppm	59	67	37	11	76	66	65	53	42	44
	8-Hour - 0.07 ppm <sup>a</sup>	--	--	47	18	84	88	94	88	82	77
	Federal Primary Standards:										
	8-Hour - 0.08 ppm (0.075 ppm) <sup>a</sup>	41	47	19	3	53	37(73)	41(77)	(67)	(50)	(54)
	Max 1-Hour Conc. (ppm)	0.147	0.155	0.128	0.126	0.17	0.139	0.142	0.125	0.122	0.125
	Max 8-Hour Conc. (ppm)	0.117	0.121	0.103	0.103	0.122	0.116	0.114	0.108	0.107	0.112
No. Days Exceeded	<b>Carbon Monoxide:<sup>b</sup></b>										
	California Standard:										
	1-Hour - 20 ppm	0	0	0	0	0	0	0	0	0	0
	8-Hour - 9.0 ppm	0	0	0	0	0	0	0	0	0	0
	Federal Primary Standards:										
	1-Hour - 35 ppm	0	0	0	0	0	0	0	0	0	0
	8-Hour - 9.0 ppm	0	0	0	0	0	0	0	0	0	0
	Max 1-Hour Conc. (ppm)	8.0	5	4	3	3	4	3	2	3	--
	Max 8-Hour Conc. (ppm)	3.0	3.7	3.0	2.5	2.1	2.9	2.0	1.9	1.8	1.4
No. Days Exceeded	<b>Nitrogen Dioxide:<sup>b</sup></b>										
	California Standard:										
	1-Hour - 0.18 ppm, (Federal -100 ppb)	0	0	0	0	0	0	0	0	0	0
	Federal Standard:										
	Annual Arithmetic Mean (AAM) (ppm) <sup>c</sup>	0.024	0.022	0.017	0.022	0.020	0.021	0.019	0.017	0.017	0.017
Max. 1-Hour Conc. (ppm)	0.10	0.09	0.09	0.08	0.08	0.07	0.09	0.08	0.06	0.06	
No. Days Exceeded	<b>Sulfur Dioxide:<sup>b</sup></b>										
	California Standards:										
	1-Hour – 0.25 ppm	0	0	0	0	0	0	0	0	0	0
	24-Hour – 0.04 ppm	0	0	0	0	0	0	0	0	0	0
	Federal Primary Standards:										
	24-Hour – 0.14 ppm <sup>d</sup>	0	0	0	0	0	0	0	0	0	0
	Annual Standard – 0.03 ppm <sup>e</sup>	No	No	No	No	No	No	No	No	No	--
	Max. 1-Hour Conc. (ppm)	0.02	0.02	0.02	0.02	0.01	0.02	0.01	0.01	0.02	0.05
Max. 24-Hour Conc. (ppm)	0.002	0.012	0.015	0.011	0.004	0.002	0.003	0.003	0.005	--	
No. Days Exceeded	<b>Suspended Particulates (PM10):</b>										
	California Standards:										
	24-Hour - 50 µg/m <sup>3</sup>	24	19	15	19	19	32	12	9	1	3
	Federal Primary Standards:										
	24-Hour – 150 µg/m <sup>3</sup>	0	0	0	0	0	0	0	0	0	0
Annual Arithmetic Mean (µg/m <sup>3</sup> ) <sup>f</sup>	45.2	43.9	41.4	39.2	45.0	54.8	38.3	34.8	28.0	29.2	
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	100	142	83	80	125	120	85	80	51	65	
No. Days Exceeded	<b>Suspended Particulates (PM2.5):<sup>b</sup></b>										
	California and Federal Primary Standards:										
	24-Hour – 65 µg/m <sup>3</sup> (35µg/m <sup>3</sup> ) <sup>g</sup>	8	8	5	4	1(32)	3(33)	0(14)	0(12)	(4)	(4)
	Annual Arithmetic Mean (µg/m <sup>3</sup> ) <sup>h</sup>	27.5	24.9	22.1	21.0	19.0	19.1	16.4	15.3	13.2	13.6
Max. 24-Hour Conc. (µg/m <sup>3</sup> )	77.6	104.3	91.7	98.7	68.5	75.7	57.7	47.2	46.5	60.8	

Note -- No data available. Ppm = parts per million; ppb = parts per billion

- a. 2004 is first year of SCAQMD records for state 8-hour Ozone standard. Federal ozone standard is 0.075 ppm, effective May 27, 2008.
- b. Metro Riverside County 1 air monitoring station (SRA 23) data summaries used because this pollutant not monitored for SRA 24.
- c. Federal NO<sub>2</sub> standard is AAM > 0.053; State NO<sub>2</sub> standard of AAM > 0.030 effective March 20, 2008.
- d. Federal SO<sub>2</sub> standard revoked 24-hour and AAM standards and established new 1-hour standard of 0.075 ppm, effective August 2, 2010.
- e. Yes or No indicating whether or not the standard has been exceeded for that year.
- f. Federal PM-10 standard is AAM > 50µg/m<sup>3</sup> was revoked December 17, 2006. State standard is AAM > 20µg/m<sup>3</sup>, effective July 5, 2003.
- g. Federal 24-hour PM-2.5 standard changed to 35µg/m<sup>3</sup> in 2006. Data for 2009 did not reflect old 24-hour standard.
- h. Federal PM-2.5 standard is annual average (AAM) > 15µg/m<sup>3</sup>. State standard is AAM > 12µg/m<sup>3</sup>.

## 5.1.2 Related Regulations

### Criteria Air Pollutants

The federal and state ambient air quality standards (AAQS) establish the context for the local air quality management plans (AQMP) and for determination of the significance of a project's contribution to local or regional pollutant concentrations. The federal and state AAQS are presented in **Table 5.1-B**. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness and persons engaged in strenuous work or exercise, all referred to as "sensitive receptors." SCAQMD defines a "sensitive receptor" as a land use or facility such as schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes. (SCAQMD 1993, p. 1-2.)

Both federal and state Clean Air Acts require that each non-attainment area prepare a plan to reduce air pollution to healthful levels. The 1988 California Clean Air Act and the 1990 amendments to the federal Clean Air Act (CAA) established new planning requirements and deadlines for attainment of the air quality standards within specified time frames which are contained in the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised, and approved over the past decade. (SCAQMD 1993, p. 2-4) The currently adopted clean air plan for Basin is the 1999 SIP Amendment, approved by the U.S. Environmental Protection Agency (USEPA) in 2000.

The AQMP for Basin establishes a program of rules and regulations directed at attainment of the state and national air quality standards. The AQMP control measures and related emission reduction estimates are based upon emissions projections for a future development scenario derived from land use, population, and employment characteristics defined in consultation with local governments. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans and/or population projections. The SCAQMD adopted an updated AQMP in June 2007, which outlines the air pollution measures needed to meet federal health-based standards for particulates (PM-2.5) by 2014 and for ozone by 2023 (SCAQMD 2007). The AQMP was forwarded to the CARB for review and approved on September 27, 2007. It was sent to the USEPA for its final approval and to be included as a revision to California's SIP on November 16, 2007. On November 22, 2010, USEPA published its notice of proposed partial approval and partial disapproval of the 2007 AQMP PM-2.5 Plan. The disparity exists primarily because the attainment demonstration relies too heavily (i.e., greater than 10 percent) on emissions reductions from several state rules that have not been finalized or submitted to USEPA for approval. However, according to the SCAQMD Board Meeting Agenda on March 4, 2011, the proposed revision to the PM-2.5 and Ozone SIP for the South Coast Air Basin and Coachella Valley will not adversely impact the 2007 SIP attainment demonstration, or the overall SIP reduction commitment.

The CARB maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of Basin within which the proposed Project is located is

designated as a non-attainment area for NO<sub>2</sub> under state standards, and as a non-attainment area for ozone, PM-10, and PM-2.5 under both state and federal standards.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. They include the application of water or chemical stabilizers to disturbed soils at least twice a day; covering all haul vehicles before transport of materials; restricting vehicle speeds on unpaved roads to 15 mph; and sweeping loose dirt from paved site access roadways used by construction vehicles. In addition, it is required to establish a vegetative ground cover on disturbance areas that are inactive within 30 days after active operations have ceased. Alternatively, an application of dust suppressants can be applied in sufficient quantity and frequency to maintain a stable surface. Rule 403 also requires grading and excavation activities to cease when winds exceed 25 mph.

### Toxic Air Contaminants

Toxic Air Contaminants are regulated under both federal and state laws. Federally, the 1970 Amendments to the Clean Air Act included a provision to address air toxics. California regulates toxic air contaminants through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code §39660, *et seq.*, and Part 6 Air Toxics “Hot Spots” Information and Assessment (§44300, *et seq.*). CARB, working in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA), identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant below a specific threshold based on its effects on health, or to the lowest concentration achievable through use of best available control technology for toxics (T-BACT). The program is administered by the CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by CARB.

### Greenhouse Gas Emissions

#### Federal

Previously the U.S. EPA (USEPA) had not regulated GHGs under the Clean Air Act because it asserted that the Act did not authorize it to issue mandatory regulations to address global climate change and that such regulation would be unwise without an unequivocally established causal link between GHGs and the increase in global surface air temperatures. In *Massachusetts v. Environmental Protection Agency et al.* (127 S. Ct. 1438 (2007)), however, the U.S. Supreme Court held that GHGs are pollutants under the Clean Air Act and directed the USEPA to decide whether the gases endangered public health or welfare. On December 7, 2009, the USEPA issued an Endangerment Finding under Section 202(a) of the Clean Air Act, opening the door to federal regulation of GHGs. The Endangerment Finding notes that GHGs threaten public health and welfare and are subject to regulation under the Clean Air Act. To date, the USEPA has not promulgated major regulations on GHG emissions, but it has begun to develop them.

The USEPA had also not moved aggressively to regulate GHGs because it expected Congress to make progress on GHG legislation, primarily from the standpoint of a cap-and-trade system. However, proposals circulated in both the House of Representative and Senate have been controversial and it may be some time before Congress adopts major climate change legislation. The USEPA's Endangerment Finding paves the way for federal regulation of GHGs with or without Congress. To date, Congress, under the Consolidated Appropriations Act of 2008 (HR 2764), has established mandatory GHG reporting requirements for some emitters of GHGs. On September 22, 2009, the USEPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the USEPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 MT or more a year of GHGs.

### **State**

#### **Title 24**

For decades, California's Building Codes have mandated energy efficiency. Since the production of energy uses large quantities of fossil fuels, efficient use of energy reduces GHGs. California Code of Regulations Title 24 Part 6; California's Energy Efficiency Standards for Residential and Nonresidential Buildings, were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The amendments made in October 2005 require new homes to use half the energy they used only a decade ago. In September 2008, the new 2008 standards were adopted to update the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (also known as the California Energy Code) and associated administrative regulations in Part 1. The amended 2008 standards went into effect in January 2010. Energy efficient buildings require less electricity, and electricity production by fossil fuels results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased greenhouse gas emissions.

The California Building Standards Commission adopted the nation's first green building standards on July 17, 2008. The California Green Building Standards Code, also known as the CalGreen Code, (proposed Part 11, Title 24) was adopted as part of the California Building Standards Code in the CCR. Part 11 establishes voluntary standards, that become mandatory in the 2010 edition of the Code (January 2011), on planning and design for sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and internal air contaminants.

#### **Assembly Bill 1493 (Pavley)**

In addition to building code requirements, California is leading the U.S. in regulating the emissions of GHGs directly. In July 2002, Governor Gray Davis signed California Assembly Bill (AB) 1493 (Pavley), which requires CARB to develop and adopt regulations that reduce GHG emitted by passenger vehicles and light duty trucks. Regulations adopted by CARB will apply to 2009 and later model year vehicles. CARB estimates that the regulation, if implemented, will reduce GHG emissions from the light duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030. The USEPA initially denied the Clean Air Act waiver required to implement AB 1493 on December 19, 2007.

However, in January 2009, President Barack Obama issued a directive to the USEPA to reconsider California's request for the waiver. The USEPA granted California's request for a Clean Air Act waiver on June 30, 2009.

#### **Executive Order S-03-05**

In June 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. This Order calls for the following GHG emission reduction targets to be established: reduce GHG emissions to 2000 levels by 2010; reduce GHG emissions to 1990 levels by 2020; and reduce GHG emissions to 80 percent below 1990 levels by 2050. S-3-05 also requires that the Secretary of the California Environmental Protection Agency (CalEPA) shall coordinate oversight of the efforts made to meet the targets with: the Secretary of the Business, Transportation and Housing Agency, Secretary of the Department of Food and Agriculture, Secretary of the Resources Agency, Chairperson of the Air Resources Board, Chairperson of the Energy Commission, and the President of the Public Utilities Commission. The Secretary of CalEPA leads a "Climate Action Team" made up of representatives from the agencies listed above to implement GHG emission reduction programs and report on the progress made toward meeting the statewide GHG targets that were established in the executive order. Per the Executive Order, the first Climate Action Team report to the Governor and the Legislature was released in March 2006.

#### **Assembly Bill 32**

In September 2006, Governor Arnold Schwarzenegger signed Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006. AB 32 directs the California Air Resources Board (CARB) to implement regulations for a cap on sources or categories of sources of GHG emissions. The bill requires that CARB develop regulations to reduce emissions with an enforcement mechanism to ensure that the reductions are achieved, and to disclose how it arrives at the cap. It also includes conditions to ensure businesses and consumers are not unfairly affected by reductions.

AB 32 requirements and milestones are as follows:

- June 30, 2007 – Identification of discrete early action greenhouse gas emissions reduction measures. Three early action measures were approved by CARB on June 21, 2007. Six other discrete early action measures were subsequently approved.
- January 1, 2008 – Establish a 1990 baseline GHG emissions level and approval of a statewide limit equivalent to that level. Adoption of mandatory reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 baseline.
- January 1, 2009 – Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, the CARB Board adopted the *Climate Change Scoping Plan* (Scoping Plan) at its meeting.
- January 1, 2010 – Adoption and enforcement of regulations to implement the "discrete" actions. The Board identified nine discrete early action measures including regulations affecting landfills, motor vehicle fuels, refrigerants in cars, tire pressure, port operations, and other sources in 2007

that included ship electrification at ports and reduction of high global warming potential (GWP) gases in consumer products. Regulatory development for the remaining measures is ongoing.

- January 1, 2011 – Adoption of GHG emissions limits and reduction measures by regulation.
- January 1, 2012 – GHG emissions limits and reduction measures adopted in 2011 become enforceable.

AB 32 codifies S-3-05's year 2020 goal by requiring that statewide GHG emissions be reduced to 1990 levels by the year 2020.

Under AB 32, CARB published its *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions* in California in October 2007. There are 44 early action measures, both regulatory and non-regulatory, and are currently underway or to be initiated by the CARB in the 2007 to 2012 timeframe. The early action measures apply to the fuels, transportation, forestry, agriculture, education, energy efficiency, commercial, waste, fuels, cement, oil and gas, electricity, and fire suppression sectors. As noted in the milestones above, nine of the early action measures are discrete early action measures that are regulatory and enforceable by January 1, 2010. CARB estimates that the 44 recommendations have the potential to result in GHG reductions of at least 42 MMTCO<sub>2</sub>E by 2020, representing approximately 25 percent of the 2020 target.

As discussed in the Scoping Plan (CARB 2008b), the projected total business-as-usual emissions for year 2020 (596 MMTCO<sub>2</sub>E) must be reduced approximately 30 percent to achieve CARB's approved 2020 emission target of 427 MMTCO<sub>2</sub>E. This is approximately 15 percent reduction in today's levels. The Scoping Plan identifies recommended measures for several GHG emission sectors and the associated emission reductions to meet the 2020 emissions target. Each sector has a different emission reduction target. The majority of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements for reducing California's GHG to 1990 levels by 2020 include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing state laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

**Renewable Portfolio Standard (RPS)**

A regulation establishing the 33 percent renewable electricity standard was adopted unanimously on September 23, 2010 by CARB. The standard will promote green jobs to construct and run renewable facilities in California, reduce hundreds of tons of harmful air pollution, insulate California's economy from the shock of volatile natural gas prices and help establish the state as a global leader in the research, development and manufacturing of clean, renewable energy sources.

**Senate Bill 1368**

Also in September 2006, Governor Arnold Schwarzenegger signed Senate Bill (SB) 1368 which calls for the adoption of a GHG performance standard for in-state and imported electricity generators to mitigate climate change. On January 25, 2007, the California Public Utilities Commission adopted an interim GHG emissions performance standard. This standard is a facility-based emissions standard requiring all new long-term commitments for baseload generation to serve California consumers with power plants that have emissions no greater than a combined cycle gas turbine plant. The established level is 1,100 pounds of CO<sub>2</sub> per megawatt-hour.

**Executive Order S-01-07**

Executive Order S-01-07 was approved by the Governor on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It also required that a Low Carbon Fuel Standard for transportation fuels be established for California which was approved by CARB on April 23, 2009. The regulation is designed to increase the use of alternative fuels, replacing 20 percent of the fuel used by cars in California with clean alternative fuels by 2020, including electricity, biofuels, hydrogen, and other options.

**Senate Bill 97 (CEQA Guideline Amendments)**

In August 2007, Governor Arnold Schwarzenegger signed Senate Bill (SB) 97, CEQA: Greenhouse Gas Emissions. The bill required the Office of Planning and Research (OPR), by July 1, 2009, to prepare guidelines for the feasible mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions, as required by CEQA, including, but not limited to, effects associated with transportation or energy consumption. The Natural Resources Agency was required to certify and adopt those guidelines by January 1, 2010. On June 19, 2008, OPR released an interim technical advisory for addressing climate change in CEQA documents (OPR 2008). The recommended approach is to identify and quantify project-related GHG emissions; determine its significance; and if the impact is found to be potentially significant, implement mitigation measures or alternatives that will reduce the impact below significance (OPR 2008). Further, the guidance states that the lead agency is not responsible for completely eliminating all project-related GHG emissions (OPR 2008).

Pursuant to SB 97, OPR released and the Natural Resources Agency adopted CEQA Guideline Amendments (Adopted Amendments) addressing GHG emissions on December 30, 2009 (OPR 2009). The amended State *CEQA Guidelines* went into effect in March 2010. As a result, CEQA now requires a discussion of potential climate change impacts for projects that require environmental analysis. Lead agencies are now required to consider the adverse effects of a project's cumulative contribution to GHG

emissions on the environment and determine if a project's climate change impact may be significant. The amended State *CEQA Guidelines* provide that significance thresholds may be quantitative, qualitative, or in the form of performance-based standards. Various agencies, including the CARB and SCAQMD, have been developing and drafting standards and guidelines for determining the cumulative significance of a project's GHG emissions on global climate change. However, there is currently no single accepted industry practice or methodology for analyzing GHG impacts under CEQA. The approach used in this analysis is to disclose the most recent regulatory activity. The Project's GHG emissions will be evaluated according to the draft thresholds proposed by SCAQMD, discussed in more detail below.

#### Senate Bill 375

On September 30, 2008, Governor Arnold Schwarzenegger signed Senate Bill (SB) 375 (Steinberg). SB 375 focuses on housing and transportation planning decisions to reduce fossil fuel consumption and conserve farmlands and habitat. This legislation is important to achieving AB 32 goals because GHG emissions associated with land use, which includes transportation, are the single largest source of emissions in California. SB 375 provides a path for better planning by providing incentives to locate housing developments closer to where people work and go to school, allowing them to reduce vehicle miles traveled (VMT) every year.

To achieve these goals, SB 375 will:

- Require the regional transportation plan for each of the state's major metropolitan areas to adopt a "sustainable community strategy" that will meet the region's target for reducing GHG emissions from cars and light trucks. These strategies would get people out of their cars by promoting smart growth principles such as: development near public transit; projects that include a mix of residential and commercial use; and projects that include affordable housing to help reduce new housing developments in outlying areas with cheaper land and reduce vehicle miles traveled (VMT).
- Create incentives for implementing the sustainable community strategies by allocating federal transportation funds only to projects that are consistent with the emissions reductions.
- Provide various forms of CEQA relief by allowing projects that are shown to conform to the preferred sustainable community strategy through the local general plans (and therefore contribute to GHG reduction) to have a more streamlined environmental review process. Specifically, if a development is consistent with the sustainable community's strategy and incorporates any mitigation measures required by a prior EIR, then the environmental review does not have to consider: a) growth-inducing impacts, or b) project-specific or cumulative impacts from cars on global climate change or the regional transportation network. In addition, a narrowly-defined group of "transit priority projects" will be exempt from CEQA review.

On September 23, 2010, CARB adopted regional targets for reducing GHG emissions in 2020 and 2035 associated with passenger vehicles in the state's 18 Metropolitan Planning Organizations (MPOs). The Southern California Association of Governments (SCAG) is the local MPO for the region. The SCAG targets are an eight percent reduction in per capita emissions by 2020 and a 13 percent reduction in per capita GHG emissions by 2035 (the 2035 target is conditioned on discussion with the MPO). With the



targets adopted, SCAG will develop and finalize a Sustainable Community Strategy (SCS) as part of the 2012 Regional Transportation Plan.

#### **CARB's Preliminary Draft Staff Proposal for Interim Significance Thresholds**

Pursuant to OPR's request to recommend significance thresholds, CARB released the Preliminary Draft Staff Proposal: Recommended Approaches for Setting Interim Significant Thresholds for Greenhouse Gases under CEQA on October 24, 2008 (CARB 2008a). The current recommendations are a sector-specific approach to develop thresholds for projects that result in a substantial portion of the state's GHG emissions. The preliminary interim thresholds are for two sectors: 1) industrial projects, and 2) residential and commercial projects. For industrial projects that do not qualify under existing CEQA statutory or categorical exemptions, CARB recommends that GHG-related impacts may be found to be insignificant if they: (1) meet interim performance standards for construction and transportation-related emissions; and (2) emit no more than 7,000 MTCO<sub>2</sub>E from non-transportation operational sources. CARB recommends that residential and commercial projects that do not qualify under existing CEQA statutory or categorical exemptions are presumed to have a less than significant impact related to climate change if: (1) construction activities meet an interim CARB performance standard for construction-related emissions; (2) operational activities: i) meet the California Energy Commission's Tier II Energy Efficiency goal; ii) meet an interim CARB performance standard for water use; iii) meet an interim CARB performance standard for waste; and iv) meet an interim CARB performance standard for transportation; and (3) the project will emit no more than a "to be determined" limit for MTCO<sub>2</sub>E per year. Although the CARB 2008 Draft Guidance indicated CARB's intent to provide final guidance to OPR before OPR issued its draft CEQA guidelines, CARB did not release final guidance before the CEQA Guideline Amendments were adopted in December 2009. Because no further guidance has been issued as of April 2014, these recommendations are not utilized in the Project's analysis; they are briefly addressed here for the purpose of full disclosure.

#### **Regional**

In addition to current rules and regulations which also address GHG, SCAQMD plans to provide guidance to local lead agencies on determining significance for GHG in their CEQA documents by convening a GHG CEQA Significance Threshold Working Group to work with SCAQMD staff on developing GHG CEQA significance thresholds. The SCAQMD began hosting monthly working group meetings in April 2008. The result of the October 2008 working group meeting was a *Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold* (SCAQMD 2008a) and the *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* (SCAQMD 2008b). The Draft Threshold is intended to be interim guidance until statewide significance thresholds or guidance is established. The proposed significance threshold is a tiered approach which allows for flexibility by establishing multiple thresholds to cover a broad range of projects.

SCAQMD proposes three tiers of compliance that may lead to a determination that impacts are less than significant, including: (1) projects with greenhouse gas emissions within budgets set out in approved regional plans, to be developed under the SB 375 process; (2) projects with GHG emissions that are below designated quantitative thresholds: (i) industrial projects with an incremental GHG emissions

increase that falls below (or is mitigated to be less than) 10,000 MTCO<sub>2</sub>E/yr; or (ii) commercial and residential projects with an incremental GHG emissions increase that falls below (or is mitigated to be less than) 3,000 MTCO<sub>2</sub>E/yr, provided that such projects also meet energy efficiency and water conservation performance targets that have yet to be developed; (3) projects that purchase GHG offsets which, either alone or in combination with one of the three tiers mentioned above, achieve the target significance screening level.

On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG significance threshold for projects where the SCAQMD is the lead agency. Currently, the Board has only adopted thresholds relevant to industrial (stationary source) projects.

Since December of 2008, the SCAQMD continued hosting the working group meetings and revised the draft threshold proposal several times although it did not officially provide these proposals in a subsequent document. The most recent working group meeting on September 28, 2010<sup>2</sup> proposed two options lead agencies can select from for GHG screening thresholds of significance in residential and commercial projects and proposes to expand the industrial GHG threshold for use by lead agency. Option 1 proposes a threshold of 3,000 MTCO<sub>2</sub>E/year for all residential and commercial projects; Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MTCO<sub>2</sub>e/year for residential projects; 1,400 MTCO<sub>2</sub>E/year for commercial projects; and 3,000 MTCO<sub>2</sub>E/year for mixed use projects. Although both Options are recommended, a lead agency is advised to use only one Option, and to use it consistently. The Project's GHG emissions will be compared to the Option 1 of the SCAQMD recommendations.

### 5.1.3 Significance Thresholds Criteria

The Initial Study Environmental Checklist form found in Appendix G of the CEQA Guidelines defines thresholds of significance for Air Quality and GHG Emissions. The Notice of Preparation for the PEIR included the Initial Study Environmental Checklist to show the areas being analyzed in the PEIR; refer to Appendix A of this PEIR. Accordingly and based on the IS, the Project may be considered to have a significant impact on Air Quality and GHG Emissions in the following areas if the Project would:

- (Threshold A) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- (Threshold B) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- (Threshold C) Expose sensitive receptors to substantial pollutant concentrations;
- (Threshold D) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and/or

<sup>2</sup> <http://www.aqmd.gov/ceqa/handbook/GHG/nov19mtg/nov19.html>

- (Threshold E) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

#### 5.1.4 Project Design Considerations

Design considerations refer to ways in which the proposed Project will limit or mitigate for potential impacts to air quality or GHG, through the design of the Project. No specific design measures have been implemented that would avoid or reduce potentially significant impacts to air quality or GHG. However, the Facilities identified in the Moreno MDP will be constructed in numerous phases, minimizing emissions and dust generation at any given time.

#### 5.1.5 Environmental Impacts before Mitigation

**Threshold A:** *Violate any air quality standard or contribute substantially to an existing or projected air quality violation.*

Air quality impacts can be divided into short-term and long-term impacts. Short-term impacts are usually related to construction and grading activities. Long-term impacts are usually associated with build-out conditions and long-term operations of a project. Both short-term and long-term air quality impacts can be analyzed on a regional and localized level. Regional air quality thresholds examine the effect of project emissions on the air quality of the Basin, while localized air quality impacts examine the effect of project emissions on the neighborhood around the Project site. The following information was derived from the AQIA which is found in Appendix B of this Draft PEIR.

#### SCAQMD's Regional Significance Threshold (RST) Analysis

The thresholds contained in the SCAQMD CEQA Air Quality Handbook are considered regional thresholds and are shown in **Table 5.1-C – SCAQMD CEQA Regional Significance Thresholds**. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.

**Table 5.1-C – SCAQMD CEQA Regional Significance Thresholds**

Emission Threshold	Units	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations	lbs/day	55	55	550	150	150	55

#### Short-Term Analysis

Short-term emissions consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing, and architectural coating (painting) operations.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph,

sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 miles per hour and establishing a permanent, and stabilizing ground cover on finished sites. In addition, projects that disturb 50 acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of the Project (analyzed facilities are less than 50 acres) a Fugitive Dust Control Plan or Large Operation Notification would not be required.

Short-term emissions were evaluated using the CalEEMod version 2011.1.1 computer program. The model evaluated emissions resulting from a reasonably foreseeable representative project (described later in this section). Construction timing and overall phasing sequence of the Moreno MDP Facilities are currently unknown; however, it is anticipated that construction would occur over many years. Due to funding availability, construction could potentially occur intermittently over the next 10 to 50 years. Actual air quality impacts would depend upon the types and lengths of MDP Facilities constructed and on the timing of multiple projects located in the same vicinity. By nature of a Programmatic EIR, project components have yet to be designed; thus, construction specifics are currently unknown, and therefore this analysis is somewhat speculative. **This analysis uses conservative assumptions in an attempt to provide a worst-case scenario and to not understate any potential impacts.**

For modeling purposes, it was assumed that construction of the representative project could start no sooner than September 2014. Although MDP Facility construction may not start in September 2014, assuming construction would occur in 2014 represents a conservative estimate of emissions because vehicle and equipment emissions generally improve over time. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that any other MDP Facility emissions are expected to be equal to or less than the estimated construction emissions modeled.

To provide a worst-case analysis of the Moreno MDP, a representative project was identified for construction of MDP Facilities. This representative project entails a typical (i.e., usual) construction scenario, including anticipated phasing, construction equipment, area disturbed during grading activities, and export of excavated material. **The representative project consists of site preparation, grading, and installation during construction of a storm drain, a trapezoidal channel (partially concrete-lined), and a detention basin.** Construction scenario assumptions were based on anticipated construction of and along Line F and Line F-2, which include the Cactus Basin (see **Table 3-B –Moreno MDP Facilities Overview**). These MDP Facilities were chosen as the representative project in order to determine the maximum reasonably foreseeable air quality impacts or worst-case scenario associated with construction of the MDP Facilities. Therefore, while actual construction could differ from the scenario analyzed in this Draft PEIR, the modeled analysis and estimated maximum daily emissions included herein represent a conservative assessment of air quality impacts associated with anticipated construction of MDP Facilities.

Modeled construction for the representative project consists of the following activities, which are assumed to be constructed sequentially for the purposes of this analysis:

Basin Excavation:

- Construction of a 28.5-acre basin is anticipated to require approximately two months, of which site preparation is assumed for one week and grading/excavation of the basin is assumed for 1.5 months, beginning no earlier than September 2014.
- Approximately 429,000 cubic yards of soil will be exported from the basin. A maximum disturbance area of four acres is assumed to occur per day.

Trapezoidal Channel (partially lined):<sup>3</sup>

- Construction of approximately 3,800 linear feet of open, trapezoidal channel will begin no earlier than September 2014 and is expected to last eight months.
- Site Preparation is expected to last two weeks and will occur before grading operations.
- Grading/excavation are anticipated to require two months. The footprint for the grading/excavation of the channel is anticipated to disturb 200 feet per day. Excavation to a depth of six feet is anticipated, resulting in approximately 74,400 cubic yards of soil export.
- Construction of the channel is anticipated to take approximately six months after grading/excavation.

Storm Drain Installation:

- Construction of an approximately 1,800-linear foot underground storm drain is expected to begin no earlier than September 2014 and last approximately one month.
- A trench depth of 10 feet is assumed, resulting in approximately 8,000 cubic yards of potential soil export.
- Approximately 25,200 square feet (0.58 acres) of surface area will be covered in asphalt once the pipeline is in place.

The construction equipment estimated to be used for each analyzed activity is shown in Appendix A of the AQIA and is based on the District's input and typical construction practices. The equipment mix is meant to represent a reasonably conservative estimate of construction activity. For the analysis, it was generally assumed that heavy construction equipment would be operating at the site for approximately 8 hours per day, 5 days per week. To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the modeling utilized the mitigation option of watering the representative project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions.

**Table 5.1-D** summarizes the estimated construction emissions for the representative project.

<sup>3</sup> Also referred to as soft-bottom channels in other sections of the Draft PEIR.

**Table 5.1-D – Unmitigated Estimated Maximum Daily Construction Emissions**

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Basin Excavation						
Site Preparation	3.35	27.55	14.69	0.03	1.24	1.17
Grading	69.69	787.87	380.70	1.23	1,028.41	37.52
Trapezoidal Channel Construction						
Site Preparation	0.92	6.67	5.50	0.01	0.40	0.36
Grading	15.55	153.12	81.39	0.22	184.29	9.66
Construction	0.09	0.69	0.66	0.00	0.12	0.04
Storm Drain Installation						
Grading	6.76	64.33	34.96	0.08	27.75	4.59
Paving	2.15	11.79	8.19	0.01	1.09	0.97
<b>Maximum</b>	<b>69.69</b>	<b>787.87</b>	<b>380.70</b>	<b>1.23</b>	<b>1,028.41</b>	<b>37.52</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>YES</b>	<b>No</b>	<b>No</b>	<b>YES</b>	<b>No</b>

Notes: See Appendix A of the AQIA for model output report. Numbers may not match due to rounding within the model. Results shown were modeled using the representative project, which is the maximum reasonably foreseeable air quality impacts, or worst-case scenario associated with implementation of the Moreno MDP.

As shown in **Table 5.1-D** above, criteria pollutant emissions from construction of the representative project will exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and PM-10, but will not exceed the thresholds for VOC, CO, SO<sub>2</sub>, or PM-2.5. The main source of NO<sub>x</sub> emissions are from on-road vehicle exhaust from soil hauling and construction equipment while the main source of PM-10 emissions is from hauling during basin and channel excavation activities.

Representative project modeling assumed that construction of MDP Facilities (**Table 5.1-D**) would occur sequentially (i.e. one after another). In the event two construction activities would overlap, the combined emissions from both activities would not exceed additional SCAQMD thresholds for criteria pollutants, with the exception of VOC emissions. If the two activities that would generate the greatest amount of emissions (i.e., basin excavation (grading) and trapezoidal channel grading) would occur simultaneously, then VOC emissions could be as high as 85 pounds per day. Accordingly, based on the SCAQMD's quantitative significance thresholds and the maximum emissions presented in **Table 5.1-D**, in addition to impacts from NO<sub>x</sub> and PM-10, significant VOC emissions, would result if two construction phases occurred concurrently. Please see the discussion under the heading "Threshold A Conclusion" for additional information regarding the significance determination and implementation of mitigation.

### Long-Term Analysis

Long-term air quality analysis addresses the post-construction impacts related to the Moreno MDP Facilities. Once an MDP Facility is constructed, it would require maintenance in order to retain flood control capacity. It is expected that the District will operate and maintain the MDP Facilities. Maintenance of storm drains and open channels typically consists of keeping those facilities and their side drains clear of debris and sediment, as well as repairing access roads and fences. On rare occasions, major repairs may be required following damaging storm events. Thus, major grading is not expected to routinely occur while maintaining the underground storm drains and open channels. In addition to maintenance activities required for the proposed storm drains and open channels, the routine maintenance of the partially-lined channels and basins likely require the removal of deposition, repair of eroded slopes, and reduction of fire hazard by annual mowing and application of herbicides. Vegetation may be removed or mowed annually, or as necessary, to provide the designed hydraulic capacity. Anticipated maintenance activities may require the temporary and short-term use of an excavator, small tractor, or loader, and operation of light-duty trucks utilized by maintenance workers. Most maintenance projects would be completed in one day. MDP Facility operation and maintenance would be similar to the District's existing maintenance operations and the Project does not propose new long-term uses. Therefore, long-term air quality impacts associated with operational air pollutant emissions will be less than significant.

### Regional Significance Threshold Conclusion

Based on the regional significance threshold analysis for the representative project, the short-term construction emissions will exceed the daily regional thresholds set by SCAQMD for NO<sub>x</sub> and PM-10 and mitigation measures will be required. If two construction activities occur concurrently, additional VOC impacts may result. As the Moreno MDP does not propose new long-term uses, no new long-term air quality impacts will result.

### SCAQMD's Localized Significance Threshold (LST) Analysis

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology (SCAQMD 2008) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Moreno MDP is located within SRA 24.

### Methodology

The emissions analyzed under the LST methodology are NO<sub>2</sub>, CO, PM-10, and PM-2.5. For attainment pollutants, NO<sub>2</sub> and CO, the LSTs are derived using an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any ambient air quality standard for a particular source receptor area. LSTs for NO<sub>2</sub> and CO are derived by adding the incremental emission impacts from the project activity to the peak background NO<sub>2</sub> and CO concentrations and comparing the

total concentration to the state ambient air quality standards. The state standard for NO<sub>2</sub> is the 1-hour state standard of 18 parts per hundred million and for CO it is the 1-hour and 8-hour state standards of 9 parts per million (ppm) and 20 ppm respectively. For PM-10 and PM-2.5, for which the Basin is non-attainment, the LSTs are derived using an air quality dispersion model to back-calculate the emissions necessary to make an existing violation in the specific source receptor area worse, using the allowable change in concentration thresholds approved by the SCAQMD. For PM-10 and PM-2.5, the approved 24-hour concentration

### Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with hauling, vendor trips, and worker trips are mobile source emissions that occur off-site and need not be considered. SCAQMD has provided LST lookup tables and sample construction scenarios<sup>4</sup> to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although some facilities are larger than five acres, it is anticipated that an area no larger than four acres would be disturbed per day during construction of a typical project, which corresponds to the detention basin.<sup>5</sup> Because the representative project consist of three types of facilities of varying size, the LST analysis for the representative project is analyzed independently and the corresponding LST lookup tables were used for construction emissions. Default information contained in the LST sample construction scenarios for each analyzed facility was modified using Project-specific information such as the construction equipment usage information from the CalEEMod data found in Appendix A of the AQIA.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The Moreno MDP area includes many types of sensitive receptors consisting of schools, child care centers, athletic facilities, playgrounds, retirement homes and convalescent homes adjacent to and in close proximity with the majority of the MDP Facilities. However, existing residences are the nearest sensitive receptors in the Project vicinity for each facility within the representative project. The Cactus Basin is separated from its nearest sensitive receptors by Cactus Avenue to the south at a distance of approximately 100 feet (30 meters) and Brodiaea Avenue to the north at a distance of approximately 100 feet (30 meters). Line F will traverse through predominantly vacant land and will be separated from the nearest sensitive receptors, by approximately 150 feet (46 meters) as it crosses Brodiaea Avenue. Line F-2 will be constructed within Redlands Boulevard immediately adjacent to existing residences. The closest receptor distance on the LST look-up tables is 25 meters. According to SCAQMD Methodology, projects with boundaries closer than 25 meters to the nearest receptor should use LST's for receptors located at 25 meters. Therefore, a receptor distance of 25 meters was chosen for all the analyzed facilities, to provide a worst-case scenario. The results are summarized in **Table 5.1-E – Unmitigated LST Results for Construction Emissions**.

<sup>4</sup> <http://www.aqmd.gov/ceqa/handbook/LST/LST.html>

<sup>5</sup> <http://www.aqmd.gov/ceqa/handbook/LST/CalEEModguidance.pdf>



**Table 5.1-E – Unmitigated LST Results for Construction Emissions**

Activity	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10	PM-2.5
<b>Basin Excavation</b>				
<b>25 meter LST Threshold for 4-acre per day</b>	<b>237</b>	<b>1,346</b>	<b>11</b>	<b>7</b>
Site Preparation	33.5	14.9	6.4	2.4
Site Grading	108.6	52.2	10.0	5.6
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Trapezoidal Channel</b>				
<b>25 meter LST Threshold for 3-acre per day</b>	<b>203</b>	<b>1,114</b>	<b>9</b>	<b>5</b>
Site Preparation	20.9	10.8	3.3	1.4
Site Grading	64.6	33.7	4.9	3.2
Pipeline Construction	1.8	0.8	0.1	0.1
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>
<b>Storm Drain</b>				
<b>25 meter LST Threshold for 1-acre per day</b>	<b>118</b>	<b>602</b>	<b>4</b>	<b>3</b>
Site Grading	31.9	16.7	1.8	1.5
Asphalt and Paving	12.2	7.9	0.8	0.8
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: LST Threshold for the 3-acre and 4-acre site has been calculated by using Appendix K of SCAQMD's LST Methodology, dated February 2005, available at SCAQMD. Each activity occurs separately. Results shown were modeled using the representative project, which is the maximum reasonably foreseeable air quality impacts, or worst-case scenario associated with implementation of the Moreno MDP.

As shown in **Table 5.1-E**, short-term construction emissions from the representative project facilities will not exceed the SCAQMD-established LST for any criteria pollutant.

### Long-Term Analysis

The proposed drainage facilities may include channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within the plan area. There would be no long-term operation of the proposed MDP Facilities that would generate localized emissions that could expose sensitive receptors to substantial pollutant concentrations. Maintenance activities would be temporary and would not represent a long-term source of potential localized emissions that would impact sensitive receptors within the MDP Boundary.

### Localized Significance Threshold Analysis Conclusion

Based on the LST analysis, the short-term construction of the Moreno MDP will not result in localized air quality impacts to sensitive receptors within the Project vicinity. Due to the lack of any new long-term source of emissions, long-term LST impacts are considered less than significant. Therefore, mitigation measures will not be required.

### Threshold A Conclusion

Based on the regional analysis provided above, short-term construction emissions will exceed daily regional thresholds set by SCAQMD for NO<sub>x</sub> and PM-10 during construction of the representative project, where each activity is constructed sequentially. If the two activities with the greatest emissions are constructed concurrently, VOC impacts may result. Therefore, based on the analysis of the representative project, implementation of the Moreno MDP could potentially result in significant impacts to VOC, NO<sub>x</sub>, and PM-10 emissions when construction of MDP Facilities occurs sequentially or concurrently. **It is important to note that storm drain installation (or any activity of similar magnitude) alone will not exceed any applicable SCAQMD thresholds and not result in significant air quality impacts during construction.** No long-term air quality impacts will occur because the Moreno MDP does not create a new long-term source of operational emissions. Implementation of mitigation measures **MM Air 1** through **MM Air 4** will reduce short-term construction impacts. However, as described in Section 5.1.7, estimated short-term emissions from construction of the Moreno MDP, as analyzed by the representative project, may exceed applicable SCAQMD regional thresholds for VOC, NO<sub>x</sub>, and PM-10 after implementation of mitigation measures. **Therefore, the impacts to air quality from construction of the Moreno MDP are considered regionally significant and unavoidable after mitigation.**

Based on the LST analysis provided above, short-term construction emissions will not result in localized air quality impacts to sensitive receptors within the Moreno Watershed<sup>6</sup> and mitigation will not be required<sup>7</sup>. Due the lack of any new long-term source of emissions, long-term LST impacts are considered less than significant. **Therefore, the Moreno MDP's short-term construction and long-term operation emissions are less than significant on a localized level without mitigation.**

**Threshold B:** *Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).*

As previously stated in Section 5.1.2 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the Project is located is designated as a non-attainment area for NO<sub>2</sub> under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.

In evaluating the cumulative effects of the Project, Section 21100(e) of CEQA states that “previously approved land use documents including, but not limited to, general plans, specific plans, and local

<sup>6</sup> As referred to in other sections of this Draft PEIR, the boundaries of the Moreno MDP are coterminous with the Moreno Watershed.

<sup>7</sup> LST emissions were modeled using the representative LST project, which is the maximum reasonably foreseeable air quality impacts, or worst-case scenario associated with implementation of the Moreno MDP.

coastal plans, may be used in cumulative impact analysis.” In addressing cumulative effects for air quality, the AQMP utilizes approved general plans; therefore, it is the most appropriate document to use to evaluate cumulative impacts of the proposed Project. This is because the AQMP evaluated air quality emissions for the entire Basin using a future development scenario based on population projections and set forth a comprehensive program that would lead the region, including the Project area, into compliance with all federal and state air quality standards. As discussed in the IS/NOP, the Project will not conflict with or obstruct the implementation of the AQMP. As discussed in the analysis under Threshold A, the short-term construction emissions from the Moreno MDP’s, representative project will exceed the daily regional thresholds set by SCAQMD for NO<sub>x</sub> and PM-10, and VOC if two activities generating the greatest amount of emissions occur concurrently. Because no new long-term uses are proposed, air quality impacts associated with operational air pollutant emissions will be less than significant. Although the proposed Moreno MDP is in conformance with the AQMP, because the short-term construction emissions from the MDP’s representative project will result in impacts to ozone precursors, the incremental contribution to criteria pollutant emissions resulting from the construction of MDP Facilities is **potentially cumulatively considerable. Therefore, the impact is considered significant.**

**Threshold C:** *Expose sensitive receptors to substantial pollutant concentrations.*

The closest sensitive receptors are residents immediately adjacent to the MDP Facilities. According to the analysis under Threshold A, short-term emissions will only be generated in the Project area during construction of the Project and as discussed above, have been found less than significant on a localized level. Additionally, no long-term localized impacts will occur as a result of the operation and maintenance of the Moreno MDP due to the lack of new long-term sources of emissions. However, emissions of NO<sub>x</sub> and PM-10 during construction are above SCAQMD recommended daily regional thresholds. VOC emissions also exceed SCAQMD thresholds if the two activities generating the greatest amount of emissions were constructed concurrently. Therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant. Mitigation measures **MM Air 1** through **MM Air 4** will be implemented to reduce these impacts. **However, as discussed in Section 5.1.7, below, there are no distinct SCAQMD established quantitative reductions associated with them; therefore, to be conservative, it is assumed that there is no change in the estimated emissions from those mitigation measures and the emissions remain significant after implementation of mitigation measures.**

**Threshold D:** *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.*

It should be noted that the release of GHG in general and CO<sub>2</sub> specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO<sub>2</sub> in the atmosphere has upon the Earth’s climate (i.e., climate change) and the associated consequences of climate change that results in adverse environmental affects (e.g., sea level rise, loss of snowpack, severe weather events). Although air quality modeling can estimate a project’s incremental contribution of CO<sub>2</sub> into the atmosphere, it is not feasible to determine whether or how an individual

project's relatively small incremental contribution (on a global scale) might translate into physical effects on the environment. Since the Earth's climate is determined by the complex interaction of different components of the Earth and its atmosphere and the sun, it is not possible to discern whether the presence or absence of GHG emitted by the Project would result in any measurable impact that would cause climate change. Nonetheless, GHG emissions resulting from the Moreno MDP were quantified and evaluated pursuant to CEQA.

The construction activities from the previously identified representative project were analyzed below for their contribution to global GHG emissions:

### Short-Term Analysis

#### Construction-Related Activities

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for a given project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. Life-cycle emissions associated with the manufacture of building materials are also not quantified in this analysis although they undoubtedly exist. Quantification was not attempted because of the large spatio-temporal variation in sources for building products used to construct the MDP Facilities and the consequent large uncertainty associated with the resulting emissions. For this reason, to attempt to quantify life-cycle emissions of materials would be speculative. This conclusion is consistent with guidance on quantification of emissions for commercial projects presented by the California Air Pollution Control Officer's Association guidance. (CAPCOA, p. 65).

**Table 5.1-F – Unmitigated Construction Equipment GHG Emissions**, summarizes the CalEEMod output results and presents the GHG emissions estimates for the Moreno MDP's representative project in metric tonnes per year (MT/yr) for CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, and CO<sub>2</sub>E.<sup>8</sup>

<sup>8</sup> CO<sub>2</sub>E is the sum of CO<sub>2</sub> emissions estimated plus the sum of CH<sub>4</sub> and N<sub>2</sub>O emissions estimated multiplied by their respective GWP.

**Table 5.1-F – Unmitigated Construction Equipment GHG Emissions**

Phase	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
<b>2014</b>				
Basin	1,760.81	0.06	0.00	1,761.94
Trapezoidal Channel	411.94	0.02	0.00	412.35
Storm Drain	52.66	0.00	0.00	52.74
<b>2015</b>				
Trapezoidal Channel	4.33	0.00	0.00	4.33
<b>Total</b>	<b>2,229.74</b>	<b>0.08</b>	<b>0.00</b>	<b>2,231.36</b>
			<b>Amortized Total</b>	<b>74.38</b>

Notes: GHG emissions were modeled using the representative project, which is the maximum reasonably foreseeable air quality impacts, or worst-case scenario associated with implementation of the Moreno MDP.

Evaluation of the table above indicates that an estimated 2,231.36 MTCO<sub>2</sub>E will occur from the representative project’s construction equipment over the course of the estimated construction period. The Moreno MDP and its Facilities do not fit into the typical categories provided (industrial, commercial, and residential) in the draft thresholds from CARB and SCAQMD. However, the total GHG emissions from the construction of the MDP’s representative project is below the lowest SCAQMD recommended screening level of 3,000 MTCO<sub>2</sub>E/yr for commercial projects. Further, the draft SCAQMD GHG threshold Guidance document released in October 2008 (SCAQMD 2008b, p. 3-8) recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Due to the lack of adopted emissions thresholds, the estimated amount of emissions from construction of the MDP’s representative project, and negligible operational emissions from infrequent maintenance vehicles that will not result in additional sources of emissions when compared to existing maintenance routines, implementation of the Moreno MDP will not generate a significant amount of GHG emissions and the **impact is considered to be less than significant.**

**Threshold E:** *Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear flood control project such as this. Additionally, implementation of the Moreno MDP will not generate GHG that will cause a significant impact on the environment. Further, the Moreno MDP will not obstruct implementation of any plan, policy, or regulation adopted for the purpose of reducing GHG emissions and will be subject to future applicable regulations once adopted. Therefore, **impacts are considered less than significant.**

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

### 5.1.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to reduce or eliminate impacts.

For construction of MDP storm drain facilities, no mitigation over and above adherence to SCAQMD regulations and the District's standard regulatory procedures is required.

In order to reduce VOC, NO<sub>x</sub>, and PM-10 emissions from construction of Moreno MDP Facilities, the following mitigation measures shall be implemented for MDP Facilities related to channel construction or basin excavation activities:

**MM Air 1:** For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).

**MM Air 2:** For channel and basin Facilities, to reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail, safe detours to prevent traffic congestion to the best of the project's ability, and provide temporary traffic control measures during construction activities that will ensure smooth traffic flows. Pursuant to CCR Title 13 §2449(d)(3), construction equipment and truck idling times shall be prohibited in excess of five minutes on site. To reduce traffic congestion, and therefore NO<sub>x</sub>, the plan shall include, as necessary, appropriate, and practicable, the following: dedicated turn lanes for movement of construction trucks and equipment on and off site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow. This measure applies to all projects, unless the Lead Agency determines that a traffic control plan is not warranted or feasible due to no impact on local roadways.

**MM Air 3:** For channel and basin Facilities, to minimize impacts related to particulate matter (PM-10 and PM2.5) generation from construction activities, consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site. The contractor shall be required to comply with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that may include watering, stabilized construction access to reduce tracking of mud or dirt onto public roads, covering trucks hauling loose materials off-site<sup>9</sup>, and street sweeping.

**MM Air 4:** For channel and basin Facilities, to reduce construction vehicle emissions contractor specification packages for Facility construction phases shall require construction equipment to meet EPA standards according to the following, unless a Facility (or Facilities)-specific air quality analysis is conducted at the time are actually designed and proposed for construction that determines impacts would be less than significant by adhering to the most current federal, state and local (e.g., (SCAQMD) regulations, and the District's standard regulatory practices:

- The contracting company's fleet of off-road diesel-powered construction equipment greater than 100 horsepower shall meet Tier 3 off-road emissions standards or better.
- Any emissions control device used by the contractor shall achieve Level 3 emissions reductions of no less than 85 percent for particulate matter, as specified by CARB regulations.
- A copy of the fleet's tier compliance documentation, and CARB or AQMD operating permit shall be available to the Lead Agency for such Facility (i.e., Moreno Valley, Riverside County, or District) at the time of mobilization of each applicable unit of equipment.

### 5.1.7 Environmental Effects after Mitigation Measures are Implemented

Although implementation of mitigation measures **MM Air 1** and **MM Air 2** will reduce MDP Facility-generated emissions of VOC, NO<sub>x</sub>, and PM-10, there are no distinct SCAQMD established quantitative reductions associated with them; therefore, to be conservative, it is assumed that there is no change in the estimated emissions of the Project from those mitigation measures. To mitigate fugitive dust (PM-10) emissions from the hauling of large quantities of soil from the construction of a basin or the construction of a channel that requires substantial excavation; **MM Air 3** will reduce fugitive PM-10 emissions from soil hauling during the grading phase by approximately 91 percent. **MM Air 4** will reduce NO<sub>x</sub> and VOC emissions from off-road equipment by at least six percent for activities related to basin grading and channel grading. The results are shown in **Table 5.1-G**, below.

<sup>9</sup> Covering trucks hauling loose materials achieves a 91 percent reduction in PM-10 per SCAQMD Mitigation Measures and Control Efficiencies for Fugitive Dust – Table XI-A: Construction & Demolition, available at [http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM\\_fugitive.html](http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html).

**Table 5.1-G – Mitigated Estimated Maximum Daily Construction Emissions**

Activity/Year	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Basin Grading	65.72	740.37	385.18	1.23	125.71	36.54
Trapezoidal Channel Grading	12.81	123.88	80.55	0.22	27.34	8.93
<b>Maximum</b>	<b>65.72</b>	<b>740.37</b>	<b>385.18</b>	<b>1.23</b>	<b>125.71</b>	<b>36.54</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>YES</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: The PM-10 emissions shown above represent a 91% reduction in fugitive dust from soil hauling, not from total PM-10 emissions. Because unmitigated emissions from storm drain construction do not exceed SCAQMD thresholds, mitigated emissions estimates for storm drains are not included in this table. Emissions were modeled using the representative project, which is the maximum reasonably foreseeable air quality impacts, or worst-case scenario associated with implementation of the Moreno MDP.

The evaluation presented above demonstrates that even with mitigation, projected short-term emissions from construction of the Moreno MDP, as analyzed by the representative project, are above applicable SCAQMD regional thresholds for NO<sub>x</sub>. The emissions generated by storm drain installation remain below applicable thresholds without implementation of mitigation measures. As shown in **Table 5.1-G**, emissions of PM-10 will be mitigated below the SCAQMD thresholds. Emissions of VOC are below the threshold when activities occur sequentially. If the two activities that generate the most emissions (basin grading and channel grading) occur at the same time, the VOC emissions could be as high as 79 pounds per day (**Table 5.1-G**), which would also exceed the SCAQMD threshold and result in significant VOC impacts. **Therefore, construction impacts after implementation of mitigation remain significant and unavoidable due to NO<sub>x</sub> emissions.**

The Moreno MDP is considered to have a cumulatively considerable net increase on ozone precursors (VOC and NO<sub>x</sub>) after implementation of mitigation, which are non-attainment in the region under both state and federal standards. **Therefore, the impact is considered potentially significant after mitigation.**

The Moreno MDP will not generate GHG, either directly or indirectly, that will cause a significant impact on the environment nor will it conflict with or obstruct implementation of any future plan, policy, or regulation adopted for the purpose of reducing GHG emissions. **Therefore, GHG emissions are considered less than significant and mitigation is not required.**

### 5.1.8 Cumulative Environmental Effects after Mitigation Measures are Implemented

#### Criteria Pollutants

Due to the defining geographic and meteorological characteristics of the Basin, the cumulative area for air quality impacts is the Basin itself. As previously stated in Section 5.1.2 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the Moreno MDP is located is designated as a non-



attainment area for NO<sub>2</sub> under state standards, and for ozone, PM-10 and PM-2.5 under both state and federal standards.

Project emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered, and reflect air pollutant emissions in the context of ambient conditions in the Moreno MDP vicinity.

As discussed in Section 5.1.5 (Environmental Impacts before Mitigation), Section 5.1.7 (Environmental Effects after Mitigation Measures are Implemented), and Appendix B (the Moreno MDP's AQIA), the Moreno MDP short-term emissions are above regional thresholds before and after mitigation during construction.

**Since the short-term emissions exceed SCAQMD thresholds after implementation of mitigation, the Moreno MDP's incremental contribution to criteria pollutant emissions is potentially cumulatively considerable.**

### GHG Emissions

Greenhouse gases (GHG) are those gases that will contribute to global climate change; therefore, the cumulative impact area for GHG emissions is the earth's atmosphere. Implementation of the proposed Moreno MDP along with the cumulative development projects will contribute GHG emissions to the atmosphere.

The annual GHG emissions from the Moreno MDP's representative project are below the draft GHG screening threshold developed by SCAQMD for commercial projects, and do not generate a significant amount of GHG emissions. **Considering the Moreno MDP's representative project results in a small contribution to GHG emissions, implementation of the Moreno MDP does not incrementally contribute to a cumulatively significant effect and cumulative impacts related to GHG emissions are considered less than significant.**

### 5.1.9 References

In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- Albert A. Webb Associates, *Air Quality and Greenhouse Gas Impact Analysis for the Moreno Master Drainage Plan Revision*, April 2014. (Appendix B) [Cited as AQIA]
- California Air Pollution Control Officer's Association, *CEQA and Climate Change*, January 2008. (Available at <http://www.capcoa.org/documents/>, accessed April 9, 2012.) [Cited as CAPCOA.]
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- California Air Resources Board, *Staff Report – California 1990 Greenhouse Gas Emissions Level and 2020 Emission Limit*, November 16, 2007. (Available at <http://www.arb.ca.gov/cc/ccei.htm>, accessed April 9, 2012.) [Cited as CARB 2007]
- California Air Resources Board, *Preliminary Draft Staff Proposal, Recommended Approaches for Setting Interim Significance Thresholds for Greenhouse Gases under the California Environmental Quality Act*, October 24, 2008. (Available at <http://www.arb.ca.gov/cc/localgov/ceqa/meetings/102708/prelimdraftproposal102408.pdf>, accessed April 9, 2012.) [Cited as CARB 2008a]
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## 5.2 Biological Resources

The following discussion addresses potential impacts related to:

- Having a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Having a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfering substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflicting with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The following discussion of biological resources within the Moreno MDP Boundary is based on the *General Biological Report*, prepared by Glenn Lukos Associates (GLA). This report provides a programmatic level of assessment of the proposed MDP Facilities, the relationship of the Moreno MDP to the requirements of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP), the California Environmental Quality Act (CEQA), and state and federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code. This report is contained in its entirety as Appendix C of this document.

As discussed below, the Project's potential to have a substantial adverse effect, either directly or indirectly to biological resources is considered to be **less than significant with mitigation incorporated**.

### 5.2.1 Setting

The proposed Project traverses both undeveloped and developed areas. Nearly all of the proposed MDP Facilities occur in developed areas, or in existing/former agricultural areas. A smaller number of the proposed MDP Facilities occurs within areas supporting non-native grassland and ruderal vegetation. Many of the proposed MDP Facilities occur within existing paved roads, with others occurring within open fields. Some of the proposed MDP Facilities, specifically the proposed open channels, coincide with existing drainage courses. The majority of the Moreno MDP area is disturbed and does not support native habitats (GLA, p. 5).

**Vegetation**

Botanical resources within the Moreno MDP Watershed were generally assessed, including the potential for special-status plants to occur within the footprints of the proposed MDP Facilities. The MSHCP identifies eight general vegetation types that occur within the Moreno MDP Boundary including: Field Croplands (Agriculture), Grove/Orchard (Agriculture), Residential/Urban/Exotic (Disturbed/Developed), Non-Native Grassland (Grassland), Riversidean Sage Scrub (Scrub), Oak Woodland (Woodland or Forest), Riparian Scrub (Wetlands), and Disturbed Alluvial (Scrub). Nearly all of the proposed MDP Facilities coincide with the Field Cropland or Residential/Urban Exotic vegetation associations. **Table 5.2-A – MSHCP Vegetation Mapping for the Moreno MDP Watershed** summarizes the MSHCP vegetation mapping for each vegetation type, followed by MSHCP descriptions of each vegetation type (GLA, p. 23). **Figure 5.2-1a** and **Figure 5.2-1b – Vegetation Maps** depicts the general vegetation types documented by the MSHCP for northern and southern portions the Moreno Valley area, respectively, though the MSHCP mapping is outdated relative to areas that have been developed since the MSHCP baseline data was collected. For example, many areas where mapped as “agriculture” that have since been developed (GLA, p. 9).

**Table 5.2-A – MSHCP Vegetation Mapping for the Moreno MDP Watershed**

Vegetation Type	Proposed MDP Facilities
Field Croplands & Grove/Orchard (shown as Cropland, Orchard – Vineyard on <b>Figures 5.2-1a and 5.2-1b</b> )	A, A-1, A-2, A-3, A-6, A-7, A-8 B, B-1, B-3 C D-1, D-2, D-3, D-4, D-5, D-7, D-8 E-1, E-2, E-3, E-4, E-5, E-6, E-7, E-8, E-10 F, F-2, F-13, F-15, F-16, F-17 G-1, G-2, G-3, G-4, G-7, G-8, G-9, G-10 H, H-1, H-1a, H-2, H-3, H-4, H-5, H-6, H-7, H-11 J, J-1, J-7, J-8, J-9 K, K-1, K-2, K-4 Quincy Basin, Reche Canyon Debris Basin, Sinclair Basin
Residential/Urban/Exotic (shown as Urban on <b>Figures 5.2-1a and 5.2-1b</b> )	A, A-1, A-2, A-3, A-6, A-7, A-8 B, B-2, B-4 C D-1, D-2, D-3, D-4, D-5, D-7, D-8, D-9 E-3, E-7 F, F-2, F-13, F-15, F-16, F-17, F-18, F-19 G, G-2, G-3, G-4, G-7, G-8, G-9, G-10, G-11 H, H-1, H-1a, H-2, H-3, H-7 J, J-1, J-7, J-8 K, K-1, K-4 Cactus Basin, Quincy Basin

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Vegetation Type	Proposed MDP Facilities
Non-Native Grassland (shown as Annual Grassland on <b>Figure 5.2-1a</b> )	B, B-1 C G, G-7 K Reche Canyon Debris Basin Ironwood Debris Basin
Riversidean Sage Scrub & Riparian Scrub (shown as Coastal Scrub on <b>Figure 5.2-1a</b> )	A, A-1, C, K G, G-2, G-4, G-7 K, K-1, K-4 Ironwood Debris Basin Reche Canyon Debris Basin
Oak Woodland (shown as Valley Foothill Riparian on <b>Figure 5.2-1a</b> )	B
Valley Foothill Riparian ( <b>Figures 5.2-1a</b> and <b>5.2-1b</b> )	G, G-7, G-8
Disturbed Alluvial Scrub (shown as Urban on <b>Figure 5.2-1b</b> )	F
Mixed Chaparral ( <b>Figures 5.2-1a</b> )	Ironwood Debris Basin
<sup>a</sup> Source: Glenn Lukos Associates, Inc., <i>General Biological Report for the Moreno Master Drainage Plan</i> , February 27, 2012 (Appendix C), Table 4.1 and <b>Figures 5.2-1a</b> and <b>5.2-1b – Vegetation Maps</b> .	

**Special-Status Plants**

Plant species of special status include those classified as endangered or threatened, proposed for listing as endangered or threatened, candidate species for listing by a federal (U.S. Fish and Wildlife Service) or state (California Department of Fish and Game) resource agency, or considered federal Species of Concern. In addition, plants included on Lists 1, 2, 3, or 4 of the California Native Plant Society (CNPS) Inventory are also considered special status.

The proposed Moreno MDP Facilities do not occur within the Narrow Endemic Plant Species Survey Areas (NEPSSA) or Criteria Area Species Survey Areas (CAPSSA). As such, habitat assessments (and focused surveys) are not required for plants pursuant to the MSHCP. However, portions of the Moreno MDP Watershed may have the potential to support special-status plants. Therefore, special-status plants were analyzed in the general context of CEQA (GLA, p. 9).

Special-status plants are not expected to occur within the conceptual location of the majority of the proposed Moreno MDP Facilities due to a lack of suitable habitat, even though several special-status plants have a potential to occur within the Moreno MDP Boundary. However, none of these species have any MSHCP survey/conservation requirements applicable to the Project, because the Moreno MDP Watershed does not occur within the NEPSSA or CAPSSA.

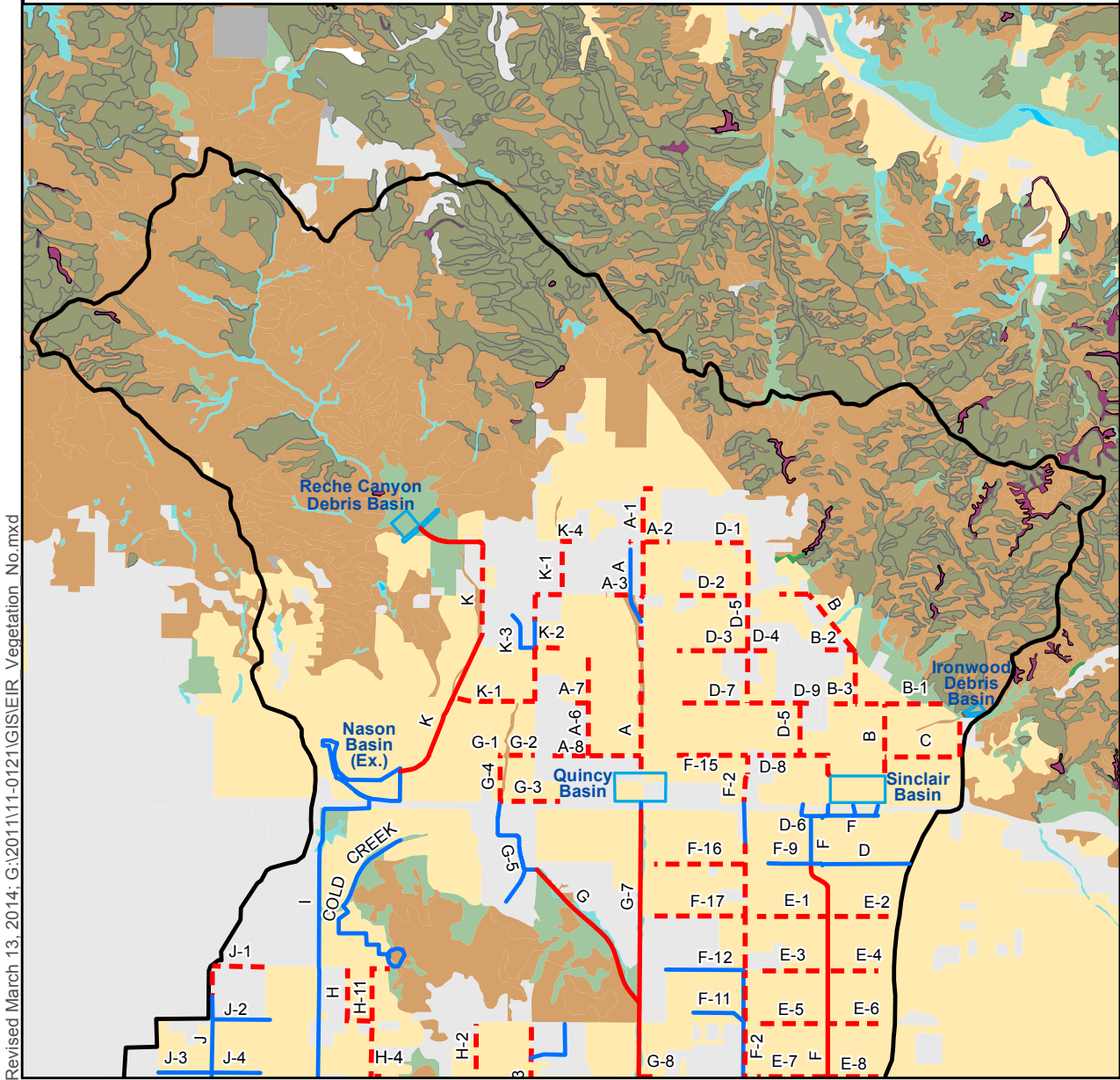
Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





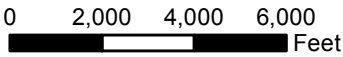
**LEGEND**

	Proposed Open Channel	<b>CDFG/MSHCP Vegetation Types</b>		Fresh Emergent Wetland	
	Proposed Storm Drain		Annual Grassland		Mixed Chaparral
	Existing Facility		Coastal Oak Woodland		Riverine, Lacustrine
	Proposed Basins		Coastal Scrub		Valley Foothill Riparian
	MDP Boundary		Cropland, Orchard - Vineyard		Urban
			Eucalyptus		

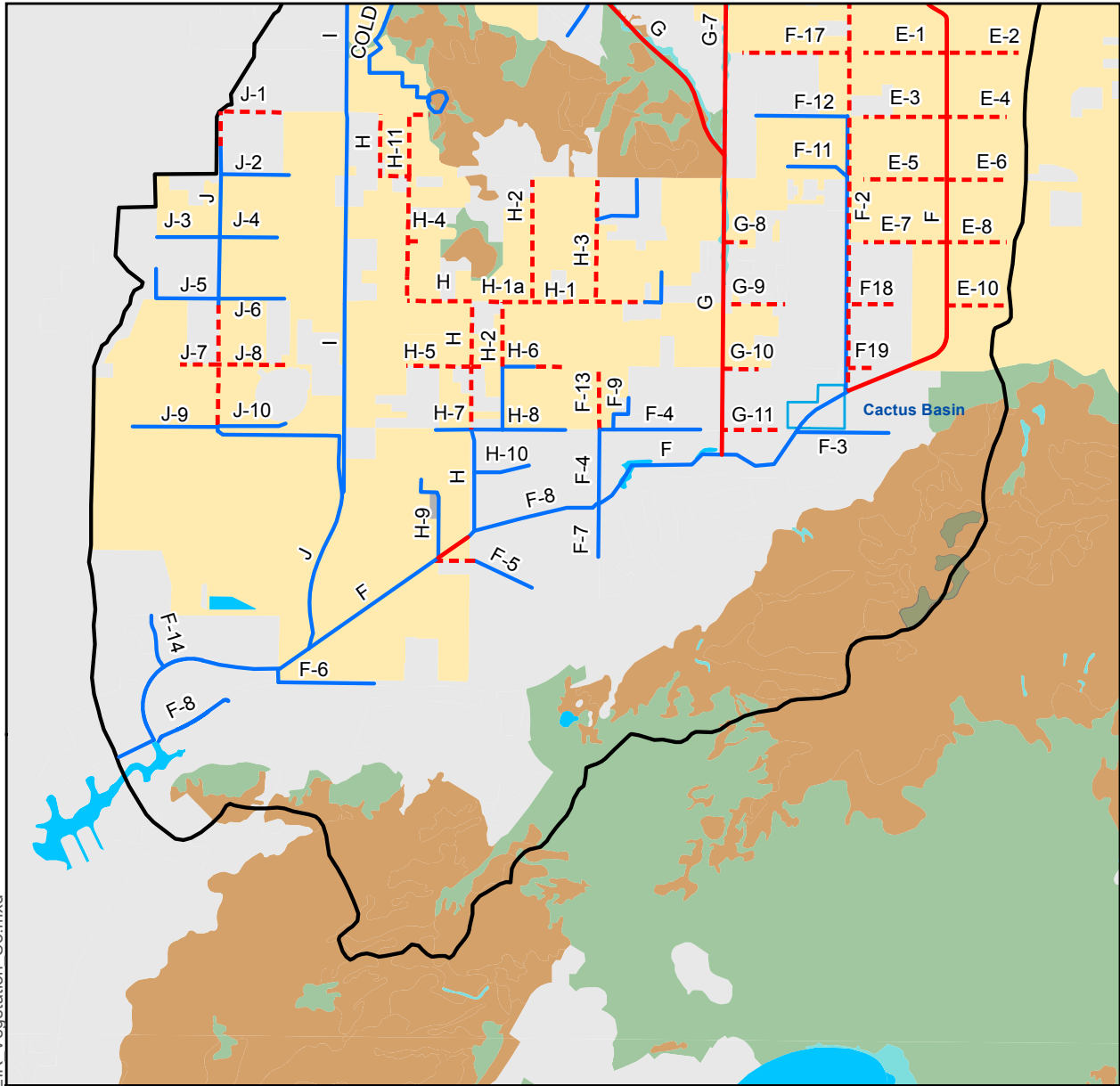


Source: County of Riverside GIS, 2013.

**Figure 5.2-1a. Vegetation Map - North**  
Moreno Master Drainage Plan Revision







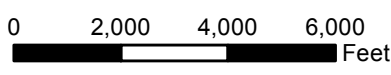
Revised March 28, 2014; G:\2011\11-0121\GIS\EIR\_Vegetation\_So.mxd

**LEGEND**

- Proposed Open Channel
  - - - Proposed Storm Drain
  - Existing Facility
  - Proposed Basins
  - MDP Boundary
- |   |  |
|---|--|
| <p><b>CDFG/MSHCP Vegetation Types</b></p> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #90EE90; margin-right: 5px;"></span> Annual Grassland</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #800080; margin-right: 5px;"></span> Coastal Oak Woodland</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #D2691E; margin-right: 5px;"></span> Coastal Scrub</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #FFD700; margin-right: 5px;"></span> Cropland, Orchard - Vineyard</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #808080; margin-right: 5px;"></span> Eucalyptus</li> </ul> | <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #008000; margin-right: 5px;"></span> Fresh Emergent Wetland</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #654321; margin-right: 5px;"></span> Mixed Chaparral</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #00BFFF; margin-right: 5px;"></span> Riverine, Lacustrine</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #ADD8E6; margin-right: 5px;"></span> Valley Foothill Riparian</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: #D3D3D3; margin-right: 5px;"></span> Urban</li> </ul> |
|---|--|

Source: County of Riverside GIS, 2013; RCFC&WCD, 2014.

**Figure 5.2-1b. Vegetation Map - South**  
Moreno Master Drainage Plan Revision



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**Table 5.2-B – Special-Status Plants Evaluated for the Moreno MDP Watershed** provides a list of special-status plants evaluated for the Moreno MDP Revision. Plant species were considered based on a number of factors, including: 1) species identified by the California Natural Diversity Database (CNDDDB) as occurring (either currently or historically) on or in the vicinity of MDP Watershed, and 2) any other special-status plants that are known to occur within the vicinity of the Project area, or for which potentially suitable habitat occurs on site (GLA, p. 29).

**Table 5.2-B – Special-Status Plants Evaluated for the Moreno MDP Watershed**

Species Name	Status	Habitat Requirements	Potential to Occur On Site
Chaparral sand verbena <i>Abronia villosa</i> var. <i>aurita</i>	Federal: None State: None CNPS: List 1B.1	Sandy soils in chaparral, coastal sage scrub.	Low potential to occur within the Project area.
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None CNPS: List 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Not expected to occur within the Project area due to a lack of suitable habitat.
Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i>	Federal: None State: None CNPS: List 1B	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Not expected to occur within the Project area due to a lack of suitable habitat.
Long-spined spineflower <i>Chorizanthe polygonoides</i> var. <i>longispina</i>	Federal: None State: None CNPS: List 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps, and valley and foothill grasslands	Low potential to occur within the Project area.
Mesa horkelia <i>Horkelia cuneata</i> ssp. <i>puberula</i>	Federal: None State: None CNPS: List 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Not expected to occur within the Project area due to a lack of suitable habitat.
Mud nama <i>Nama stenocarpum</i>	Federal: None State: None CNPS: List 2	Marshes and swamps	Not expected to occur within the Project area due to a lack of suitable habitat.
Palmer's grapplinghook <i>Harpagonella palmeri</i>	Federal: None State: None CNPS: List 4.2	Chaparral, coastal sage scrub, valley and foothill grassland. Occurring in clay soils.	Low potential to occur within the Project area.
Parish's brittlescale <i>Atriplex parishii</i>	Federal: None State: None CNPS: List 1B	Chenopod scrub, playas, vernal pools.	Not expected to occur within the Project area due to a lack of suitable habitat.
Parish's desert-thorn <i>Lycium parishii</i>	Federal: None State: None CNPS: List 2.3	Coastal sage scrub, Sonoran desert scrub	Not expected to occur within the Project area due to a lack of suitable habitat.

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Species Name	Status	Habitat Requirements	Potential to Occur On Site
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None CNPS: List 1B.1	Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.	Low potential to occur within the Project area.
Payson's jewelflower <i>Caulanthus simulans</i>	Federal: None State: None CNPS: List 4.2	Sandy or granitic soils in chaparral and coastal scrub.	Low potential to occur within the Project area.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None CNPS: List 1B.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Low potential to occur within the Project area.
Robinson's pepper grass <i>Lepidium virginicum</i> var. <i>robinsonii</i>	Federal: None State: None CNPS: List 1B.2	Chaparral, coastal sage scrub	Low potential to occur within the Project area.
San Bernardino aster <i>Symphotrichum defoliatum</i>	Federal: None State: None CNPS: List 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Not expected to occur within the Project area due to a lack of suitable habitat.
San Diego ambrosia <i>Ambrosia pumila</i>	Federal: FE State: None CNPS: List 1B.1	Chaparral, coastal sage scrub, valley and foothill grassland, vernal pools. Often in disturbed habitats.	Not expected to occur within the Project area due to a lack of suitable habitat.
Santa Ana River woolly star <i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>	Federal: FE State: SE CNPS: List 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Not expected to occur within the Project area due to a lack of suitable habitat.
Slender-horned spineflower <i>Dodecahema leptoceras</i>	Federal: FE State: SE CNPS: List 1B.1	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Not expected to occur within the Project area due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential to Occur On Site		
Smooth tarplant <i>Centromadia pungens</i> ssp. <i>laevis</i>	Federal: None State: None CNPS: List 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Low potential to occur within the Project area.		
Spreading navarretia <i>Navarretia fossalis</i>	Federal: FT State: None CNPS: List 1B	Vernal pools, playas, chenopod scrub, marshes and swamps (assorted shallow freshwater).	Not expected to occur within the Project area due to a lack of suitable habitat.		
Thread-leaved brodiaea <i>Brodiaea filifolia</i>	Federal: FT State: SE CNPS: List 1B.1	Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.	Not expected to occur within the Project area due to a lack of suitable habitat.		
<p><b>Notes:</b></p> <table border="0"> <tr> <td> <u>Federal</u>  FE – Federally Endangered  FT – Federally Threatened </td> <td> <u>State</u>  SE – State Endangered  ST – State Threatened </td> </tr> </table> <p><u>CNPS</u>  List 1B – Plants rare, threatened, or endangered in California and elsewhere.  List 2 – Plants rare, threatened, or endangered in California, but more common elsewhere.  List 3 – Plants about which more information is needed.  List 4 – Plants of limited distribution (a watch list).</p> <p><u>CNPS Threat Code Extensions</u>  1 – Seriously endangered in California (over 80% of occurrences threatened/high degree and immediacy of threat)  2 – Fairly endangered in California (20-80% occurrences threatened)  3 – Not very endangered in California (&lt;20% of occurrences threatened or no current threats known)</p> <p>Source: Glenn Lukos Associates, Inc., <i>General Biological Report for the Moreno Master Drainage Plan</i>, February 27, 2012 (Appendix C), Table 4.2.</p>				<u>Federal</u> FE – Federally Endangered FT – Federally Threatened	<u>State</u> SE – State Endangered ST – State Threatened
<u>Federal</u> FE – Federally Endangered FT – Federally Threatened	<u>State</u> SE – State Endangered ST – State Threatened				



**Special-Status Communities/Habitats**

Special-status habitat types are those vegetation communities that support rare, threatened, or endangered plant or wildlife species or are diminishing and are of special concern to resource agencies. Sensitive and/or protected habitat types within the Moreno MDP Watershed include Riversidean sage scrub (RSS) and riparian habitats. The MSHCP provides protection for sensitive vegetation communities and wildlife habitat.

The MSHCP recognizes a number of different riparian categories, including riparian forest, riparian scrub, southern willow scrub, mule fat scrub, southern cottonwood/willow riparian, and southern sycamore/alder riparian. Other riparian categories are represented by a substantial component of invasive species, including giant reed (*Arundo donax*) and tamarisk (*Tamarix* spp.). Several of these categories appear to be represented within the MDP Watershed, including some within the existing channel associated with the lowermost portion of proposed Line F. The drainage feature associated with proposed Line K contains a substantial amount of giant reed. (GLA, p. 27)

Portions of several proposed MDP Facilities are associated with a few small habitat patches mapped by the MSHCP as Riversidean sage scrub (RSS) and riparian scrub, including (all or a portion of): Lines A, A-1, C, and K (GLA, pp. 27 and 28), G, G-2, G-4, G-7, K, K-1, K-4, and portions of the Ironwood Debris Basin and the Reche Canyon debris Basin. Refer to **Figures 5.2-1a and 5.2-1b – Vegetation Maps**, for these habitat locations.

**Wildlife**

Wildlife resources within the Moreno MDP Watershed were generally assessed, including the potential for special-status animals to occur within the footprint of the proposed MDP Facilities.

**Special-Status Animals**

Special-status or sensitive wildlife species include those that are state or federally listed as threatened or endangered, are proposed for listing as threatened or endangered, have been designated as state or federal candidates for listing, state or federal species of concern, or California Fully Protected.

The proposed MDP Facilities were evaluated for the potential to impact special-status animals, although the MSHCP requires habitat assessments and focused surveys for only a small number of species. The majority of the proposed MDP Facilities occur within the MSHCP survey area for the western burrowing owl (*Athene cunicularia*), with a very small portion occurring within the survey area for the Los Angeles pocket mouse (*Perognathus longimembris brevinasus*). The Moreno MDP Watershed does not occur within the MSHCP Amphibian Survey Area. The MSHCP also requires habitat assessments for certain species associated with riparian/riverine areas and vernal pools (GLA, p. 10).

Special-status animals that have the potential to occur within the Moreno MDP Watershed include, but are not limited to: the western burrowing owl, Stephens' kangaroo rat (*Dipodomys stephensi*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), California horned lark (*Eremophila alpestris actia*), coast horned lizard

(*Phrynosoma blainvillii*), coastal whiptail (*Aspidoscelis tigris stejnegeri*), orangethroat whiptail (*Aspidoscelis hyperythra*), and red-diamond rattlesnake (*Crotalus ruber*), and numerous raptor species. (GLA, p. 30)

**Table 5.2-C – Special Status Animals Evaluated for the Moreno MDP Watershed** provides a list of special-status animals, including MSHCP Covered Species with additional survey requirements, the habitat requirements for these species, and the species’ potential for occurrence within the MSHCP Watershed. Species were evaluated based on a number of factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) within or in the vicinity of the MDP Facilities, and 2) any other special-status plants that are known to occur within the vicinity of the MDP Facilities, or for which potentially suitable habitat occurs within the MDP Watershed.

**Table 5.2-C – Special-Status Animals Evaluated for the Moreno MDP Watershed**

Species Name	Status	Habitat Requirements	Potential for Occurrence
<b>Invertebrates</b>			
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None	Restricted to deep seasonal vernal pools, vernal pool-like ephemeral ponds, and stock ponds.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal: FT State: None	Seasonal vernal pools	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
<b>Amphibians</b>			
Western spadefoot <i>Scaphiopus hammondii</i>	Federal: None State: None CDFG: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
<b>Reptiles</b>			
Coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: None CDFG: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Low potential for occurrence within portions of the MDP Facilities.
Coastal whiptail <i>Aspidoscelis tigris</i>	Federal: None State: None	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Low potential for occurrence within portions of the MDP Facilities.

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Species Name	Status	Habitat Requirements	Potential for Occurrence
Orangethroat whiptail <i>Aspidoscelis hyperythra</i>	Federal: None State: None CDFG: SSC	Coastal sage scrub, chaparral, non-native grassland, oak woodland, and juniper woodland.	Low potential for occurrence within portions of the MDP Facilities.
Red-diamond rattlesnake <i>Crotalus exsul</i>	Federal: None State: None CDFG: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Low potential for occurrence within portions of the MDP Facilities.
<b>Birds</b>			
Bell's sage sparrow <i>Amphispiza belli belli</i>	Federal: FSC State: None CDFG: SSC	Chaparral and coastal sage scrub along the coastal lowlands, inland valleys, and in the lower foothills of local mountains.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Burrowing owl <i>Athene cunicularia</i>	Federal: None State: None CDFG: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Moderate to high potential for occurrence within portions of the MDP Facilities.
California horned lark <i>Eremophila alpestris actia</i>	Federal: None State: None	Occupies a variety of open habitats, usually where trees and large shrubs are absent.	Moderate to high potential for occurrence within portions of the MDP Facilities.
Coastal California gnatcatcher <i>Polioptila californica californica</i>	Federal: FT State: None CDFG: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Cooper's hawk (Nesting) <i>Accipiter cooperi</i>	Federal: None State: None	Primarily occurs in riparian areas and oak woodlands, most commonly in montane canyons. Known to use urban areas, occupying trees among residential and commercial.	Moderate to high potential for occurrence within the MDP Watershed for foraging, though not expected to nest within the footprint of the MDP Project Facilities.

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Species Name	Status	Habitat Requirements	Potential for Occurrence
Ferruginous hawk (wintering) <i>Buteo regalis</i>	Federal: FSC State: None CDFG: SSC	Open, dry country, perching on trees, posts, and mounds. In California, wintering habitat consists of open terrain and grasslands of the plains and foothills.	Moderate to high potential for occurrence within the MDP Watershed for winter foraging. Does not nest in California.
Golden eagle <i>Aquila chrysaetos</i>	Federal: None State: None CDFG: SSC	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Low potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Project Facilities.
Least Bell's vireo <i>Vireo bellii pusillus</i>	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Low potential to occur within limited riparian habitat associated with proposed MDP Facilities.
Loggerhead shrike <i>Lanius ludovicianus</i>	Federal: None State: None CDFG: SSC	Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs.	Low to moderate potential for occurrence within portions of the MDP Facilities.
Northern harrier (nesting) <i>Circus cyaneus</i>	Federal: None State: None CDFG: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Low to moderate potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Project Facilities.
Peregrine falcon (nesting) <i>Falco peregrinus anatum</i>	Federal: FSC State: SE CDFG: CFP	Although part of its historic breeding range, this species does not breed in southern California. In the west, breeding habitat consists of high cliffs along the coast.	Low to moderate potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Project Facilities.

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Species Name	Status	Habitat Requirements	Potential for Occurrence
Prairie falcon (nesting) <i>Falco mexicanus</i>	Federal: None State: None CDFG: SSC	Breeds in mountainous regions and shortgrass prairies, nesting on cliff ledges.	Low to moderate potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Project Facilities.
Sharp-shinned hawk (nesting) <i>Accipiter striatus</i>	Federal: None State: None CDFG: SSC	Breeds in young coniferous forests with high canopy associations. Habitats that they are documented to use include ponderosa pine, black oak, riparian deciduous, mixed conifer, and Jeffrey pine.	Low to moderate potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Project Facilities.
Southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: None	Grass covered hillsides, coastal sage scrub, and chaparral.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Tricolored blackbird <i>Agelaius tricolor</i>	Federal: FSC State: None CDFG: SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	Federal: FC State: SE	Dense, wide riparian woodlands with well-developed understories.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
White-tailed kite (nesting) <i>Elanus leucurus</i>	Federal: None State: None CDFG: CFP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low to moderate potential for occurrence within the MDP Watershed for foraging, though does not nest within the footprint of the MDP Facilities.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Yellow-breasted chat <i>Icteria virens</i>	Federal: None State: None CDFG: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
Yellow warbler <i>Setophaga petechia</i>	Federal: None State: None CDFG: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.
<b>Mammals</b>			
Los Angeles pocket mouse <i>Perognathus longimembris brevinasus</i>	Federal: None State: None CDFG: SSC	Fine, sandy soils in coastal sage scrub and grasslands.	Low potential for occurrence within portions of the MDP Facilities.
Northwestern San Diego pocket mouse <i>Chaetodipus fallax fallax</i>	Federal: None State: None CDFG: SSC	Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Moderate to high potential for occurrence within portions of the MDP Facilities.
San Diego black-tailed jackrabbit <i>Lepus californicus bennettii</i>	Federal: None State: None CDFG: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Moderate to high potential for occurrence within portions of the MDP Facilities.
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: None CDFG: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Not expected to occur within the MDP Facilities due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Potential for Occurrence
Stephens' kangaroo rat <i>Dipodomys stephensi</i>	Federal: FE State: ST	Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.	Moderate to high potential for occurrence within portions of the MDP Facilities.
<u>Federal (FESA)</u> FE - Federally Endangered FT - Federally Threatened FSC - Federal Species of Concern BCC – Birds of Conservation Concern	<u>State (CESA)</u> SE - State Endangered ST - State Threatened	<u>CDFW</u> SSC - California Species of Special Concern CFP - Fully Protected WL – Watch List	
Source: Glenn Lukos Associates, Inc., <i>General Biological Report for the Moreno Master Drainage Plan</i> , February 27, 2012 (Appendix C), Table 4.3			

**Jurisdictional Resources**

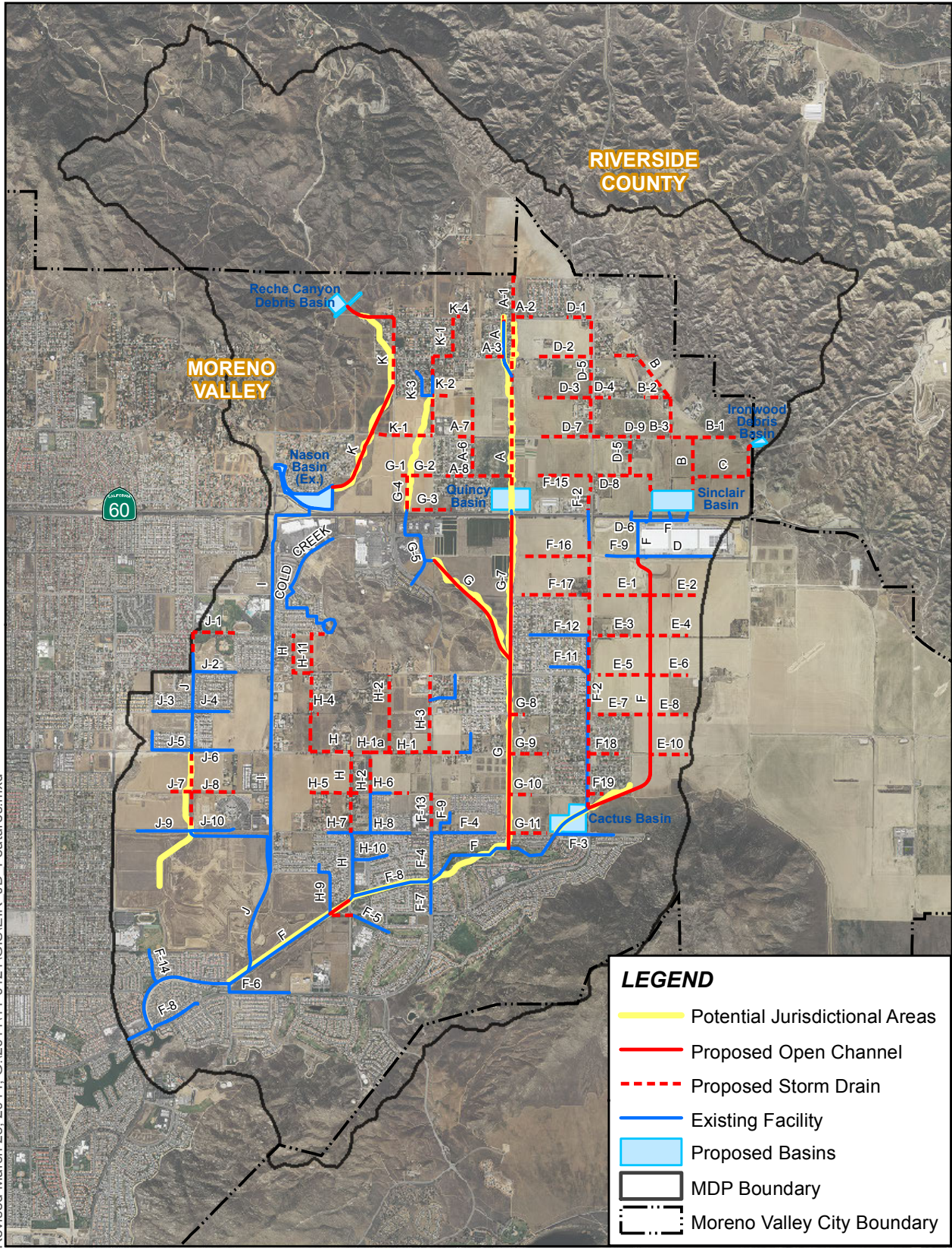
Drainages, streambeds, wetlands, and creeks considered “waters of the U.S.” fall under the jurisdiction of the U.S. Army Corps of Engineers (ACOE). Under Section 404 of the federal Clean Water Act, the ACOE regulates fill or dredged material discharged into “waters of the United States,” including wetlands. Waters of the U.S., as defined by the ordinary high water mark, typically include streams, rivers, lakes, and tributaries thereof. However, isolated waters are usually not regulated under Section 404.

Drainages, streambeds, creeks, and associated riparian vegetation fall under the jurisdiction of the California Department of Fish and Wildlife (CDFW).<sup>1</sup> Under Section 1602 of the Fish and Game Code, the CDFW is authorized to issue conditions for substantial impacts to fish and wildlife resources. The Regional Water Quality Control Board (RWQCB) regulates waters of the United States through Section 401 of the federal Clean Water Act. The RWQCB can also regulate the discharge of waste to waters of the State through the state's Porter-Cologne Water Quality Control Act.

Based on a review of aerial imagery and roadside observations, the Moreno MDP Watershed contains several drainage features that would be considered waters of United States subject to the jurisdiction of the ACOE and RWQCB, and waters of the State subject to the jurisdiction of CDFW. In addition, there are at least several other areas with the potential to support jurisdictional waters, but that are likely maintained by agricultural activities (GLA, p. 38). **Figure 5.2-2 – Potential Jurisdictional Features Map** identifies the locations of drainage features potentially under the jurisdiction of the resource agencies. The Moreno MDP Watershed also contains numerous roadside ditches, some of which may be regulated by one or more of the resource agencies, such as segments of roadside ditches along Redlands Boulevard north and south of State Route 60. (GLA, p. 38)

<sup>1</sup> Effective January 1, 2013, the California Department of Fish and Game (CDFG) changed its name to the California Department of Fish and Wildlife (CDFW), although its services and purpose has not changed. This document includes several references to CDFG and the Fish and Game Code, all of which coincide with the services, purpose and mission of the CDFW. Because applicable statues have not yet been updated, this document and related technical reports refers, in some instances, to the CDFW as the CDFG.

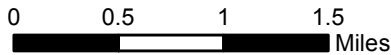
Revised March 28, 2014; G:\2011\11-0121\GIS\EIR\_JD\_Features.mxd



Sources: Glenn Lukos Associates, April, 2012; RCFC&WCD, 2014; Eagle Aerial, April 2012.

**Figure 5.2-2. Potential Jurisdictional Features Map**

Moreno Master Drainage Plan Revision







## 5.2.2 Related Regulations

### Federal

#### Federal Endangered Species Act of 1973

The Federal Endangered Species Act of 1973 (ESA) (16 U.S.C. 1531–1543) and subsequent amendments provide for the conservation of endangered and threatened species and the habitats on which they depend. A federally endangered species is one that is facing extinction throughout all or a significant portion of its geographical range. A federally threatened species is one likely to become endangered within the foreseeable future throughout all or a significant portion of its range. The presence of any federally threatened or endangered species on a site generally imposes severe constraints on development; particularly if development would result in a “take” of the species or its habitat. The federal term “take” is defined in Section 3(18) of the ESA as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. Harm in this sense can include any disturbance to habitats used by the species during any portion of its life history.

Implementation of the proposed Moreno MDP Revision is not expected to result in “take” of a listed species.

#### Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3800 prohibit the take, possession, or destruction of any birds, their nests or eggs. Although no native habitat communities are present and the Project site is located in a predominately developed environment, certain common bird species may utilize the landscaped areas, especially the existing parking lot trees for breeding and/or seasonal foraging.

The proposed Moreno MDP Revision will comply with the MTBA and California Fish and Game Code by limiting the period in which construction will take place or through the implementation of mitigation measures identified in Section 5.2.6 – Proposed Mitigation Measures, below.

### State

#### California Endangered Species Act

The California Endangered Species Act (Fish and Game Code 2050, *et seq.*) (CESA) establishes that it is the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. CESA mandates that state agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires state lead agencies to consult with the CDFW during the CEQA process to avoid jeopardy to threatened or endangered species. CESA prohibits any person from taking or attempting to take a species listed as endangered or threatened (Fish and Game Code Section 2080). The state term “take” is defined in Section 86 of the Fish and Game Code as to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill. Section 2080 provides the permitting structure for CESA. The “take” of a state-listed Endangered or Threatened species or Candidate species will require incidental take permits as authorized by the CDFW. The proposed Project

however, is not expected to require such authorizations as it is not expected to result in “take” of a listed species.

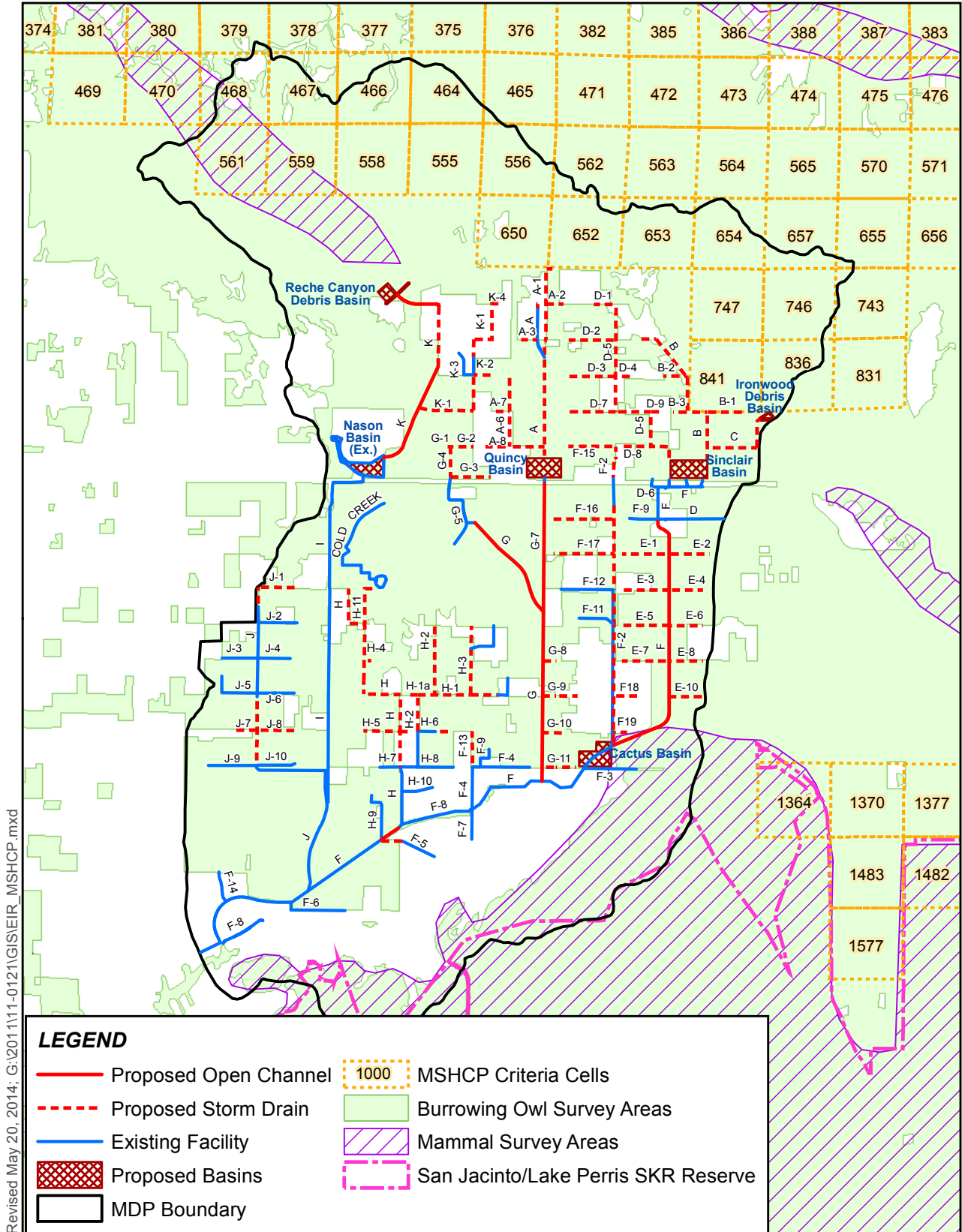
## Regional

### Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of 146 species and their associated habitats in Western Riverside County. The MSHCP will enhance and maintain biological diversity and ecosystem processes while allowing future growth. The MSHCP serves as an HCP pursuant to Section 10(a)(1)(B) of the federal Endangered Species Act of 1973, as amended, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP will result in an MSHCP Conservation Area in excess of 500,000 acres. On June 17, 2003 the Riverside County Board of Supervisors approved the MSHCP, certified the EIR/EIS for the Plan, and authorized the Chairman to sign the Implementing Agreement. The District, Moreno Valley, and Riverside County, are signatories to the Implementing Agreement (IA) and Permittees, and as such are required to comply with all applicable policies and requirements of the MSHCP. (GLA, p. 5; MSHCP vol I, p. Def/Acr-xi)

The Moreno MDP Watershed is located within the MSHCP. The MSHCP is divided into 16 separate Area Plans, each with its own conservation goals and objectives. Within each Area Plan, the Criteria Area is divided into Subunits, and further divided into Criteria Cells and Cell Groups (a group of criteria cells). Each ungrouped, independent Cell and Cell Group has designated “criteria” for the purpose of targeting additional conservation lands for acquisition. Projects meeting the definition of a “Covered Activity” are not required to set aside land pursuant to the Cell Criteria. All projects within the Criteria Area must go through the Joint Project Review (JPR) process, where the project is reviewed to ensure overall compliance/consistency with the biological requirements of the MSHCP. (GLA, p. 5) Flood Control facilities (improvements and new construction) undertaken by a Permittee are Covered Activities; thus, any MDP Facility that is located within a Criteria Cell is subject to the JPR process. As shown on **Figure 5.2-3 – MSHCP Map**, there are several Criteria Cells within the Moreno MDP Watershed; however, no proposed MDP Facility traverses across a Criteria Cell. Proposed Lines B-1 and B-3 are adjacent to Criteria Cell 841.

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Revised May 20, 2014; G:\2011\111-0121\GIS\EIR\_MSHCP.mxd

Source: County of Riverside GIS, 2014; RCFC&WCD, 2014.

Figure 5.2-3. MSHCP Map  
Moreno Master Drainage Plan Revision

0 3,000 6,000 9,000 Feet



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As outlined in MSHCP Section 6.1.6 Mitigation Responsibilities, the District, Moreno Valley, and Riverside County have the obligations identified in the following table under the MSHCP and the IA:<sup>2</sup>

**Table 5.2-D –MSHCP Section 6.1.6 Mitigation Responsibilities**

MSHCP Obligation	Local Permittees		
	District	Moreno Valley	Riverside County
Adopt and maintain resolutions as necessary to implement the requirements and to fulfill the purposes of the Permits, the MSHCP and the IA for its Covered Activities. Such requirements include: (1) compliance with the policies of the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools as set forth in Section 6.1.2 of the MSHCP; (2) compliance with the policies of the protection of Narrow Endemic Plant Species as set forth in Section 6.1.3 of the MSHCP; (3) conduct surveys as set forth in 6.3.2 of the MSHCP; (4) compliance with all requirements of Section 7.3.7 of the MSHCP; (5) compliance with Urban/Wildlands Interface Guidelines as set forth in Section 6.1.4 of the MSHCP; and (6) compliance with the Best Management Practices and the siting requirements and design criteria as set forth in Section 7.0 and Appendix C of the MSHCP. (MSHCP Vol I, Section 6.1.6, p. 6-51)	X		
Adopt and maintain ordinances or resolutions as necessary, and amend their General Plans as appropriate, to implement the requirements and to fulfill the purposes of the Permits, the MSHCP and the IA for private and public development <sup>3</sup> projects. Such requirements include: (1) the collection of Local Development Mitigation Fees and other relevant fees as set forth in Section 8.5 of the MSHCP; (2) compliance with the HANS process or equivalent process to ensure application of the Criteria and thus, satisfaction of the local acquisition obligation; (3) compliance with the policies for the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools, set forth in Section 6.1.2 of the MSHCP; (4) compliance with the policies for the Protection of Narrow Endemic Plant Species set forth in Section 6.1.3 of the MSHCP; (5) compliance with survey requirements as set forth in Section 6.3.2 of the MSHCP; (6) require Urban/Wildlands Interface Guidelines compliance as set forth in Section 6.1.4 the MSHCP; and (7) compliance with the Best Management Practices and the siting and design criteria as set forth in Section 7.0 and Appendix C of the MSHCP. (MSHCP Vol I, Section 6.1.6, pp. 6-48-6-49)		X	X
Contribute mitigation through payment of three (3) percent of total capital costs for a Covered Activity to Western Riverside County Regional Conservation Authority (WRC-RCA). Such payment may be offset through acquisition of replacement Habitat or creation of new Habitat for the benefit of Covered Species, as appropriate. Such	X		

<sup>2</sup> Uppercase terms, except District and Project, are as defined by the MSHCP.

<sup>3</sup> Development as defined by the MSHCP includes buildings, structures, infrastructure, and all alterations of the land. (MSHCP Vol I, p. Def/Acr-v)

MSHCP Obligation	Local Permittees		
	District	Moreno Valley	Riverside County
mitigation shall be implemented prior to impacts to Covered Species and their Habitats. (MSHCP Vol I, Section 6.1.6, p. 6-51)			
Transmit any collected Local Development Mitigation Fees, other appropriate fees and associated interest as described in Section 8.5 of the MSHCP to the RCA at least quarterly. (MSHCP Vol I, Section 6.1.6, p. 6-49)		X	X
Contribute to implementation of the MSHCP and Reserve Assembly as determined appropriate by the affected Permittee for County and City <u>public projects</u> , including but not limited to any one or any combination of the following: 1) acquisition of replacement Habitat at a 1:1 ratio that is Biologically Equivalent or Superior to the property being disturbed; or 2) payment of the Local Development Mitigation Fees as established for commercial and industrial Development. Such contribution shall occur prior to impacts to Covered Species and their Habitats. (MSHCP Vol I, Section 6.1.6, p. 6-49)		X	X
Take all necessary and appropriate actions, following applicable land use permit enforcement procedures and practices, to enforce the terms of project approvals for public and private projects, including compliance with the MSHCP, the Permits and the IA. (MSHCP Vol I, Section 6.1.6, p. 6-49)		X	X
Manage land owned or leased within the MSHCP Conservation Area that has been set aside for Conservation purposes pursuant to a management agreement to be executed between the District and CDFW. (MSHCP Vol I, p. 6-52)	X		
Manage MSHCP Conservation Area property or conservation easements owned or leased by Moreno Valley or Riverside County pursuant to Sections 5.0 and 8.0 of the MSHCP. (MSHCP Vol I, Section 6.1.6, p. 6-50)		X	X
Carry out all other applicable requirements of the MSHCP, the IA and Permits. Notwithstanding the foregoing, nothing in the IA shall be construed to require the District, Moreno Valley, or Riverside County to provide funding, or any other form of compensation, beyond the fees collected, dedicated lands required pursuant to the Permits, the IA and the MSHCP, or other mitigation agreed to by the appropriate Parties, consistent with the terms and conditions of the MSHCP. (MSHCP Vol I, Section 6.1.6, pp. 6-49-6-50 and 6-52)	X	X	X
Participate as a member of the Reserve Management Oversight Committee as set forth in Section 6.6.4 of the MSHCP. (MSHCP Vol I, Section 6.1.6, pp. 6-50 and 6-52)	X	X	X
Source: County of Riverside Transportation and Land Management Agency, <i>Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) – Volume I – The Plan</i> , approved June 17, 2003, compiled from Section 6.1.6.			

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

**Stephens' Kangaroo Rat Habitat Conservation Plan**

The Moreno MDP is located within the boundary of the adopted HCP for the endangered Stephens' kangaroo rat (SKR) implemented by the Riverside County Habitat Conservation Agency (RCHCA). The SKR HCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. The SKR HCP initially established Core Reserves for the conservation of key SKR populations. Outside of the Core Reserves, the HCP established a fee assessment area by which individual projects are granted coverage under the HCP by payment of SKR fees. The MSHCP, through its goals for SKR, reaffirms the conservation goals of the SKR HCP, while expanding the coverage area outside of the original coverage boundaries of the SKR HCP. Neither the SKR HCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payments of SKR fees are sufficient to obtain take authorization for SKR, unless specific lands are targeted for conservation by SKR HCP or MSHCP. (SKR HCP)

Although all of the Moreno MDP Boundary Watershed, except for a small area in the southern portion of the watershed (see **Figure 5.2-3 – MSHCP Map**) is located outside of the existing SKR reserves and areas additionally targeted for SKR conversation, the MDP Watershed is located within the SKR fee assessment area (SKR HCP, Figure 3). If an MDP Facility or portion of an MDP Facility is constructed by a public agency, it would be considered a “public works project” and as such would be exempt from payment of the SKR HCP mitigation fee. (GLA, p. 37) However, if any MDP Facility or portion of an MDP Facility is constructed as part of a private development project, the proponent of such a project would be required to pay the SKR HCP mitigation fee. (SKR HCP)

**Local****City of Moreno Valley General Plan**

The *Moreno Valley General Plan* (MVGP) contains the following policies regarding biological resources that are applicable to the Moreno MDP Revision:

**Conservation Element:**

- **Policy 7.4.3:** Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels (MVGP, p. 9-37).
- **Policy 7.4.5:** The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multispecies Habitat Conservation Plan (MVGP, p. 9-37).
- **Program 7-2:** Advocate for natural drainage channels to the Riverside County Flood Control and Water Conservation District, in order to assure the maximum recovery of local water, and to protect riparian habitats and wildlife (MVGP, p. 9-38).

The Project complies with Policy 7.4.3 and Program 7-2 through the incorporation of unlined channels where feasible. Moreno Valley will comply with Policy 7.4.5 for any MDP Facility constructed as part of a city public works project and for any MDP Facility constructed as part of a private development project.



**City of Moreno Valley Municipal Code**

Moreno Valley regulates conservation through the Moreno Valley Municipal Code. The following are existing regulations and standard conditions on development projects that may include MDP Facilities, regulated through the Moreno Valley Municipal Code:

- **Chapter 3.48:** Establishes the Western Riverside Multi-Species Habitat Conservation Plan Fee Program Ordinance into the City's Municipal Code.
- **Chapter 8.60:** Establishes the implementation measures of the SKR HCP, including the impact and mitigation fee as part of the City's Municipal Code.
- **Chapter 9.17.010 Section B.3:** Encourage the preservation of existing mature trees and shrubs, native plants significant rock outcroppings, and natural drainage courses and riparian vegetation.
- **Chapter 9.01.080 Section C.1:** Administration of the General Plan – Investigate and make recommendations to the Moreno Valley City Council regarding reasonable and practical means for implementing the General Plan or any element thereof, so that it will serve as an effective guide for orderly growth and development, preservation and conservation of open space and natural resources, and for the efficient and effective expenditure of public funds relating to the subjects addressed in the general plan.

**5.2.3 Significance Thresholds Criteria**

The Initial Study Environmental Checklist form found in Appendix G of the CEQA Guidelines defines thresholds of significance for Biological Resources. The Notice of Preparation for the PEIR included the Initial Study Environmental Checklist to show the areas being analyzed in the PEIR; refer to [Appendix A](#) of this PEIR. Accordingly and based on the IS, the Project may be considered to have a significant impact on Biological Resources in the following areas if the Project would:

- (Threshold A) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (Threshold B) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- (Threshold C) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- (Threshold D) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- (Threshold E) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

#### 5.2.4 Project Design Considerations

No specific design measures would be implemented that would avoid or reduce potentially significant impacts to biological resources. However, most of the proposed MDP Facilities are located within existing roads and other disturbed areas that lack significant biological resources.

#### 5.2.5 Environmental Impacts before Mitigation

**Threshold A:** *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.*

Biological resources were evaluated at a programmatic level for the proposed Moreno MDP Revision. Therefore, in order to determine Facility-specific impacts, pursuant to mitigation measure **MM BIO 1**, prior to construction of any individual MDP Facility, a general biological resources assessment shall be conducted. The assessments shall include recommendations for subsequent surveys and mitigation measures, if needed. Facility-specific assessments may be included as part of larger development projects, however the analysis is subject to approval by Moreno Valley and the District.

Special-status plants listed in the MSHCP, NEPSSA and/or CAPSSA do not occur within the Moreno MDP Watershed; therefore focused plant surveys will not be required pursuant to the MSHCP for individual projects. However, if a future Facility-specific general biological resources assessment identifies any special-status plant species to be impacted by an individual development project or MDP Facility, Facility-specific impacts to special-status plants may be individually and cumulatively significant prior to mitigation. However, since any special-status plant species detected would be covered without additional conservation requirements, participation in (and compliance with) the MSHCP would reduce any impacts to special-status plants to less than significant and additional mitigation would not be required (GLA, p. 44).

Therefore, the following is a discussion of special-status wildlife species with recommended measures for individual MDP Facilities within the Moreno MDP Watershed, including in some cases, survey/conservation requirements pursuant to the MSHCP.

##### Burrowing Owl

The MSHCP requires that burrowing owl habitat assessments be conducted for properties occurring within the Burrowing Owl Survey Area. Habitat assessments are to follow the MSHCP Burrowing Owl Survey Instructions, in order to determine the presence of suitable habitat for the burrowing owl. The Survey Instructions identify burrowing owl habitat as including, but not limited to, native and non-native

grassland, interstitial grassland within shrub lands, shrub lands with low density shrub cover, golf-courses, drainage ditches, earthen berms, unpaved airfields, pastureland, dairies, fallow fields, and agricultural use areas. Burrowing owls typically use burrows made by fossorial (adapted for burrowing or digging) mammals, such as ground squirrels or badgers in addition to man-made structures, such as earthen berms; cement culverts; asphalt, rock, or wood debris piles; or openings beneath cement or asphalt pavement. Thus, they are often found within, under, or in close proximity to these types of man-made structures (GLA, p. 9).

As shown on **Figure 5.2-3 – MSHCP Map**, all or portions of the following proposed MDP Facilities are located within the burrowing owl survey area: Lines A, A-1, A-2, A-3, A-6, B, B-1, B-2, B-3, C, D-1, D-2, D-3, D-5, D-7, D-8, E-1 through E-8, E-10, F, F-2, F-13, F-15, F-16, F-17, G, G-1 through G-4, G-6 through G-11, H, H-1a, H-3 through H-6, H-11, J, J-1, J-7, J-8, K, K-1, K-2, the northwest portion of the Cactus Basin, and all of the Ironwood Debris Basin, Quincy Basin, Reche Canyon Debris Basin, and Sinclair Basin. Therefore, habitat assessments, including focused burrow surveys (if suitable habitat is present), may be required. Subsequent to designation of the MSHCP burrowing owl survey area, portions of the survey area have been developed and, habitat assessments can generally exclude developed areas (GLA, p. 9). Moreover, many of the proposed Moreno MDP Facilities occur within existing paved roads that do not provide habitat for burrowing owls (GLA, p. 5).

However, because many of the proposed Moreno MDP Facilities are conceptually located within agricultural areas and grasslands, which have some potential to support burrowing owls (GLA, p. 36), impacts to burrowing owls, including the loss of burrowing owl habitat, would be potentially significant. Therefore, to comply with the MSHCP and reduce potential impacts to burrowing owls, Facility-specific habitat assessments for proposed MDP Facilities located within the burrowing owl habitat area, habitat assessments (if suitable habitat is present), and pre-construction surveys will be required. Mitigation measure **MM BIO 2** requires habitat assessments, including focused burrow surveys if suitable habitat is present for Moreno MDP Facilities. Mitigation measure **MM BIO 3** requires pre-construction surveys prior to ground disturbance associated with MDP Facilities and avoidance of active nests. **Therefore, potential impacts to burrowing owls are less than significant with mitigation.**

#### Riparian Birds

For MDP Facilities impacting riparian habitat, the MSHCP requires habitat assessments and focused surveys (within suitable habitat) for least Bell's vireo (LBV) (*Vireo bellii pusillus*), southwestern willow flycatcher (SWWF) (*Empidonax traillii extimus*), and western yellow-billed cuckoo (WYBC) (*Coccyzus americanus occidentalis*). The SWWF and WYBC do not occur within the Moreno MDP Watershed due to a lack of suitable habitat. The LBV is generally not expected to occur within the Moreno MDP Watershed; however, limited riparian habitat may exist in portions of a few alignments, such as Line F and K (GLA, pp. 35 and 43).

The MSHCP vegetation mapping identifies riparian scrub habitat in association with a drainage feature corresponding to proposed MDP Lines A-1 and A-4. However, the extent of riparian habitat is inadequately mapped within the Moreno MDP Watershed. Riparian vegetation is associated with other

drainage features within the Project area, including existing drainages associated with the following proposed MDP Lines F, G, and K. Therefore, the full extent of riparian habitat within the Moreno MDP Watershed must be determined through individual Facility-specific studies (GLA, p. 28). A more-detailed discussion of riparian habitat in the context of jurisdictional waters and MSHCP Riparian/ Riverine areas is provided in response to Threshold B.

Impacts to LBV, including the loss of LBV habitat, would be potentially significant prior to mitigation. However, implementation of mitigation measures **MM BIO 4**, which requires Facility-specific riparian/ riverine surveys, and mitigation measure **MM BIO 5**, which requires individual projects within areas of suitable riparian habitat to conduct protocol presence/absence surveys for the least Bell's vireo and require additional measures for positive surveys, will reduce potential impacts to less than significant. **Therefore, potential impacts to riparian birds, including SWWF, WYBC and LBV are less than significant with mitigation.**

#### Listed Fairy Shrimp

Based on a general biological review of the Moreno MDP Watershed, suitable habitat to support listed fairy shrimp (i.e., Riverside fairy shrimp (*Streptocephalus woottoni*), vernal pool fairy shrimp (*Branchinecta lynchi*), and Santa Rosa fairy shrimp (*Linderiella santarosae*) is not expected (GLA, p. 43). Depending on the species, suitable habitat may include vernal pools, ephemeral ponds, stock ponds, and other features that may support fairy shrimp (GLA, p. 35).

Impacts to listed fairy shrimp would be potentially significant if habitat containing listed fairy shrimp is disturbed. However, implementation of mitigation measure **MM BIO 6**, which requires Facility-specific surveys within potentially suitable habitat and additional measures for positive surveys, will reduce potential impacts to listed fairy shrimp to less than significant. **Therefore, potential impacts to listed fairy shrimp are less than significant with mitigation.**

#### Los Angeles Pocket Mouse

Section 6.3.2 of the MSHCP requires habitat assessments and focused surveys (within suitable habitat) for specific small mammals when a project occurs within a designated MSHCP mammal survey area. A portion of proposed MDP Line F, prior to its connection with the proposed Cactus Basin (immediately east of Redlands Boulevard) is located within the MSHCP mammal survey area for the Los Angeles pocket mouse (LAPM) (*Perognathus longimembris brevinasus*). (GLA, p. 36)

LAPM habitat is generally defined as fine, sandy soils in coastal sage scrub and grasslands. The vegetation associated with the LAPM includes: non-native grassland, Riversidean sage scrub, Riversidean alluvial fan sage scrub, chaparral and redshank chaparral. The portion of Line F within the LAPM Survey Area is mapped by the MSHCP as non-native grassland. This area appears to be regularly disturbed through disking, but likely contains soils with a potential to support LAPM. Although the area has been subject to past disturbance, there is some potential for the Los Angeles pocket mouse to be present (GLA, pp. 38, 39, and 47).

Impacts to the LAPM would be potentially significant if occupied LAPM habitat is disturbed. However, implementation of mitigation measure **MM BIO 7**, which requires habitat assessments and (if necessary) additional measures for positive surveys for proposed MDP Facilities, will reduce impacts to less than significant. **Therefore, potential impacts to LAPM are less than significant with mitigation.**

#### **Stephens' Kangaroo Rat**

Stephens' kangaroo rat (SKR) (*Dipodomys stephensi*) is federally listed as endangered and state listed as threatened. Within western Riverside County, SKR is a Covered Species pursuant to the SKR HCP and the MSHCP. SKR is found almost exclusively in open grasslands or sparse shrublands with cover of less than 50 percent during the summer. Soil type is also an important habitat factor for SKR occupation. As a burrowing animal, the SKR typically is found in sandy and sandy loam soils with low clay to gravel content. SKR may be found on rocky soils, but population densities generally are much lower. (GLA, pp. 39 and 40)

Portions of the Moreno MDP Watershed contain habitat suitable to support SKR, including the grassland areas, and to some extent the agricultural areas. Therefore, implementation of the Moreno MDP will result in the potential loss of habitat for SKR. The Moreno MDP Watershed is within the SKR fee assessment area; however, none of the MDP Facilities are within or in proximity to any SKR Core Reserves or areas additionally targeted for SKR conservation (see **Figure 5.2-3**). (GLA, p. 40)

The SKR is a covered species in the MSHCP and is specifically identified as a "Covered Species Adequately Conserved" (Table 2-2 of the MSHCP). Project Facilities, or portions of the Project Facilities, that are constructed by a public agency, such as Moreno Valley or the District are considered public works projects and must contribute mitigation via the MSHCP. Mitigation for District Projects is accomplished by payment of three percent of total capital costs of a project to WRC-RCA; however, such payment may be offset through acquisition of replacement habitat or creation of new habitat for the benefit of covered species. (MSHCP Vol I, p. 6-51) Mitigation for Moreno Valley and Riverside County public works projects is accomplished one or any combination of the following: 1) acquisition of replacement Habitat at a 1:1 ratio that is Biologically Equivalent or Superior to the property being disturbed or 2) payment of the Local Development Mitigation Fees at the rate in effect for commercial and industrial property. (MSHCP Vol I, p. 6-49) Moreno MDP Facilities, or portions of the Moreno MDP Facilities, that are constructed as part of private development will be required to pay the SKR HCP and MSHCP mitigation fees in order to receive coverage for SKR impacts (GLA, pp. 39, 40, and 47).

**Because the SKR is a covered species in the MSHCP and public works projects contribute to the MSHCP and private development projects pay the SKR HCP and MSHCP fees, impacts to SKR will be less than significant.**

#### **Raptor Foraging Habitat**

Special-status and common raptors known or with a potential to forage within the MDP Watershed include, but are not limited to: red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), ferruginous hawk (*Buteo regalis*), Swainson's hawk (*Buteo swainsonii*), northern harrier (*Circus*

*cyaneus*), golden eagle (*Aquila chrysaetos*), white-tailed kite (*Elanus leucurus*), Cooper's hawk (*Accipiter cooperi*), sharp-shinned hawk (*Accipiter striatus*), American kestrel (*Falco sparverius*), merlin (*Falco columbarius*), prairie falcon (*Falco mexicanus*), and peregrine falcon (*Falco peregrinus anatum*). The majority of the Moreno MDP Watershed includes at least moderate quality foraging habitat for the various raptor species, including the agricultural areas, grassland areas, and to a lesser extent the developed areas (GLA, pp. 41 and 47). Therefore, impacts to raptor foraging habitat would be cumulatively significant, and potentially individually significant. However, the District, Moreno Valley, and Riverside County are signatories to the MSHCP, which provides coverage for raptor foraging habitat. (GLA, p. 47) **Through compliance with the provision of the MSHCP for the individual MSHCP Facilities, potential impacts the loss of raptor foraging habitat are less than significant.**

**Threshold B:** *The proposed project would adversely affect any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

The MSHCP vegetation mapping (see **Figure 5.2-1a – Vegetation Map North**) identifies riparian scrub habitat in association with proposed Moreno MDP Lines A-1 and A-4. The MSHCP recognizes a number of different riparian categories, including riparian forest, riparian scrub, southern willow scrub, mule fat scrub, southern cottonwood/willow riparian, and southern sycamore/alder riparian. Other riparian categories are represented by a substantial component of invasive species, including giant reed (*Arundo donax*) and tamarisk (*Tamarix* spp.). However, the extent of riparian habitat is inadequately mapped within the Moreno MDP Watershed. Several of these categories appear to be associated with other drainage features within the Project area, including existing drainages associated with the proposed MDP Lines F, G, and K. The drainage feature associated with proposed Line K contains a substantial amount of giant reed (GLA, p. 28). As such, the full extent of riparian habitat within the Moreno MDP Watershed must be determined through Facility-specific mapping to ascertain which areas may be subject to MSHCP requirements (see **MM BIO 4**). (GLA, p. 28) **With implementation of MM BIO 4, impacts to riparian habitat will be considered less than significant with mitigation.**

GLA conducted a preliminary general assessment for waters subject to the jurisdictions of: (i) the ACOE pursuant to Section 404 of the CWA; (ii) the RWQCB pursuant to Section 401 of CWA; and/or (iii) CDFW pursuant to Section 1602 of the California Fish and Game Code. Features with the potential for jurisdiction were mapped (see **Figure 5.2-2 – Potential Jurisdictional Features Map**), including agricultural ditches and other roadside ditches, etc., however a comprehensive, wetland/waters delineation was not conducted. Facility-specific jurisdictional delineations will need to be conducted to determine whether features will be subject to the jurisdictions of the ACOE, RWQCB, and/or CDFW (see **MM BIO 8**). (GLA, p. 48)

The Project area contains roadside ditches and other ditches, which if later are shown to be historic diversions of natural waters, will be potential jurisdictional waters. In addition, there are several other

areas with the potential to support jurisdictional waters, but that are likely maintained by agricultural activities (GLA, p. 41).

Areas supporting hydrophytic vegetation (such as riparian areas identified in **Figures 5.2-1a and 5.2-1b – Vegetation Maps**) would need to be evaluated at a Facility-specific level to determine whether they satisfy wetland criteria. Any “isolated” wetlands will need to be evaluated by the ACOE and the Environmental Protection Agency (EPA) following their joint regulatory guidance, in order to confirm whether any of the “isolated” wetlands would be jurisdictional. **Therefore, with implementation of MM BIO 8, impacts to federally-protected wetlands will be considered less than significant with mitigation.**

**Threshold C:** *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*

Wildlife movement corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation by human disturbance, or by the encroachment of urban development. Movement corridors are important as the combination of topography and other natural factors, in addition to urbanization, has fragmented or separated large open space areas. The fragmentation of natural habitat creates isolated ‘islands’ of vegetation that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. According to the MSHCP, there are no special linkage corridors within the proposed Moreno MDP Watershed and will not directly impact or impede the use of any recognized wildlife nursery sites (GLA, p. 48).

Portions of the proposed Moreno MDP Facilities contain trees, shrubs, and herbaceous vegetation with the potential to support nesting birds. The MBTA and California Fish and Game Code prohibit impacts to nesting birds. Implementation of the proposed Moreno MDP will result in removing vegetation (i.e., trees, shrubs, and ground cover) suitable for nesting migratory birds (GLA, pp. 41, 47, and 48). **However, with implementation of mitigation measure MM BIO 9, which requires seasonal avoidance of vegetation removal and/or nesting bird surveys, potential impacts to migratory birds are less than significant with mitigation.**

**Threshold D:** *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

The *Moreno Valley General Plan* contains policies relating to the protection of biological resources and the Moreno Valley Municipal Code includes ordinances to implement such policies. Compliance with the MSHCP will conserve important resources such as mature trees, rock outcroppings, hills, ridges, and other prominent land forms, as open space. The location of specific Moreno MDP Facilities is dictated by engineering and hydraulic concerns. **The Project shall meet the goals and policies of the District, Moreno Valley, and Riverside County relative to the protection of biological resources through compliance with the MSHCP; impacts to local policies or ordinances protecting biological resources are less than significant.**

**Threshold E:** *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

#### **MSHCP**

As discussed in Section 5.2.2 – Related Regulations, the Moreno MDP is located within the boundaries of the MSHCP, the purpose of which is to conserve habitat for selected species throughout western Riverside County. The MSHCP consists of several Criteria Areas and Cells that assist in facilitating the process by which individual properties are evaluated for inclusion and subsequent conservation in the MSHCP. None of the proposed MDP Facilities are located within the MSHCP Criteria Area; thus, none of the potential footprints of the MDP Facilities are targeted for conservation (GLA, p. 6).

Section 3.2.1 of the MSHCP states that, “in the event that a Permittee elects to use property currently depicted as Public/Quasi Public (PQP) Lands on the MSHCP Plan map (Figure 3-1 of MSHCP) in a way that alters the land use such that it would not contribute to Reserve Assembly, the Permittee shall locate and acquire or otherwise encumber replacement acreage at a minimum ratio of 1:1 replacement taking into account direct and indirect effects of PQP Lands in one location with PQP Lands in another location. The Permittee must make findings that the replacement acreage is biologically equivalent or superior to the existing property as set forth in Section 6.5 of the MSHCP, Volume I.” Although the location of the MDP Facilities is conceptual, two proposed MDP Facilities, Lines A and J-9 coincide with PQP Lands. However, the proposed activities in these areas are not expected to adversely affect conservation values of PQP Lands. (GLA, p. 6)

In addition to Criteria Cell requirements, the MSHCP requires consistency with Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and 7.5.3 (Construction Guidelines). The Moreno MDP’s consistency with these sections is discussed below.

#### ***Section 6.1.2 Protection of Species within Riparian/Riverine Areas and Vernal Pools***

Implementation of portions of the Moreno MDP will result in impacts to MSHCP riverine features, including in some cases, riparian habitat (GLA, p. 45). The Moreno MDP is not expected to impact vernal pools, as previously stated under Threshold A in Section 5.2.5 under the subheading “Listed Fairy Shrimp. (GLA, p. 43) Pursuant to Section 6.1.2 of the MSHCP, mitigation measures will be required for individual projects which cannot avoid all MSHCP riparian/riverine areas and vernal pools mapped within the footprint of the proposed Moreno MDP Facilities. If it is infeasible to avoid 100 percent of riparian/riverine areas, the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP). DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period. Mitigation measure **MM BIO 4**, which requires mapping of riparian/riverine areas and vernal pools, and avoidance of these features or 100 percent habitat replacement if avoidance is infeasible, incorporates the requirements of Section 6.1.2.

Therefore, with the incorporation of mitigation, the Moreno MDP Revision will comply with the requirements of the MSHCP, and is therefore consistent with Section 6.1.2.



**Section 6.1.3 Protection of Narrow Endemic Plant Species**

Section 6.1.3 of the MSHCP requires site-specific focused surveys for narrow endemic plant species where appropriate or suitable habitat is present within the NEPSSA. The proposed Moreno MDP Facilities do not occur within the NEPSSA (GLA, p. 6); therefore, the Moreno MDP Revision will comply with the requirements of the MSHCP, and is thus, consistent with Section 6.1.3.

**Section 6.1.4 Urban and Wildlands Interface**

Section 6.1.4 of the MSHCP addresses indirect effects associated with locating projects in proximity to the MSHCP Conservation Area, including effects associated with drainage, toxics, lighting, noise, and invasives. The proposed MDP Facilities do not occur adjacent to the MSHCP Conservation Area, and therefore are not expected to result in indirect impacts that would adversely affect wildlife resources within the Conservation Area (GLA, p. 46). Therefore, the Moreno MDP Revision will comply with the requirements of the MSHCP, and is thus, consistent with Section 6.1.4.

**Section 6.3.2 Additional Survey Needs and Procedures**

Section 6.3.2 requires habitat assessments and focused surveys (within suitable habitat) for the burrowing owl for projects within the burrowing owl survey area. The majority of the proposed Moreno MDP Facilities are within the burrowing owl survey area (GLA, p. 45). Thus, a habitat assessment and focused survey (if suitable habitat is present) are required for individual projects located within the Burrowing Owl Survey Area as required by mitigation measures **MM BIO 2** and **MM BIO 3**.

A portion of Line F occurs within the MSHCP survey area for LAPM and even though the area has been subject to past disturbance, there is some potential for LAPM to be present (GLA, p. 47). Mitigation measure **MM BIO 7**, which requires an LAPM habitat assessment for Facilities within the MSHCP LAPM survey area and a presence/absence trapping study in the event suitable habitat is present satisfies the requirements of Section 6.3.2.

Therefore, with the incorporation of mitigation, the Moreno MDP Revision will comply with the requirements of the MSHCP, and is therefore consistent with Section 6.3.2.

**Section 7.0 Design Criteria and Appendix C BMPs**

Section 7.5 of the MSHCP sets forth *Guidelines for Facilities Within the Criteria Area and Public/Quasi-Public Lands*. Section 7.5.1 outlines guidelines for planned roadways that are Covered Activities within the Criteria Area and Public/Quasi-Public (PQP) Lands and Section 7.5.2 outlines design guidelines for roads with the potential to result in impediments to wildlife movement. The guidelines in Sections 7.5.1 and 7.5.2 apply to projects involving the construction of roads and do not apply to the proposed Moreno MDP.

Construction of the Moreno MDP Facilities within PQP Lands, i.e., Lines A and J-9, is subject to the construction guidelines in Section 7.5.3. These guidelines require actions such as: preparation of water pollution and erosion control plans for projects involving the movement of more than 50 cubic yards of earth; consideration of seasonal breeding requirements; implementation of sediment and erosion

control measures; minimization of the disturbance footprint, and other practices to prevent indirect impacts to adjacent Conservation Areas.

Because the MDP Facilities will comply with NPDES regulations as discussed in Section 5.4 – Hydrology/Water Quality, and will implement mitigation measure **MM BIO 8**, the Moreno MDP will comply with the requirements of the MSHCP and is, therefore, consistent with Section 7 with mitigation.

#### **Stephens' Kangaroo Rat Habitat Conservation Plan**

As discussed in Section 5.2.2 – Related Regulations, the Moreno MDP is located within the boundary of the SKR HCP. Neither the SKR HCP nor MSHCP requires project-specific SKR surveys for sites located outside of the existing Core Reserves. Instead, payment of SKR fees for private projects and participation in the MSHCP for public works projects are sufficient to obtain take authorization for SKR, unless specific lands are targeted for conservation by SKR HCP or MSHCP.

Portions of the Moreno MDP Watershed contain habitat suitable to support SKR, including the grassland areas, and to some extent the agricultural areas. All of the proposed Moreno MDP Facilities occur within the SKR fee assessment area, but outside of the existing SKR reserves and areas additionally targeted for SKR conservation (**Figure 5.2-3 – MSHCP Map**); therefore, focused surveys for SKR are not required. (GLA, p. 47; SKR HCP).

As previously discussed under Threshold A, Moreno MDP Facilities, or portions of the Moreno MDP Facilities, constructed by the District, Moreno Valley, or Riverside County are exempt from payment of the SKR fee; however each public agency must contribute mitigation via the MSHCP. Any Moreno MDP Facilities, or portions of the Moreno Facilities, constructed as part of a private development project are required to pay the SKR HCP/MSHCP mitigation fee to receive coverage. Therefore, no requirements under the SKR HCP other than payment of the SKR HCP mitigation fee is required and potential impacts with regards to conflicting with the provisions of the SKR HCP will be less than significant. (GLA, p. 47)

Implementation of mitigation measures **MM BIO 1** through **MM BIO 8** will also ensure the Project is consistent with the MSHCP. The proposed Project is not located within any other adopted HCP or NCCP. **For the reasons discussed herein, implementation of the proposed Moreno MDP Revision will not conflict with an approved local, regional, or state conservation plan and impacts will be less than significant with mitigation.**

#### **5.2.6 Proposed Mitigation Measures**

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to reduce potentially significant adverse impacts to special-status species and their habitat, as well as impacts to jurisdictional features.

**MM BIO 1:** Prior to construction of any individual MDP Facility, a Facility-specific general biological resources assessment shall be conducted by a qualified biologist. The general biological resource

assessments shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, an identification of: sensitive plant or animal species that occur or may occur on site, other protected natural resources including sensitive vegetation communities, streams, rivers, vernal pools, and wetlands. The assessments shall include recommendations for subsequent surveys and mitigation measures, if needed. Since the Project is located within the Western Riverside County MSHCP Plan Area, the general biological assessments shall also include a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP. For MDP Facilities located within a Criteria Cell, the assessments may be included as part of the Joint Project Review application. If an MDP Facility is being constructed as part of a private development project, the general biological resource assessment prepared for the development project may be utilized, at the discretion of Moreno Valley and the District, in lieu of preparing a separate document specifically for the MDP Facility.

**MM BIO 2:** In order to avoid impacts to burrowing owls and to comply with the MSHCP, burrowing owl habitat assessments for individual MDP Facilities will be conducted by a qualified biologist following the MSHCP Burrowing Owl Survey Instructions. The burrowing owl habitat assessment may be conducted as part of the general biological resources assessment in **MM BIO 1**. If the result of the habitat assessment indicates that suitable habitat is present, including suitable burrows, focused burrowing owl surveys shall be conducted for those areas with suitable habitat pursuant to Step II, Part B of the MSHCP Survey Instructions. If owls are found in the impact area of an MDP Facility, Species Objective 5 from the MSHCP shall be implemented. If avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.

**MM BIO 3:** All future MDP facilities within the mapped survey area for Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities. If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. Take of active nests shall be avoided. The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service.

**MM BIO 4:** Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP. In conjunction with a delineation of jurisdictional waters (see **MM BIO 8**), MSHCP riparian/riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in **MM BIO 1**. For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint. If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP

including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.

**MM BIO 5:** Within areas of suitable riparian habitat, a qualified biologist shall conduct protocol presence/absence surveys for the least Bell's vireo following USFWS protocols.

If least Bell's vireos are detected, then 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo, if feasible. If conservation is infeasible, then the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 6:** A qualified biologist will assess individual project sites for habitat with the potential to support listed fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions. This assessment may be conducted as part of the general biological resources assessment in **MM BIO 1**. If potentially suitable habitat is identified, a qualified biologist will conduct presence/absence surveys for listed fairy shrimp following accepted protocols.

For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of vernal pools and listed fairy shrimp habitat. If listed fairy shrimp are detected and avoidance is not feasible, then (1) long-term conservation shall be implemented pursuant to Appendix E of the MSHCP if feasible; or (2) the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 7:** A qualified biologist will conduct a habitat assessment for individual projects located within the MSHCP Los Angeles pocket mouse survey area. This assessment may be conducted as part of the general biological resources assessment in **MM BIO 1**. If suitable habitat is present, the biologist will conduct a presence/absence trapping study.

If a Los Angeles pocket mouse (LAPM) is detected, then 90 percent of those portions of the Facility footprint that provide for long-term conservation value for LAPM shall be avoided until it is demonstrated that the MSHCP conservation goals for LAPM have been met. If avoidance is not feasible the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options. DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 8:** Prior to construction, individual projects shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Project-specific delineations may be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality

Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction. These delineations may be conducted as part of the general biological resources assessment in **MM BIO 1**. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency. Authorizations may include, but are not limited to, a Section 404 permit from the ACOE, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW.

Project-specific impacts to jurisdictional waters shall be mitigated at the Facility level through the permitting process in a manner approved by the ACOE, CDFW, and the RWQCB, where applicable.

**MM BIO 9:** In order to comply with the MBTA and/or California Fish and Game Code, site-preparation activities (removal of trees and vegetation) shall be avoided, to the greatest extent possible, during the native and migratory bird species nesting season (generally February 1 through August 31).

If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to disturbance. Surveys shall be conducted no more than thirty (30) days prior to scheduled removals, and repeated if necessary. If active nests are identified, the biologist will recommend buffers around the vegetation containing the active nests. The vegetation containing the active nest shall not be removed, and no grading shall occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within thirty (30) days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.

### 5.2.7 Environmental Effects after Mitigation Measures are Implemented

Based on the required compliance with the MSHCP for all future MDP Facilities, required permits from ACOE, RWQCB, and CDFW for jurisdictional resources, and the implementation of mitigation measures identified in Section 5.2.6, potential adverse impacts associated with special-status species, both plant and wildlife, riparian habitat, wetlands, wildlife movement, local policies, and approved habitat conservation plans will be reduced to less than significant.

Implementation of mitigation measure **MM BIO 1** will require that prior to construction of a specific MDP Facility, a Facility-specific biological resources assessment shall be conducted by a qualified biologist to determine what, if any, biological resources may be impacted. New mitigation or conditions substantially different than those described herein, may trigger subsequent CEQA documentation. However, due to the fluid nature of biological resources and related regulations, each Facility will be evaluated on a case-by-case basis at the time a project is proposed. As a Lead or Responsible Agency for District Facilities and storm drain connections, the District retains the discretion to utilize a CEQA document prepared for a private development project, if the document adequately addresses the impacts of the MDP Facilities. Implementation of mitigation measures **MM BIO 2 through MM BIO 9** will require focused surveys, replacement of lost habitat, and seasonal avoidance of vegetation removal

and/or nesting bird surveys as required by the MSHCP, MBTA, and California Department of Fish and Game Code.

**Therefore, the Project is in compliance with local, state, and federal laws, including the MSHCP and CEQA, and potential impacts related to biological resources are less than significant with mitigation.**

### **5.2.8 Cumulative Environmental Effects after Mitigation Measures are Implemented**

A cumulatively considerable impact will occur if the Project in conjunction with the cumulative development projects and other future projects result in a significant impact to biological resources. As this Project is analyzed at the programmatic level, cumulative impacts are assessed by the MVGP FEIR, which accounts for the long-term development of Moreno Valley and its Sphere of Influence, which accounts for the locations of the proposed MDP Facilities. The cumulative impacts analysis regarding biological resources as part of MVGP FEIR, determined that the implementation of the MVGP will increase the likelihood that the native and semi-native vegetation communities will be reduced within the western Riverside County region. Riversidean Sage Scrub and Riversidean Alluvial Fan Scrub have been diminished by past development throughout the region. Many Moreno Valley Non-native Grasslands and Field/Croplands support significant wintering raptor populations. Under the MVGP, there is potential for losses of this wildlife resource in all of the Project sections. Native grasslands have been severely diminished throughout California, increasing the use of Non-native Grasslands by raptors. More recently, Non-native Grasslands have come under increased development pressure, as they frequently occur on relatively level, developable lands. The high value of this resource, coupled with the historic and recent regional losses and potential for large-scale losses under MVGP will result in cumulatively considerable raptor wintering and foraging impacts. Where Non-native Grasslands occur in smaller patches and can be demonstrated to lack significant raptor foraging value, their loss will not be individually or cumulatively significant. Impacts to sensitive species within the planning area may also occur and could be cumulatively considerable. However, the MSHCP will provide adequate take coverage and compensation for such anticipated losses. (MVGP FEIR, p. 7-5)

The MSHCP has been designed to compensate for the loss of biological resources throughout western Riverside County, and cumulative impacts to existing biological resources resulting through increased future development have been addressed in the MSHCP Final EIR/EIS dated June 17, 2003. Therefore, future development projects within the planning area that conform to the MSHCP will not result in cumulatively considerable impacts for those biological resources adequately covered by the MSHCP. For resources not covered adequately by the MSHCP, which would entail wetlands in the case of this Project, additional mitigation may be necessary. Any impacts to wetlands are considered cumulatively considerable. However, compliance with federal and state regulations and compliance with any conditions associated with regulatory permits from the permitting agencies (i.e., CDFW, USFWS, Regional Board) are expected to reduce these impacts to a level below significance and less than cumulatively considerable. Impacts to non-covered sensitive species or resources resulting from MVGP implementation are not expected to be cumulatively considerable. (MVGP FEIR, p. 7-6)

The Project's impacts will be mitigated with compliance to MSHCP and mitigation measures **MM BIO 1**, **MM BIO 4**, **MM BIO 5**, **MM BIO 6**, and **MM BIO 8**, which requires, as necessary, appropriate subsequent studies and cooperation with federal and state agencies for any applicable permitting and mitigation measures. Cumulative development projects and other future projects will be assessed individually for their compliance with the MSHCP. These other projects may also require additional mitigation measures as wetlands/riparian/riverine habitat impacts are regulated by certain federal and state agencies. It is reasonable to assume that any additional mitigation measures required of these other projects will bring these projects in conformance with the MSHCP and/or with the appropriate resource authorities.

**Therefore, cumulative impacts will be less than significant with mitigation.**

### 5.2.9 References

In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- Glenn Lukos Associates, *General Biological Report for the Moreno Master Drainage Plan*, February 27, 2012. (Appendix C) [Cited as GLA]
- City of Moreno Valley, *City of Moreno Valley General Plan*, July 11, 2006. (Available at [http://www.moreno-valley.ca.us/city\\_hall/general-plan/06gpfinal/gp/gp-tot.pdf](http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/gp-tot.pdf), accessed February 21, 2012.) [Cited as MVGP]
- City of Moreno Valley, *Moreno Valley Municipal Code*, August 2011. (Available at <http://qcode.us/codes/morenovalley/>, accessed February 21, 2012.) [Cited as MVMC]
- County of Riverside Transportation and Land Management Agency, *Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) – Volume I – The Plan*, approved June 17, 2003. (Available at [http://www.wrc-rca.org/Permit\\_Docs/mshcp\\_vol1.html](http://www.wrc-rca.org/Permit_Docs/mshcp_vol1.html), accessed August 2013.) [Cited as MSHCP Vol I]
- Riverside County Habitat Conservation Agency, *Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County*. (Available at <http://www.skrplan.org/skr.html#017>, accessed August 12, 2013.) [Cited as SKR HCP]

## 5.3 Cultural Resources

Potential impacts related to:

- Disturbing any human remains, including those interred outside of formal cemeteries; was found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A).

The following discussion addresses potential impacts related to:

- Causing a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Causing a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5; and/or
- Directly or indirectly destroying a unique paleontological resource or site or unique geologic feature.

The following discussion of cultural resources within the Moreno MDP Boundary, is based on the *Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California*; and *Paleontological Resources Assessment Report, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California*, prepared by CRM TECH. These reports are included as Appendices D.1 and D.2, respectively, of this Draft PEIR.

As discussed below, the Project's potential to have a substantial adverse effect, either directly or indirectly to cultural resources is considered to be **less than significant with mitigation incorporated**.

### 5.3.1 Setting

The Moreno MDP and MDP Facilities are proposed to be located within and or adjacent to both paved roadways and open fields in a rapidly urbanizing former agricultural area. Soils in the MDP Boundary consist of grayish-brown, medium grained sands with some decomposing granite near the hills and boulder outcrops. Past developments have removed almost all traces of the native landscape along the roadways, but some native vegetation was observed in the fields that have not been used for agriculture. Vegetation noted near the roadways consists mostly of introduced landscaping plants, while the rest of the MDP Watershed hosts scattered growths of tumbleweeds, wild mustards, cottonwood, datura, and the typical small grasses and shrubs. (CRM-B, pp. 5–6.)

### Ethnohistoric Context

The Moreno MPD is located within an area where the traditional territories of three Native American groups overlap: the Serrano of the San Bernardino Mountains, the Luiseño of the Perris-Elsinore region, and the Gabrielino of the San Gabriel Valley, in addition to a late influx of Cahuilla during the 19<sup>th</sup> century. (CRM-A, p. 4.)

Despite their difference in linguistic affiliation, Native Americans who lived in the Moreno Valley area exhibited similar social organization and resource procurement strategies. The villages of these Native



Americans were based on clan or lineage groups. Archaeologically, their home/base sites are usually marked by midden deposits, often with bedrock mortar/metate features. During their seasonal rounds to exploit natural resources, small groups often ranged some distances in search of specific plants and animals. The gathering strategies of the Native Americans in this area often left behind signs of special use sites, such as boulder slicks, at the locations of the resources (CRM-A, p. 4).

### Historic Context

In comparison to other nearby communities such as Riverside and San Jacinto, Moreno Valley is a “late-boomer” both in early development in the 19<sup>th</sup> century and in urban growth in the 20<sup>th</sup> century. By the mid-19<sup>th</sup> century, the area that constitutes present-day Moreno Valley remained essentially uninhabited, despite its location on a grassy plain surrounded by several large Mexican land grants. In 1853–1855, when the U.S. government initiated the first official land survey in Southern California, the only man-made features observed in the area were a few roads crisscrossing the desert floor, including a wagon road from San Bernardino to Temecula, a second one leading to San Jacinto, and several unidentified roads or trails. (CRM-A, pp. 4–5.)

The Moreno Valley area remained unclaimed public land until 1870, when a large tract of 13,471 acres was purchased from the U.S. government in one single transaction. It was on this vast acquisition that the 11,560-acre Alessandro Tract and the town of Alessandro, where the March Air Reserve Base lies today, were laid out and offered to settlers in 1887, during a land boom that swept through southern California in the 1880s. After this initial development scheme failed, the developers of Redlands in San Bernardino County, fresh from their acclaimed success in creating the Bear Valley Reservoir and the thriving Redlands colony, took over the Alessandro Tract with the intention of irrigating the land with an elaborate water system. (CRM-A, p. 5.)

Water from the Bear Valley Reservoir reached the Moreno Valley area in 1891, ushering in a few years of prosperity in the early 1890s. Two more communities came into being in the vicinity during this brief boom: New Haven, soon to be renamed Moreno, and Midland, also known as Armada. However, the boom soon turned to bust during the drought of the late 1890s, when Bear Valley water was no longer delivered to the Moreno Valley area. As a result, the budding towns in the area became largely abandoned, and many of the buildings were taken up and moved to Riverside. (CRM-A, p. 5.)

During the early 20<sup>th</sup> century, the Moreno Valley area began to recover slowly. In 1912, a 1,100-acre portion of the original Alessandro Tract was re-subdivided as the Sunnymead Orchard Tract, thus bestowing on the community formerly known as Midland or Armada, the new name of Sunnymead. Eleven years later, a series of land development projects began just to the west of Sunnymead, which ultimately resulted in the establishment of the community of Edgemont. (CRM-A, p. 5.)

Despite these development efforts, Moreno Valley’s economic prospect was severely hampered by the lack of reliable water supply until 1973, after the completion of the California Aqueduct and its southern terminus, Lake Perris. Since then, the promise of affordable housing brought an influx of commuters to the Moreno Valley area, setting off a period of rapid growth and urbanization. By 1984, when residents

in the communities of Moreno, Sunnymead, and Edgemont voted to incorporate as the City of Moreno Valley, the new city had already become the second most populous in Riverside County, due in large part to the availability of affordable housing. (CRM-A, p. 5.)

### **Paleontological Context**

Paleontological resources constitute the remains of prehistoric life, exclusive of any human remains, and include the localities where fossils were collected as well as the sedimentary rock formations from which they were derived. The defining character of fossils or fossil deposits is their geologic age which is typically regarded as older than 10,000 years, the generally accepted temporal boundary marking the end of the last late Pleistocene glaciation and the beginning of the current Holocene epoch. (CRM-B, p. 3.)

Paleontological resources are defined as the remains or traces of prehistoric plant and animal life. Fossil remains commonly include marine shells; the bones and teeth of fish, reptiles, and mammals; leaf assemblages; and petrified wood. Fossil traces include internal and external molds (impressions) and casts created by these organisms (CRM-B, p. 3).

The Moreno MDP lies in the northern portion of the Peninsular Ranges province, and constitutes a part of an eroded mass of Cretaceous and older crystalline rock known as the Perris Block. The Peninsular Ranges province is bounded on the north by the Transverse Ranges province, on the northeast by the Colorado Desert province, and on the west by the Pacific Ocean. It extends southward to the southern tip of Baja California. (CRM-B, p. 5.)

The Perris Block was defined as a region between the San Jacinto and Elsinore-Chino fault zones, bounded on the north by the Cucamonga (San Gabriel) Fault and on the south by a vaguely delineated boundary near the southern end of the Temecula Valley. This structural block is located in the northern portion of the Peninsular Ranges province and is considered to have been active since Pliocene times. The Pliocene- and Pleistocene-age non-marine sedimentary rocks found filling the valley areas within the Perris Block have produced a few vertebrate fossils, as well as a few invertebrate fossil remains (CRM-B, p. 5).

### **Research Methods**

#### **Phase I Archaeological Assessment**

Between October 2011 and January 2012, CRM Tech performed a cultural resources study on the Project footprint, which encompasses approximately 60 acres of vacant land and 30 miles of linear rights-of-way. The purpose of the study was to provide the District with the necessary information and analysis to determine whether implementation of the Moreno MDP, specifically the construction of future MDP Facilities, would cause substantial adverse change to any historical/ archaeological resources as mandated by CEQA. The research methods to prepare the Phase I Archaeological Assessment included a historical/archaeological resources records search, historical background research, contact with Native American representatives, and a systematic field survey of the proposed MDP Facilities. (CRM-A, p. i) The resulting Phase I Archaeological Assessment report, which is included as

Appendix D.1 to this Draft PEIR, contains a complete account of the methods, results of the various avenues of research and the final conclusion of the study.

A historical/archaeological resources records search was conducted at the Eastern Information Center (EIC) in October 2011.<sup>1</sup> The records search included an examination of maps and records on file at the EIC to determine if any previously identified cultural resources are located within or near the Project footprint. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside County Landmarks, as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory (CRM-A, pp. 4–5).

CRM TECH also conducted historical background research using published literature in local and regional history and historic maps of the Moreno Valley region. Maps consulted included the U.S. General Land Office's (GLO) land survey plat maps dated 1855–1883 and the U.S. Geological Survey's (USGS) topographic maps dated 1901–1953. (CRM-A, p. 6.)

CRM TECH submitted a written request to the State of California Native American Heritage Commission (NAHC) for a sacred lands file records search in addition to contacting a the 19 Native American representatives recommended by the NAHC in writing to solicit local Native American input regarding possible cultural resources concerns in connection with the Moreno MDP. (CRM-A, p. 6.)

A field survey of the MDP Watershed and alignments of the proposed MDP Facilities and proposed basin sites was conducted on October 27, November 1–3, and November 8, 2011. Because the proposed MDP Facility alignments are primarily confined within the heavily disturbed rights-of-way of various existing public roadways, most of the survey was conducted at a reconnaissance level by driving along the MDP Facility alignments and visually inspecting the surrounding ground surface for any indications of potential cultural resources. (CRM-A, p. 6.)

For those MDP Facilities with alignments lying outside the existing roadway rights-of-way and at the proposed MDP basin sites, a more intensive survey was conducted on foot by walking parallel transects spaced 15 meter (approximately 50 feet) apart. In this way, the entire MDP Watershed was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic periods (i.e., 50 years or older). Since much of the MDP Watershed lies under road pavement, visibility of the native ground surface was generally poor, but was excellent (95 percent) in areas of cleared and unpaved land. (CRM-A, p. 6.)

#### **Paleontological Resources Assessment**

Between October 2011 and January 2012, CRM TECH conducted performed a paleontological resources assessment on the Moreno MDP Project footprint, which encompasses approximately 60 acres of vacant land and 30 miles of linear rights-of-way. The purpose of the study was to provide the District with the necessary information and analysis to determine whether implementation of the Moreno MDP,

<sup>1</sup> The EIC is the State of California's official repository of cultural resources records for Riverside County.

specifically the construction of future MDP Facilities would potentially impact any significant paleontological resources as mandated by CEQA. The research methods in the paleontological resources assessment included records searches at the San Bernardino County Museum and the Natural History Museum of Los Angeles County, literature search, and a field survey of the MDP Watershed in accordance with the guidelines of the Society of Vertebrate Paleontology. The resulting Paleontological Resources Assessment Report, which is included as Appendix D.2 to this Draft PEIR, contains a complete account of the methods, results, and the final conclusion of the study. (CRM-B, p. 1.)

A field survey of the MDP Watershed and alignments of the proposed MDP Facilities and proposed basin sites was conducted on October 27, November 1–3, and November 8, 2011. Because the proposed MDP Facility alignments are primarily confined within the heavily disturbed rights-of-way of various existing public roadways, most of the survey was conducted at a reconnaissance level by driving along the MDP Facility alignments and visually inspecting the surrounding ground surface for any indications of potential paleontological resources. (CRM-B, p. 6.)

For those MDP Facilities with alignments lying outside the existing roadway rights-of-way and at the proposed MDP basin sites, a more intensive survey was conducted on foot by walking parallel transects spaced 15 meter (approximately 50 feet) apart. In this way, the entire MDP Watershed was systematically and carefully examined to determine the soil types, to verify the geological formations, and to look for any indications of paleontological remains. Since much of the MDP Watershed lies under road pavement, visibility of the native ground surface was generally poor, but was excellent (95 percent) in areas of cleared and unpaved land. (CRM-B, p. 6.)

## **Cultural Resources Known within the Project Boundary**

### **Historic Resources**

Two (2) historic-period sites, designated 33-015796 and 33-016655, were found across or adjacent to the proposed MDP Facilities. Both of these sites are located near the intersection of State Route 60 and Redlands Boulevard. (CRM-A, p. 7.)

Site 33-015796, which encompasses approximately 70 acres on the west side of Redlands Boulevard, consisted of the remains of a pre-1929 residential complex, represented by abandoned structural foundations, and several irrigation features. However, none of the features recorded in association with Site 33-015796 remain in existence.

Site 33-016655, known as the Kerr Stock Farm (an abandoned horse ranch), was recorded as a potential historic district encompassing approximately 120 acres on the east side of Redlands Boulevard and the south side of State Route 60. The oldest structure at this site was a Craftsman-style residence dating to the 1920s. In 2005, Site 33-016655 was evaluated for historic significance and determined not to be eligible for listing in the California Register of Historical Resources (CRM-A, p. 7). Additionally, the former location of Site 36-016655 is now mostly occupied by a group of newly completed warehouses, and the rest of the site area has also been disturbed. None of the recorded buildings, structures, or features associated with Site 36-016655 remain in or near the Moreno MDP (CRM-A, p. 10).

A wagon road once crossed the southern portion of the Moreno MDP Watershed in a generally east-west direction by the mid-1850s, when the U.S. government conducted the earliest official land surveys in the present-day Moreno Valley area. Other than this wagon road, no other evidence of any human activities was found in the vicinity of the Moreno MDP at that time (CRM-A, p. 7).

With regards to the proposed Moreno MDP basins, no buildings or other notable features were discovered at any of these sites (CRM-A, p. 10). Additionally, the systematic field survey of the proposed MDP Facilities produced completely negative results for potential cultural resources. No potential cultural resources more than 50 years of age were encountered along the MDP Facilities alignments or in the area of the proposed basins (CRM-A, p. 10).

#### **Archaeological Resources**

There are 110 recorded prehistoric sites and isolates, the majority of which were described as bedrock milling features located within the one mile of the MDP Facilities (CRM-A, p. 7). However, no evidence of prehistoric, i.e., Native American, human activities was found during the field survey conducted as part of the *Phase I Archaeological Assessment* (CRM-A, p. 10).

#### **Paleontological Resources**

No known paleontological localities (or sites) were found within the MDP Watershed or within a one-mile radius of the Project boundary by either the Natural History Museum of Los Angeles County or the San Bernardino County Museum (CRM-B, p. 6). However, paleontological localities have been reported near the MDP Boundary from soil and rock deposits similar to those known to occur within the MDP Boundary. (CRM-B, p. 7.)

### **5.3.2 Related Regulations**

#### **Federal Regulations**

##### **National Historic Preservation Act**

The National Historic Preservation Act of 1966 established the National Register of Historic Places (NRHP) as the official federal list of cultural resources that have been nominated by state offices for their historical significance at the local, state, or national level. Properties listed in the NRHP, or “determined eligible” for listing, must meet certain criteria for historical significance and possess integrity of form, location, and setting. Significance is determined by four aspects of American history or prehistory recognized by the NRHP Criteria (NPS):

- Association with events that have made a significant contribution to the broad pattern of our history; or
- Association with the lives of persons significant in our past; or
- Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possess high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction, or

- Has yielded, or has the potential to yield, information important to the prehistory or history.

Eligible properties must meet at least one of the above criteria and exhibit integrity. The integrity of a subject property is measured by the degree to which the resource retains its historical properties and conveys its historical character. Integrity also depends on the degree to which the original fabric has been retained, and the reversibility of any changes to the property.

Properties listed in the National Register include districts, sites, buildings, structures, and objects that are significant in American history, architecture, archeology, engineering, and culture.

### State Regulations

#### California Register of Historic Resources (Public Resources Code Section 5020, *et seq.*)

State law also protects cultural resources by requiring evaluations of the significance of prehistoric and historic resources in CEQA documents. A cultural resource is an important historical resource if it meets any of the criteria found in Section 15064.5(a) of the State *CEQA Guidelines*. These criteria are nearly identical to those listed above for the NRHP. The California Register of Historic Resources (CRHR) is maintained by the State Historic Preservation Office (SHPO). Properties listed, or formally designated eligible for listing, on the NRHP are automatically listed on the CRHR, as are state Landmarks and Points of Interest. The CRHR also includes properties designated under local ordinances or identified through local historical resource surveys.

The CRHR includes historic resources of importance in accordance with the following designation criteria:

- Associated with events that have made a significant contribution to the broad pattern of local or regional history or the cultural heritage of California or the United States.
- Associated with the lives of people important to local, California or national history.
- Embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master or possess high artistic values.
- Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California, or nation.

#### California Health and Safety Code Sections 7050.5, 7051, and 7054

These sections collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resources Code), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

Entities responsible for the construction of the proposed MDP Facilities, i.e., the District, Moreno Valley, Riverside County, or private developers, are responsible for compliance with these sections of the

California Health and Safety Code, in the highly unlikely event human burial remains are encountered during the construction of MDP Facilities.

#### **California Public Resources Code Section 5097.98**

California Senate Bill 297 (1982), which is codified in Section 5097.98 of the Public Resources Code (PRC) addresses the disposition of Native American burials in archeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains. It has been incorporated into Section 15064.5(e) of the State *CEQA Guidelines*.

Entities responsible for the construction of the proposed MDP Facilities, i.e., the District, Moreno Valley, Riverside County, or private developers, are responsible for compliance with this section of the California Public Resources Code, in the highly unlikely event Native American burials are encountered during the construction of MDP Facilities.

### **5.3.3 Significance Thresholds Criteria**

The Initial Study Environmental Checklist form found in Appendix G of the CEQA Guidelines defines thresholds of significance for Cultural Resources. The Notice of Preparation for the PEIR included the Initial Study Environmental Checklist to show the areas being analyzed in the PEIR; refer to Appendix A of this PEIR. Accordingly and based on the IS, the Project may be considered to have a significant impact on Cultural Resources in the following areas if the Project would:

- (Threshold A) Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- (Threshold B) Create a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5, and/or
- (Threshold C) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

### **5.3.4 Project Design Considerations**

No specific designs were considered that would avoid or reduce potential impacts to cultural resources. The type, size, and locations of the proposed Moreno MDP Facilities are limited by the hydrologic constraints and existing development within the Moreno MDP. The proposed Project is intended to identify those facilities needed to provide flood protection to protect existing and future development as the MDP Watershed develops in accordance with the Moreno Valley land use policies.

### **5.3.5 Environmental Impacts before Mitigation**

**Threshold A:** *Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5*

Significant effects upon historic structures or features are evaluated by determining the presence or absence of historic status with respect to the feature in question, and then determining the potential for Project implementation to affect the structure or feature, if it possesses historic status. Similarly, CEQA establishes that, substantial adverse change means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired (PRC §5020.1(q)).

As discussed previously under the subheading “Cultural Resources Known within the Project Boundary,” two historic-period sites, designated Site 33-015796 and Site 33-016655, were recorded near the intersection of State Route 60 and Redlands Boulevard in proximity to proposed MDP Facilities. However, none of the recorded facilities associated with Site 33-015796, were found to exist during the field survey. Site 33-016655 was evaluated in 2005, and determined not to be eligible for listing in the California Register of Historical Resources. Additionally, the field survey confirmed that the former location of Site 36-016655 is now mostly occupied by a group of newly completed warehouses, and the rest of the Site 36-016655 has been disturbed and none of the recorded buildings, structures, or features still remains in or near the MDP Boundary or any MDP Facility (CRM-A, pp. 7, 10). Further, none of the other previously recorded sites or isolates identified in the *Phase I Archaeological Assessment* was located in the immediate vicinity of the proposed MDP Facilities and no “historical resources,” as defined by CEQA are known to exist within the area proposed for MDP Facilities.

However, the location of the proposed Moreno MDP Facilities are conceptual at this time and the location and type of Facility may change as more detailed information becomes available during the final design process. For example, the locations of underground utilities, new development patterns, right-of-way availability, or the results of subsequent focused biological surveys may necessitate a shift in alignment or change in the location and type of facility identified in the Moreno MDP. Therefore, if the location or impact area of a specific MDP Facility changes from what is shown in **Figure 3.0-2 – Proposed Project**, implementation of mitigation measure **MM CR 1**, which requires a cultural resources investigation prior to construction of any MDP Facility not evaluated in the *Phase I Archaeological Assessment*. **Therefore, with implementation of mitigation measure MM CR 1, potential impacts to historical resources will be less than significant.**

**Threshold B:** *Create a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.*

As discussed previously under the subheading “Cultural Resources Known within the Project Boundary,” although there are 110 recorded prehistoric sites, consisting mainly of bedrock milling features, the field survey of the MDP Watershed produced completely negative results for these resources. Much of the area along the proposed MDP Facilities has been developed or redeveloped in recent years, resulting in extensive ground disturbances and, presumably, the loss of any archaeological remains on those properties. (CRM-A, p. 10)

The NAHC reported that the sacred lands record search identified no Native American cultural resources within the Project Boundary and suggested contacting 16 Native American representatives in the region to seek local Native American input regarding any potential cultural resources concerns in connection



with the Moreno MDP. In addition to the 16 Native American representatives on the NAHC referral list, the Cahuilla Band of Indians, Ramona Band of Cahuilla Indians, and the Santa Rosa Band of Cahuilla Indians were also contacted. As of November 2011, only the Pala Band of Mission Indians and Soboba Band of Luiseño Indians had responded. (CRM-A, p. 6)

In a letter dated November 7, 2011, the Pala Band of Mission Indians stated that the Project is located outside their Traditional Use Area; they have had no objection to the Project; and defer to tribes living closer to the MDP Watershed (CRM-A, Appendix 2).

In a letter dated November 10, 2011, the Soboba Band of Luiseño Indians stated that although the Project is outside their existing reservation it is within their tribal Traditional Use Areas. The letter further states the MDP Watershed is regarded as highly sensitive to the people of Soboba because of its close proximity to known Luiseño village sites and trade routes between the Luiseño and Cahuilla tribes. (CRM-A, Appendix 2) **Figure 5.3-1 – Soboba Band of Luiseño Indians Potentially Sensitive Areas, which is included at the end of this section, shows the location of the proposed MDP Facilities in regard to the potentially sensitive resources.**

On December 18, 2012, the District and the Pechanga Band of Luiseño Indians (Pechanga Tribe) entered into an agreement (the “Master Agreement”) that addresses the treatment of Native American human remains, grave goods, funerary objects, ceremonial and sacred items, and cultural resources and established procedures for tribal monitoring by the Pechanga Tribe. Any project that meets all of the following criteria is considered a “Covered Project” and is subject to the terms of the Master Agreement (Master Agreement, Section II):

- A. The District is the CEQA Lead Agency; and
- B. The Project is located within the Pechanga Tribe’s Traditional Land (as shown on Exhibit “A” of the Master Agreement) and not within the cities of Hemet, San Jacinto, and east Moreno Valley; and
- C. The project requires grading, groundbreaking, excavation, and ground-disturbing activities including, but not limited to construction, archaeological testing, studies, surveys, utility trenching, disking, grubbing, and staging activities.

Based on the above criteria, the only MDP Facility that is a Covered Project is the Ironwood Debris Basin, which is located within the unincorporated portion of the Riverside County (see Figure 1-2 Proposed Project and Figure 1-3 City/County Boundaries). All other MDP Facilities are located within east Moreno Valley and not subject to the terms of the Master Agreement.

Based on the results of the records searches and field surveys, no archaeological resources were identified within or adjacent to proposed MDP Facilities (CRM-A, p. 11). Further, due to the disturbed nature of the Project site from previous construction activities, impacts to archaeological resources are not anticipated (CRM-A, p. 10). Nevertheless, in the event of an accidental discovery of an archaeological resource, implementation of mitigation measure **MM CR 2**, which requires construction

in the vicinity of the find be halted until a determination as to the significance of the find is made and any find recorded and curated, will be implemented. Additionally, because the location of the proposed Moreno MDP Facilities are conceptual and may change, implementation of mitigation measure **MM CR 1** is required prior to construction of any MDP Facility not evaluated in the *Phase I Archaeological Assessment* or if the Facility is subsequently changed in location or size to an area outside the study area. Further, because the MDP Facilities are located within the Pechanga Tribe's Traditional Land and the Traditional Use Area of the Soboba Band of Luiseño Indians, if a Facility-specific assessment is required per mitigation measure **MM CR 1** and if construction of such Facility has the potential to impact archaeological and/or cultural resources, then mitigation measure **MM CR 3** requires the proponent for such Facility to notify the appropriate local Native American tribes prior to initiation of ground-disturbance activities, including further surveys. **Therefore, with implementation of mitigation measures MM CR 1 through MM CR 3, potential impacts to archaeological resources will be less than significant.**

**Threshold C:** *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

As discussed under the subheading "Paleontological Context," paleontological resources are defined as the remains or traces of prehistoric plant and animal life. The paleontological sensitivity for a geologic formation is determined by the potential for that formation to produce significant nonrenewable fossils. That is paleontological sensitivity for the proposed MDP Facilities is a function of the type and age of the geologic units within the Project boundary.

The Society of Vertebrate Paleontology issued a set of standard guidelines intended to assist paleontologists to assess and mitigate any adverse effects/impacts to nonrenewable paleontological resources in addition to defining three potential categories of potential paleontological sensitivity for geologic units that might be impacted by a project. These categories are high, low, and undetermined sensitivity (CRM-B, p. 4).

- **High sensitivity:** Geologic units assigned to this category are considered to have a high potential for significant nonrenewable vertebrate, invertebrate, marine, or plant fossils. Sedimentary rock units in this category contain a relatively high density of recorded fossil localities, have produced fossil remains in the vicinity, and are very likely to yield additional fossil remains.
- **Low sensitivity:** Geologic units are assigned to this category when they have produced no or few recorded fossil localities and are not likely to yield any significant nonrenewable fossil remains.
- **Undetermined sensitivity:** Geologic units are assigned to this category when there is limited exposure of the rock units in the area and/or the rock units have been poorly studied.

As discussed under the subheading "Cultural Resources Known within the MDP Boundary," there are no known paleontological localities within the MDP Watershed or within a one-mile radius of the MDP Boundary. However, paleontological localities have been reported nearby from sediment lithologies

similar to those known to occur within the MDP Boundaries. The field survey produced negative results for any indication of potential paleontological resources, and no surficial evidence of fossil remains was observed within or adjacent to the proposed MDP Facilities. Surface soils were found to consist of grayish-brown medium-grain sands and almost the entire area within the MDP Boundaries have been disturbed in the past by agricultural and construction activities. Decomposing granite was observed exposed near the hills and boulder outcrops. (CRM-B, pp. 8–9.)

The results of the paleontological resource assessment indicate that the surficial soils in the alignments of the proposed MDP Facilities consist of alluvium of Recent (Holocene) age and have a low potential for significant nonrenewable fossil remains. However, these younger alluvial sediments are of variable thickness and are known to rest directly on top of older Pleistocene-age sediments, which have a high potential to yield significant vertebrate fossil remains. Therefore, MDP Facility construction has a low potential to impact paleontological resources in the surficial alluvial sediments, but a high potential in the subsurface Pleistocene-age soils (CRM-B, pp. 8–9). Because of the past ground disturbances, it is expected that no intact fossil remains will be contained within the top three to five feet of sediments for MDP Facilities to be located along existing roadways nor within the top two to three feet of sediments in areas not adjacent to existing roadways (CRM-B, p. 9).

The thickness of the younger sediments may be determined from soil borings, should they be available at the onset of grading or trenching activities. However, if the age of the sediments cannot be determined, periodic monitoring will be necessary during excavations and other earth-moving activities reaching beyond three feet in depth and if buried Pleistocene-age sediments are encountered, continuous monitoring will be required Project (CRM-B, p. 9). Therefore, because construction of MDP Facilities will entail excavation and or earth-moving activities at depths greater than three feet and there is a high potential for subsurface Pleistocene-age soils in the MDP Boundary, mitigation measure **MM CR 4**, which requires a paleontological monitoring plan for earth-moving activities in Pleistocene age or older alluvium shall be implemented. In the event fossil specimens are present, mitigation measures **MM CR 5 through MM CR 7**, which relate to the disposition of specimens, shall be implemented. **With the incorporation of the aforementioned mitigation measures, potential impacts to paleontological resources will be less than significant.**

### 5.3.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). The technical studies completed for the Project determined that it was highly unlikely that the proposed MDP Facility alignments contain significant cultural resources. But because the locations and sizes of the MDP Facilities are conceptual, the following mitigation measures are required to prevent potential impacts to unknown and undiscovered cultural resources from becoming significant.

**MM CR 1:** Before At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources.

for which there is a change in the location or size of disturbance area from what was evaluated in the The Lead Agency shall consider applicable data and analyses, such as the Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California (CRM TECH, January 31, 2012), Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources. The District, Riverside County, or Moreno Valley Public Works Department shall require the proponent of such MDP Facility to prepare or cause to be prepared a Facility specific assessment of the potential for archaeological and cultural resources in order to determine the presence or extent of any such resources and evaluate the significance of such resources (if present). This assessment shall include, at minimum a Native American Heritage Commission Sacred Lands File search, a records search at the Eastern Information Center at the University of California Riverside, a walkover survey, and preparation of a written report containing the results of the assessment. The archaeological evaluations shall be completed prior to the commencement of any ground disturbing activities.

**MM CR 2:** Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State *CEQA Guidelines*), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.

**MM CR 3:** If the Facility-specific assessment required by **MM CR 1** determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a building grading permit, or Notice to Proceed with ~~or~~ construction of that proposed MDP Facility, the proponent for that Facility shall notify local Native American tribes the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities. With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor, ~~at such tribe's sole cost and expense,~~ all grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys. Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.

**MM CR 4:** Before the issuance of a Notice to Proceed with construction of any proposed MDP Facility, the proponent of the specific MDP Facility shall either:

- a) Establish to the satisfaction of the Lead Agency for the specific MDP Facility (i.e., the District, Moreno Valley, or Riverside County), that no excavation or earth-moving activities shall take place within soils that are identified as Pleistocene-age or older alluvium; or
- b) Retain the services of a qualified paleontologist to review construction and grading plans and develop a paleontological monitoring plan, if necessary. Any monitoring shall be restricted to undisturbed older alluvium, which might be present below the surface. To avoid construction delays, the monitor shall be prepared to quickly salvage fossils, as they are unearthed. The monitor shall remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have the authority to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens. If the paleontologist determines that monitoring is not necessary, the paleontologist shall prepare a memo documenting such to the satisfaction of the Lead Agency.

**MM CR 5:** A qualified paleontologist shall be retained to evaluate any recovered paleontological specimens. If the qualified paleontologist deems recovered resources as rare, substantial, or otherwise, unique, the resources shall be prepared and stabilized for formal identification and permanent preservation.

**MM CR 6:** Identification and curation of recovered paleontological specimens into an established accredited museum repository with permanent retrievable paleontological storage shall be required for recovered resources identified by the qualified paleontologist (retained via **MM CR 5**) as rare, substantial, or otherwise, unique.

**MM CR 7:** Preparation of a report of findings with an appended itemized inventory of paleontological specimens shall be required. The submittal of the report to the applicable Lead Agency (i.e., District, Moreno Valley, Riverside County) and the curation of specimens identified by the qualified paleontologist (retained via **MM CR 5**) as rare, substantial, or otherwise, unique into an established, accredited museum repository would signify the completion of the mitigation program.

### 5.3.7 Environmental Effects after Mitigation Measures are Implemented

Impacts related to historic and archaeological resources were found to be less than significant within or adjacent to proposed MDP Facilities. However, because the locations of the proposed MDP Facilities are conceptual at this time and may change as more detailed information becomes available mitigation measure **MM CR 1** requires a Facility-specific assessment of potential historic and archaeological resources. No historic or significant archaeological resources are within the footprint of the proposed MDP Facilities; nonetheless, mitigation measure **MM CR 2** includes provisions for the accidental discovery of archaeological resources. Because the MDP Facilities are located within a tribal Traditional Use Area, mitigation measure **MM CR 3** requires the proponent for any specific proposed Moreno MDP Facility to notify local Native American tribes prior to ground-disturbing activities and may allow tribal monitors to be present (at the tribe's sole expense) during grading, excavation, and other ground-

disturbing activities if the Facility-specific assessment required by **MM CR 1** determines a potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance.

No unique geologic feature is known to exist and no fossils have been documented within or adjacent to the proposed MDP Facilities. However, the Moreno MDP Boundary is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Ground-disturbing activities resulting from construction of the proposed Project could damage or destroy previously undocumented unique fossils, if located within the footprint of proposed MDP Facilities. Mitigation measures **MM CR 4** through **MM CR 7**, outline specific measures that will be taken if certain soil types are present that support paleontological resources; and creates provisions for any rare, substantial, or otherwise, unique paleontological specimens that may be unearthed during construction activities.

**Implementation of these mitigation measures will reduce potentially significant impacts upon historical, archaeological, and paleontological resources to a less than significant level.**

### 5.3.8 Cumulative Environmental Effects after Mitigation Measures are Implemented

A cumulatively considerable impact will occur if the Project, in conjunction with other future projects, results in a significant impact to cultural resources. As this Project is analyzed at the programmatic level, cumulative impacts are assessed by the *Moreno Valley General Plan Final Program EIR* (MVGP FEIR). The *Moreno Valley General Plan* (MVGP) accounts for the long-term development of Moreno Valley and its Sphere of Influence, which includes the locations of the proposed MDP Facilities. The cumulative impacts analysis regarding cultural resources as part of the MVGP FEIR determined that the implementation of the MVGP will not be significant if projects are assessed individually for potential impacts and mitigated as appropriate. Thus, this Project's impacts will be mitigated to a less than significant level and other future projects will also be mitigated to a less than significant level, as necessary and according to CEQA. It is reasonably assumed, then, that the project-specific assessments and mitigation will satisfactorily avoid significant impacts, which will prevent cumulatively considerable impacts to cultural resources. **Therefore, cumulative impacts will be less than significant.**

### 5.3.9 References

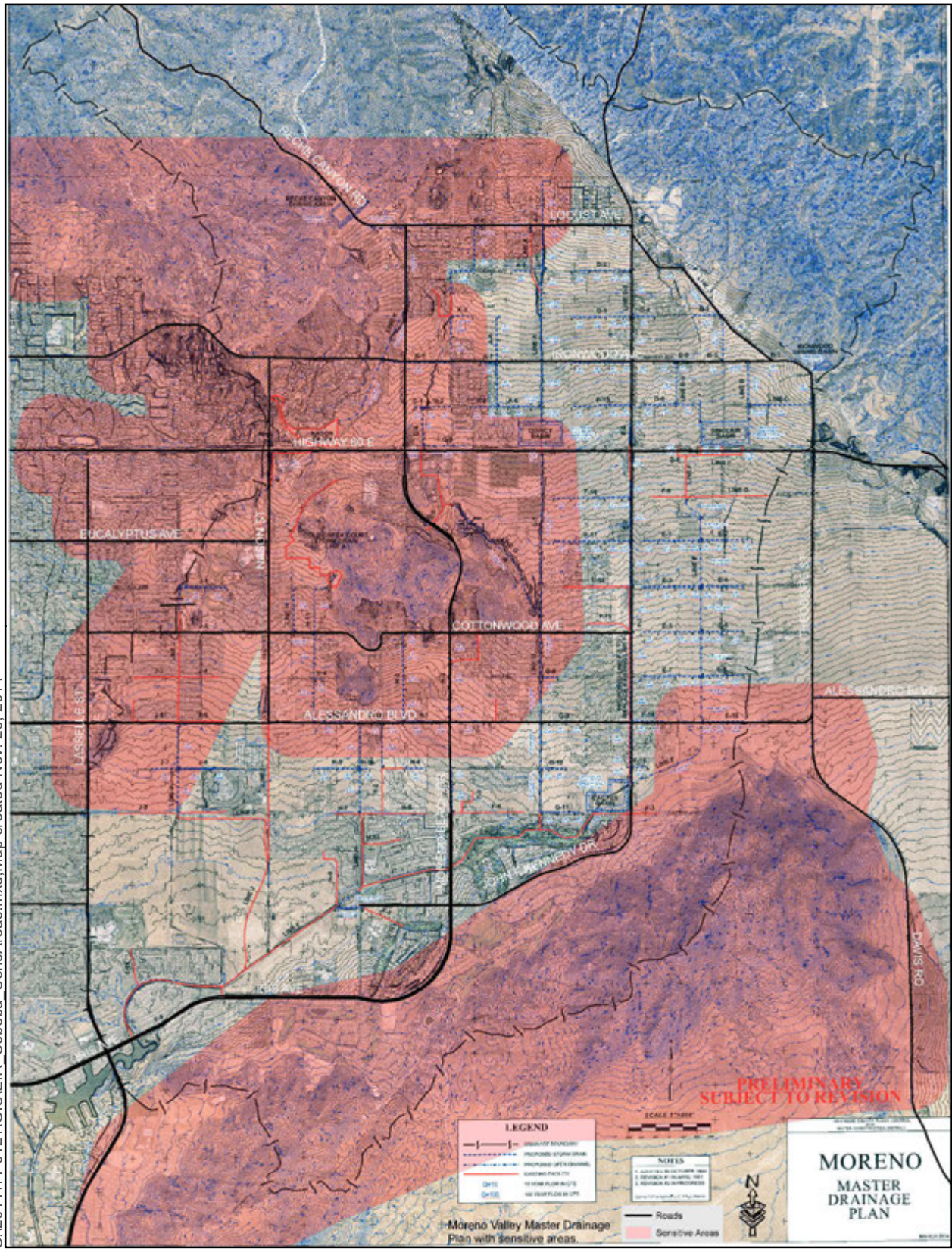
In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- CRM TECH, *Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California*, January 31, 2012. (Appendix D.1) [Cited as CRM-A]
- CRM TECH, *Paleontological Resources Assessment Report, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California*, February 1, 2012. (Appendix D.2) [Cited as CRM-B]
- National Park Service, *National Register Bulletin, How to Apply the National Register Criteria for Evaluation*. (Available at [http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15\\_2.htm](http://www.nps.gov/nr/publications/bulletins/nrb15/nrb15_2.htm),

accessed April 5, 2012.) [Cited as NPS]

- Riverside County Flood Control and Water Conservation District, *Master Cultural Resources Treatment and Tribal Monitoring Agreement*, executed December 18, 2012. (Available at the Riverside County Flood Control and Water Conservation District offices.) [Cited as Master Agreement]

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Source: Soboba Band of Luiseño Indians, 2014.

**Figure 5.3-1. Soboba Band of Luiseño Indians Potentially Sensitive Areas**

Moreno Master Drainage Plan Revision

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN





## 5.4 Hydrology and Water Quality

Potential impacts related to:

- Substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Creating or contributing runoff water, which would exceed the capacity of existing or planned storm water drainage systems;
- Placing housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Exposing people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
- Exposing people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow;

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for this Project (Appendix A). The following discussion addresses potential impacts related to:

- Violating any water quality standards or waste discharge requirements;
- Resulting in substantial discharges of typical storm water pollutants (e.g., sediment from construction activities, hydrocarbons, and metals from motor vehicles, nutrients and pesticides from landscape maintenance activities, metals of other pollutants from industrial operation) or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity;
- Substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially altering the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; and/or
- Placing structures or fill within a 100-year flood hazard area, which would impede or redirect flood flows.

**As discussed below, the Project's potential hydrology and water quality impacts are considered to be less than significant.**

### 5.4.1 Setting

The Moreno Watershed encompasses approximately 21 square miles in the generally flat valley floor from the southern base of the San Timoteo Badlands to the northern slope of Mount Russell. The major topographical feature in the watershed is a prominent hill south of State Route 60 and west of Moreno Beach Drive. Drainage in the watershed is primarily in the form of sheet flows from the north to south/southwest before ultimately flowing into the San Jacinto River (Reaches 1 to 3), Canyon Lake, Lake Elsinore, and the Santa Ana River (Reach 3). Past development and agricultural practices have removed most of the native vegetation from the Moreno Watershed, which is partially developed with residential, commercial, institutional, and industrial uses.

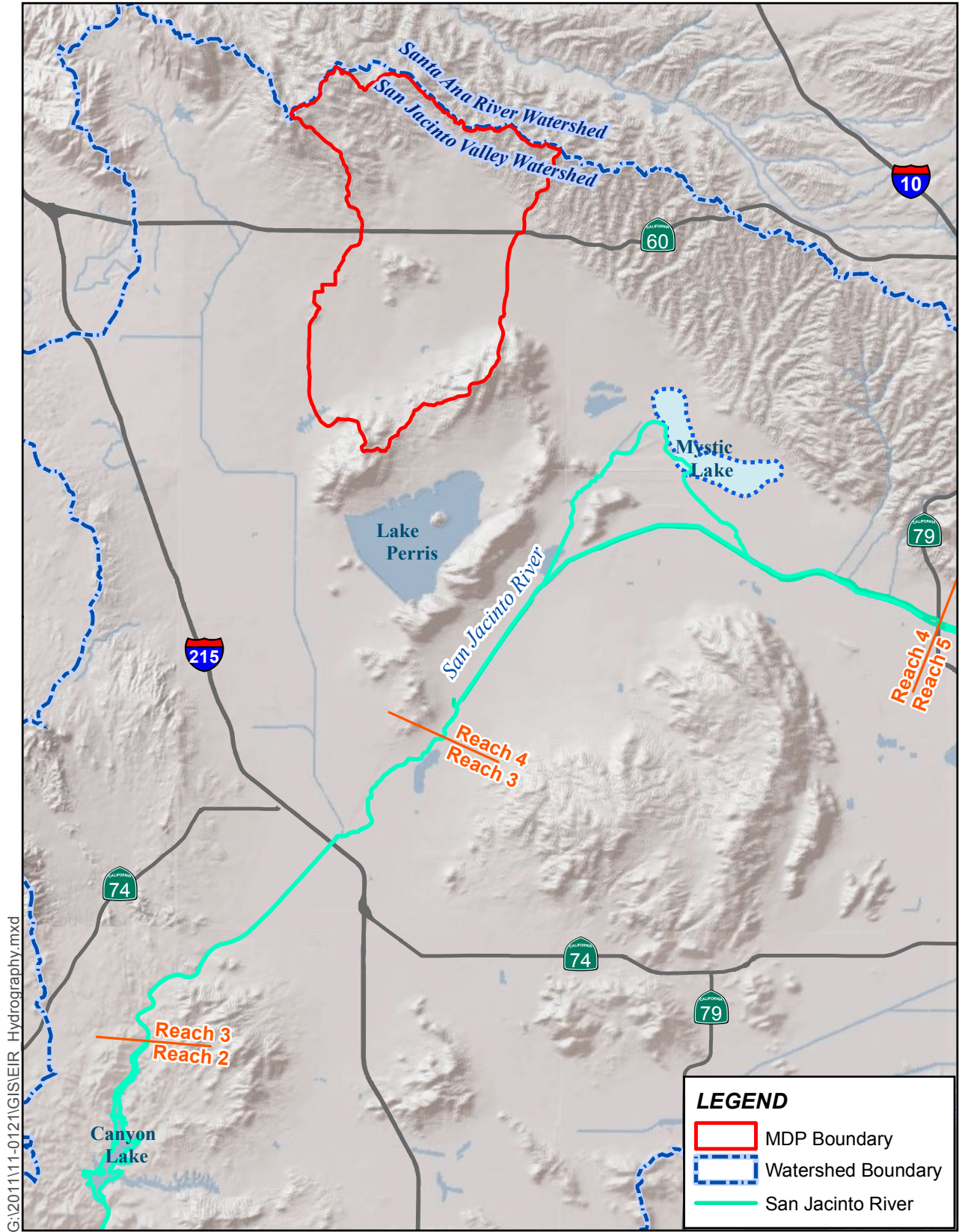
The following discussion describes the proximity of the Project to nearby water bodies, and provides background information on water quality issues related to surface water in the Project area, in order to thoroughly evaluate the impacts of the proposed Project to local hydrology and water quality.

#### Surface Waters

The Project area encompasses portions of the city of Moreno Valley and surrounding unincorporated areas, which is located within the San Jacinto River watershed, specifically within the Santa Ana River, Reach 3 watershed. The existing and proposed drainage system will collect local urban runoff and transport the flow through the developing community to an outlet at the upper terminus of the Kitching Street Channel located at Iris Avenue, just east of Lasselle Street. Kitching Street Channel drains to Perris Valley Storm Water Channel which then flows into the San Jacinto River. The San Jacinto River drains approximately 540 square miles to the Railroad Canyon Reservoir (Canyon Lake), and then into Lake Elsinore. Discharges from these two lakes are very rare (MVGP FEIR, p. 5.7-1). Overflow from Lake Elsinore spills into Temescal Creek, and ultimately flows into the Santa Ana River Reach 3. **Figure 5.4-1 – Hydrology within the Proposed Project Area** shows the boundaries of the Moreno MDP and its proximity to various surface water bodies.

The San Jacinto River, Reach 3 is located approximately five miles southwest of the Moreno MDP Boundary, and generally flows southwest past the Project area (see **Figure 5.4-2 – Regional Surface Water Bodies**). Flows in the San Jacinto watershed are dominated by storm water, urban, and agricultural runoff. Only occasionally do flows from the upper San Jacinto River watershed reach Canyon Lake, and flows reaching Lake Elsinore are even rarer. There are several dairies located southeast of the Moreno MDP Watershed in the Lakeview and San Jacinto area. Run-off from these dairies, which are outside of the Moreno MDP Watershed, may ultimately enter the San Jacinto River.

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Sources: County of Riverside GIS, 2012; ESRI.

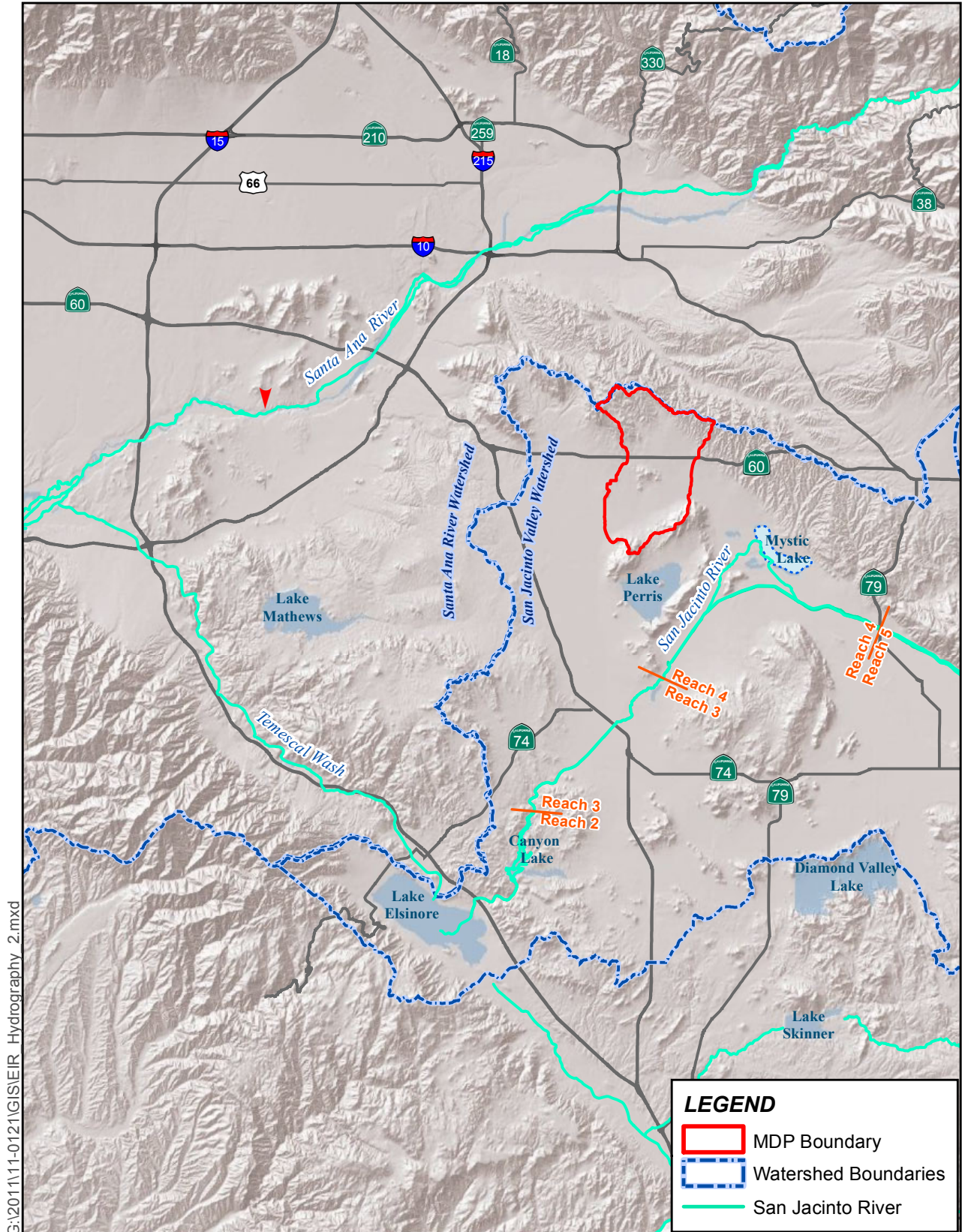
Figure 5.4-1 - Hydrology Within the Proposed Project Area

Moreno Master Drainage Plan Revision

0 1 2 3 Miles







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Sources: County of Riverside GIS, 2012; USGS 10m DEM's, ESRI.

**Figure 5.4-2 - Regional Surface Water Bodies**

Moreno Master Drainage Plan Revision

0 1 2 3  
Miles



Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



There is a private manmade lake in the Moreno Valley Ranch, which is generally bounded by Rancho Del Lago on the west, Iris Avenue on the north, Avenida De Circo on the east, and Calle Agua on the south. The northeastern part of this private lake has a lined inlet north of Iris Avenue and east of Camino Flores (existing Line F) and a lined outlet in the southwestern part of the lake that converges with the existing Perris Valley Storm Drain. This lake is part of the Storm Drain/Flood Control Plan for the Moreno Valley Ranch. The lake eliminates flood hazards by conveying 100-year storm flows through trapezoidal channels (designed and constructed to the District's specifications) in addition to acting as a retention basin during high-flow episodes. (MVR SP/EIR, pp. 66-67)

Because the water level in the Moreno Valley Lake is maintained on a year-round basis, the lake was designed to meet all applicable standards and includes a circulation system to prevent water stagnation. (MVR SP/EIR, pp. 68-69) As the private lake is designed to only handle high-flow situations from the now-existing Line F inlet, low flows are diverted away from the lake using a low-flow drain system around the edges of the lake. Typical project area urban runoff is collected into the low-flow drain system so that nuisance and irrigation runoff from developed areas are not conveyed directly into the lake. Runoff from the Mount Russell foothills, along the southern portion of the Moreno Valley Ranch development, as well as storm flows through developed portions of the Moreno Valley Ranch, are conveyed to roadways where possible utilizing underground facilities. (MVR SP/EIR, pp. 257, 261)

Accordingly, the existing Line F connects with existing underground Line F-8 within Iris Avenue to convey low-flows, which do not discharge into the private lake. While the private lake may still operate as a retention basin in high-flow episodes, it is not anticipated by the MDP Facilities. The development of the proposed MDP Facilities will safely divert and better control storm flows with adequate capacity. Until the drainage system is fully constructed, there exists the potential for the private lake to maintain its ancillary function as a flood protection retention basin.

### **Water Quality**

Water quality in this region is regulated under the jurisdiction of the Santa Ana Regional Water Quality Control Board (SARWQCB) Region 8. The SARWQCB Basin Plan (Basin Plan) establishes water quality standards for all the ground and surface waters of the region. The Santa Ana Region includes the upper and lower Santa Ana River watersheds, the San Jacinto River watershed, and several other small drainages.

SARWQCB has divided the San Jacinto River into seven reaches for regulatory purposes. The majority of storm water from the Moreno MDP Watershed enters Reach 3 of the San Jacinto River and proceeds to Canyon Lake, then Lake Elsinore, and then ultimately Reach 3 of the Santa Ana River, which flows to the Pacific Ocean. Except during large storm events, Canyon Lake and Lake Elsinore are, for all practical purposes, closed basins that have water quality characteristics reflecting the water quality of the flows entering them. Canyon Lake, Lake Elsinore, and Santa Ana River (Reach 3) have been identified by the State Water Resources Control Board (SWRCB) pursuant to Section 303(d) of the Clean Water Act (CWA) as having water quality impairments due to nutrients, pathogens, Polychlorinated biphenyls (PCBs), and unknown toxicity (Urban Runoff Management Program, p. 23).



Surface water quality may be impacted by both point source and non-point source (NPS) discharges of pollutants. Point source discharges are regulated through National Pollutant Discharge Elimination System (NPDES) permitting. Non-point source pollution is now considered to be the leading cause of water quality impairments in the state, as well as the entire nation. Non-point source pollution is not as readily quantifiable as pollution that is derived from point sources, since it occurs through numerous diffuse sources. Rainwater, snowmelt, or irrigation water can pick up and transport pollutants as it moves across land or paved surfaces, and these pollutants may ultimately be discharged into streams, lakes, the ocean, and groundwater. Urban areas and agriculture are both considered to substantially contribute to non-point source pollution in surface waters; pollutants associated with agricultural areas include fertilizers, pesticides, fecal coliform, salts, and sediments. Pollutants associated with urban areas include pathogens, organic compounds, sediment, oil and grease, metals, trash and debris, and nutrients.

### Status of Surrounding Water Bodies

The SARWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the CWA to include the beneficial uses of specific water bodies, the levels of water quality that must be met and maintained to protect those uses (water quality objectives), and the state's anti-degradation policy. Water quality standards for all ground and surface waters overseen by the SARWQCB are documented in the Basin Plan. Beneficial uses consist of all the various ways that water can be used for the benefit of people and/or wildlife. Nineteen beneficial uses are recognized within the Santa Ana Region. Nine beneficial uses have been designated for surface water bodies and groundwater in the vicinity of the Moreno MDP as summarized in **Table 5.4-A – Beneficial Uses for Receiving Waters in Proximity to the Moreno MDP**.

**Table 5.4-A – Beneficial Uses for Receiving Waters in Proximity to the Moreno-MDP**

Receiving Waters	303(d) List Impairments	Designated Beneficial Uses
San Jacinto River, Reach 1	None	MUN*, AGR*, GWR*, REC1*, REC2*, WARM*, WILD*
San Jacinto River, Reach 3	None	AGR*, GWR*, REC1*, REC2*, WARM*, WILD*
Canyon Lake (San Jacinto River, Reach 2)	Nutrients and Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD
Lake Elsinore	Nutrients, Organic Enrichment/Low Dissolved Oxygen, PCBs, Sediment Toxicity, and Unknown Toxicity	REC1, REC2, WARM, WILD
Santa Ana River, Reach 3	Pathogens, copper (during the wet season only), and lead	AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN

Definitions of Beneficial Uses	
MUN	Waters used for community, military, municipal or individual water supply systems. Uses may also include drinking water supply.
AGR	Waters are used for farming, horticulture, or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
RARE	Rare, threatened, or endangered species waters support the habitats necessary for the survival and successful maintenance of plant or animal species designated under state or federal law as rare, threatened, or endangered.
REC1	Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, and camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.
SPWN	Spawning, reproduction and development waters support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
Notes: * Intermittent beneficial use	
Source: <i>National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, The County of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Area-Wide Urban Runoff management Program</i> , Order No. R8-2010-0033, NPDES No. CAS618033, January 29, 2010. Table 3b . (Available at <a href="http://www.swrcb.ca.gov/rwqcb8/board_decisions/adopted_orders/orders/2010/10_033_RC_MS4_Permit_01_29_10.pdf">http://www.swrcb.ca.gov/rwqcb8/board_decisions/adopted_orders/orders/2010/10_033_RC_MS4_Permit_01_29_10.pdf</a> .)	
303d list: <a href="http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf">http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf</a>	

The San Jacinto River (Reaches 1 to 3), Canyon Lake, Lake Elsinore, and the Santa Ana River (Reach 3) are the receiving water bodies for the Moreno MDP Watershed. The San Jacinto River (Reaches 1 and 3) is not listed as impaired on the 303(d) list of impaired water bodies. However, Canyon Lake is listed as impaired for nutrients and pathogens; Lake Elsinore as impaired for nutrients, organic enrichment/low dissolved oxygen, PCBs, sediment toxicity, and unknown toxicity; and Santa Ana River (Reach 3) is impaired for pathogens copper (during the wet season only), and lead (303(d) List). Lake Elsinore and Canyon Lake are the terminal points for the San Jacinto River watershed (MVGFP FEIR, p. 5.7-1). Storm water from the Moreno MDP Watershed ultimately discharges to these water bodies; thus any development or infrastructure projects within the Moreno MDP Watershed will be required to treat any

storm water leaving such project sites for the aforementioned Pollutants of Concern (POC)<sup>1</sup> in compliance with the appropriate watershed-based Best Management Practices (BMPs) set forth in the *Comprehensive Nutrient Reduction Plan for Lake Elsinore and Canyon Lake*.<sup>2</sup>

All listed water quality objectives governing water quality in inland surface waters are discussed in the Basin Plan; however, only those numeric and narrative water quality objectives that are most likely to be relevant to the proposed Moreno MDP are listed in **Table 5.4-B – Numeric Water Quality Objectives** and **Table 5.4-C – Applicable Narrative Water Quality Objectives**, respectively. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the RWQCB is designed to minimize and control pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.

Whether or not a water body has numeric water quality objectives, narrative objectives apply to all inland surface waters and ground waters within the region under jurisdiction of the RWQCB. Where more than one narrative objective is applicable, the RWQCB requires the most stringent application of the objective. **Table 5.4-C, Applicable Narrative Water Quality Objectives** lists all of the applicable narrative objectives for inland surface waters in proximity to the Project.

**Table 5.4-B – Numeric Water Quality Objectives**

Water Body	Water Quality Objectives (mg/L)						
	Total Dissolved Solids (TDS)	Hardness	Sodium (Na)	Chlorine (Cl)	Total Inorganic Nitrogen (TIN)	Sulfate (SO <sub>4</sub> )	Chemical Oxygen Demand (COD)
San Jacinto River, Reach 1 – Lake Elsinore to Canyon Lake	450	260	50	65	3	60	15
San Jacinto River, Reach 2 – Canyon Lake	700	325	100	90	8	290	-
San Jacinto River, Reach 3 – Canyon Lake to Nuevo Rd.	820	400	-	250	6	-	15
San Jacinto River, Reach 4 – Nuevo Rd. to North-South Mid-	500	220	75	125	5	65	-

<sup>1</sup> A Pollutant of Concern is a pollutant that is associated with a proposed project and is listed as impaired under CWA section 303(d). (Glossary, p. G-6) The POCs for the proposed Project are nutrients, pathogens, metalloids, PCBs, and unknown toxicity.

<sup>2</sup> The Moreno Valley Municipal Code implements the requirements of any existing or future National Pollutant Discharge Elimination (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the General Construction Permit in Chapter 8.10 Stormwater/Urban Runoff Management and Discharge Controls in Chapter 8.21 Grading Regulations.

Water Body	Water Quality Objectives (mg/L)						
	Total Dissolved Solids (TDS)	Hardness	Sodium (Na)	Chlorine (Cl)	Total Inorganic Nitrogen (TIN)	Sulfate (SO <sub>4</sub> )	Chemical Oxygen Demand (COD)
Section Line							
San Jacinto River, Reach 5 – North-south Mid-Section Line T4S/R1, to confluence w/ Poppet Creek	300	140	30	25	3	40	12
Lake Elsinore, HU# 802.31	2000	-	-	-	1.5	-	-
San Ana River, Reach 3	700	350	110	140	10*	150	30

Notes: \* Total nitrogen, filtered sample  
 Source: California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin*, February 2008 update. Table 4-1. (Available at [www.swrcb.ca.gov/rwqcb8/water\\_issues/programs/basin\\_plan/index.shtml](http://www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml).)

**Table 5.4-C – Applicable Narrative Water Quality Objectives**

<b>Ammonia, Un-ionized (NH<sub>3</sub> or UIA)</b>
Calculated numerical UIA objectives as well as corresponding total ammonia nitrogen concentration for various pH and temperature conditions are shown in Tables 4-2 and 4-3 of the Basin Plan. Santa Ana River, Reach 3 shall not cause the concentration of un-ionized ammonia (as nitrogen) to exceed 0.098 mg/L (NH <sub>3</sub> -N) as a 4-day average.
<b>Bacteria, Coliform</b>
REC-1 Fecal coliform: log mean less than 200 organisms/100 mL based on five or more samples/30 day period, and not more than 10% of the samples exceed 400 organisms/100 mL for any 30-day period. REC-2 Fecal coliform: average less than 2000 organisms/100 mL and not more than 10% of the samples exceed 4000 organisms/100 mL for any 30-day period.
<b>Boron</b>
Boron concentrations shall not exceed 0.75 mg/L in inland surface waters of the region as a result of controllable water quality factors.
<b>Chlorine, Residual</b>
To protect aquatic life, the chlorine residual in wastewater discharged to inland surface waters shall not exceed 0.1 mg/L.
<b>Color</b>
Waste discharges shall not result in coloration of the receiving waters which causes a nuisance or adversely affect beneficial uses. The natural color of fish, shellfish or other inland surface water resources used for human consumption shall not be impaired.

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<b>Floatables</b>	
Waste discharges shall not contain floating materials, including solids, liquids, foam or scum, which cause a nuisance or adversely affect beneficial uses.	
<b>Fluoride</b>	
Fluoride concentrations shall not exceed values specified in the table below in inland surface waters designated MUN as a result of controllable water quality factors.	
<b>Annual Average of Maximum Optimum Fluoride Daily Air Temperature (°C)</b>	<b>Concentration (mg/L)</b>
12.0 and below	1.2
12.1 to 14.6	1.1
14.7 to 17.6	1.0
17.7 to 21.4	0.9
21.5 to 26.2	0.8
26.3 to 32.5	0.7
<b>Methylene Blue-Activated Substances (MBAS)</b>	
MBAS concentrations shall not exceed 0.05mg/L in inland surface waters designated MUN as a result of controllable water quality factors.	
<b>Nitrate</b>	
Nitrate-nitrogen concentrations shall not exceed 45 mg/L as (NO <sub>3</sub> ) or 10mg/L (as N) in inland surface waters designated MUN as a result of controllable water quality factors.	
<b>Oil and Grease</b>	
Waste discharges shall not result in deposition of oil, grease, wax or other materials in concentrations which result in a visible film or in coating objects in the water, or which cause a nuisance or adversely affect beneficial uses.	
<b>Oxygen, Dissolved</b>	
The dissolved oxygen content of surface waters shall not be depressed below 5mg/L for waters designated WARM.	
<b>pH</b>	
The pH of inland surface waters shall not be raised above 8.5 or depressed below 6.5 as a result of controllable water quality factors.	
<b>Radioactivity</b>	
Radioactivity materials shall not be present in the waters of the region in concentrations which are deleterious to human, plant, or animal life. Waters designated MUN shall meet the limits specified in the California Code of Regulations, Title 22.	
<b>Solids, Suspended and Settleable</b>	
Inland surface waters shall not contain suspended or settleable solids in amounts which cause a nuisance or adversely affect beneficial uses as a result of controllable water quality factors.	
<b>Sulfides</b>	
The dissolved sulfide content of inland surface waters shall not be increased as a result of controllable water quality factors.	

<b>Surfactants (surface-active agents)</b>
Waste discharges shall not contain concentrations of surfactants which result in foam in the course of flow or use of the receiving water, or which adversely affect aquatic life.
<b>Taste and Odor</b>
The inland surface waters of the region shall not contain, as a result of controllable water quality factors, taste- or odor-producing substances at concentrations which cause a nuisance or adversely affect beneficial uses. The natural taste and odor of fish, shellfish or other regional inland surface water resources used for human consumption shall not be impaired.
<b>Temperature</b>
The natural receiving water temperature of inland surface waters shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses. The temperature of waters designated WARM shall not be raised above 90°F June through October or above 78°F during the rest of the year as a result of controllable water quality factors. Lake temperatures shall not be raised more than 4°F above established normal values as a result of controllable water quality factors.
<b>Toxic Substances</b>
Toxic substances shall not be discharged at levels that will bioaccumulate in aquatic resources to levels which are harmful to human health.
<b>Turbidity</b>
All inland surface waters of the region shall be free of changes in turbidity which adversely affect beneficial uses.
Source: California Regional Water Quality Control Board, Santa Ana Region, <i>Water Quality Control Plan Santa Ana River Basin</i> , February 2008 update, Table 4. (Available at <a href="http://www.swrcb.ca.gov/rwgcb8/water_issues/programs/basin_plan/index.shtml">www.swrcb.ca.gov/rwgcb8/water_issues/programs/basin_plan/index.shtml</a> .)

**Storm Water Drainage**

The area within the Moreno MDP Watershed has experienced significant urban development in recent years. In order to provide adequate flood protection to the Moreno Watershed, the Moreno MDP Revision proposes the following types of facilities: earthen bottom trapezoidal channels, concrete lined channels, reinforced concrete box culverts, reinforced concrete pipes, detention basins, and debris basins.

Existing and planned land uses within the boundaries of the Moreno MDP include Residential, Rural Residential, Hillside Residential, Residential/Office, Office, Commercial, Business Park/Light Industrial, Open Space, Floodplain, and Public Facilities land use designations (MVGPP, Figure 2-2). **Table 5.4-D – Potential Pollutants Generated by Land Use Type**, identifies the pollutants that are associated with different land use types.

**Table 5.4-D – Potential Pollutants Generated by Land Use Type**

Types of Development (Land Use)	Sediment/Turbidity	Nutrients	Organic Compounds	Trash and Debris	Oxygen Demanding Substances	Bacteria & Viruses	Oil & Grease	Pesticides	Metals
Detached Residential Development	E	E	N	E	E	E	E	E	E
Attached Residential Development	E	E	N	E	p <sup>(1)</sup>	P	p <sup>(2)</sup>	E	N
Commercial/Industrial Development	p <sup>(1)</sup>	p <sup>(1)</sup>	p <sup>(5)</sup>	E	p <sup>(1)</sup>	p <sup>(3)</sup>	E	p <sup>(1)</sup>	P
Automotive Repair Shops	N	N	E <sup>(4,5)</sup>	E	N	N	E	N	P
Restaurants	N	N	N	E	E	E	E	N	N
Hillside Development	E	E	N	E	E	E	E	E	N
Parking Lots	p <sup>(1)</sup>	p <sup>(1)</sup>	E <sup>(4)</sup>	E	p <sup>(1)</sup>	p <sup>(6)</sup>	E	p <sup>(1)</sup>	E
Streets, Highways & Freeways	E	p <sup>(1)</sup>	E <sup>(4)</sup>	E	p <sup>(1)</sup>	p <sup>(6)</sup>	E	p <sup>(1)</sup>	E

Abbreviations: E = Expected P = Potential N = Not expected  
Notes:  
<sup>(1)</sup> A potential pollutant if landscaping or open area exist on a project site.  
<sup>(2)</sup> A potential pollutant if a project includes uncovered parking areas.  
<sup>(3)</sup> A potential pollutant if a land use involves food or animal waste products.  
<sup>(4)</sup> Specifically petroleum hydrocarbons.  
<sup>(5)</sup> Specifically solvents.  
<sup>(6)</sup> Bacterial indicators are routinely detected in pavement runoff.

Source: Riverside County Flood Control and Water Conservation District, *Stormwater Quality Best Management Practice Design Handbook*, July 21, 2006. Table 2. (Available at <http://www.floodcontrol.co.riverside.ca.us/downloads/Planning/BMP%20Handbook%20%28draft%208%29.pdf>.  
[http://rcflood.org/downloads/NPDES/Documents/SA\\_SM\\_DAMP/WQMP\\_Exhibit\\_C-BMP\\_Design\\_Manual\\_SA.pdf](http://rcflood.org/downloads/NPDES/Documents/SA_SM_DAMP/WQMP_Exhibit_C-BMP_Design_Manual_SA.pdf))

As shown in the above table, potential pollutants from existing and future land uses within the Project area include: sediment/turbidity; nutrients; organic compounds; trash and debris; oxygen demanding substances; bacteria and viruses; oil and grease; pesticides; and metals. Nutrients, bacteria and viruses (pathogens), organic compounds, sediment, pesticides, and metals are considered POCs for the proposed Project. POCs from future development and infrastructure projects within the Moreno MDP Watershed could reduce the water quality of receiving water bodies, which would violate the CWA; thus, treatment control BMPs, as well as site design and source control BMPs, will be used to reduce the pollutant load into receiving water bodies. BMP effectiveness is shown in **Table 5.4-E – Treatment Control BMPs and Effectiveness.**

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**Table 5.4-E – Treatment Control BMPs and Effectiveness**

Pollutant of Concern	Biofilters <sup>(1)</sup>	Detention Basins <sup>(2)</sup>	Infiltration BMPs <sup>(3)</sup>	Wet Ponds or Wetlands <sup>(4)</sup>	Filtration Systems <sup>(5)</sup>	Water Quality Inlets	Hydrodynamic Separator Systems <sup>(6)</sup>	Manufactured/Proprietary Devices <sup>(7)</sup>
Sediment/Turbidity	H/M	M	H/M	H/M	H/M	L	H/M (L for turbidity)	U
Nutrients	L	M	H/M	H/M	L/M	L	L	U
Organic Compounds	U	U	U	U	H/M	L	L	U
Trash & Debris	L	M	U	U	H/M	M	H/M	U
Oxygen Demanding Substances	L	M	H/M	H/M	H/M	L	L	U
Bacteria & Viruses	U	U	H/M	U	H/M	L	L	U
Oils & Grease	H/M	M	U	U	H/M	M	L/M	U
Pesticides (non-soil bound)	U	U	U	U	U	L	L	U
Metals	H/M	M	H	H	H	L	L	U

Abbreviations: L: Low removal efficiency H/M: High or medium removal efficiency U: Unknown removal efficiency

Notes:

- (1) Includes grass swales, grass strips, wetland vegetation swales, and bioretention.
- (2) Includes extended/dry detention basins with grass lining and extended/dry detention basins with impervious lining. Effectiveness based upon minimum 36-48-hour drawdown time.
- (3) Includes infiltration basins, infiltration trenches, and porous pavements.
- (4) Includes permanent pool wet ponds and constructed wetlands.
- (5) Includes sand filters and media filters.
- (6) Also known as hydrodynamic devices baffle boxes, swirl concentrators, or cyclone separators.
- (7) Includes proprietary storm water treatment devices as listed in the CASQA Storm water Best Management Practices Handbooks, other storm water treatment BMPs, or newly developed/emerging storm water treatment technologies.

Source: Riverside County Flood Control and Water Conservation District, *Stormwater Quality Best Management Practice Design Handbook*, July 21, 2006. Table 3. (Available at <http://www.floodcontrol.co.riverside.ca.us/downloads/Planning/BMP%20Handbook%20%28draft%20%29.pdf>.)

**5.4.2 Related Regulations**

**Federal Regulations**

**Clean Water Act (CWA)**

The CWA was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States. The CWA also directs states to establish water quality standards for all waters of the United States and to review and update such standards on a triennial basis. Other provisions of the CWA related to basin planning include Section 208, which authorizes the preparation of waste treatment management plans, and Section 319, which mandates specific actions for the control of pollution from nonpoint sources. The EPA has delegated responsibility for implementation of portions

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of the CWA to the SWRCB and the RWQCBs, including water quality control planning and control programs, such as the NPDES program. The NPDES program is a set of permits designed to implement the CWA that apply to various activities that generate pollutants with potential to impact water quality.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States. Section 304(a) requires the EPA to publish water quality criteria that accurately reflect the later scientific knowledge on the kind and extent of all effects on health and welfare that may be expected from the presence of pollutants in water. Where multiple uses exist, water quality standards must protect the most sensitive use. Water quality standards are typically numeric, although narrative criteria based upon bio-monitoring methods may be employed where numerical standards cannot be established or where they are needed to supplement numerical standards. Section 303(c)(2)(b) of the CWA requires states to adopt numerical water quality standards for toxic pollutants for which the EPA has published water quality criteria and which reasonably could be expected to interfere with designated uses of a water body.

Construction of the Moreno MDP will comply with the provisions of the CWA through the implementation of BMPs to reduce erosion and runoff from the construction sites. The Facilities proposed by the Moreno MDP Revision, specifically the detention and debris basins and the soft-bottomed channels, are in compliance with the *Comprehensive Nutrient Reduction Plan for Lake Elsinore and Canyon Lake (CNRP)*. The CNRP is a long range plan to achieve compliance with the wasteload allocations for Nutrient Total Maximum Daily Loads (Nutrient TDMLs) established for Lake Elsinore and Canyon Lake by the Municipal Separate Storm Sewer System (MS4) permit. The CNRP complies with the responsibility tasked to Regional Water Quality Control Boards by the CWA and implement the MS4 permit.

#### **NPDES Permit Program – Phase I**

In November 1990, under Phase I of the urban runoff management strategy, the EPA published NPDES permit application requirements for municipal, industrial, and construction storm water discharges. The application requirements for municipalities were directed at municipalities which own and operate separate storm drain systems serving populations of 100,000 or more, or which contribute significant pollutants to waters of the United States, and required agencies to obtain coverage under municipal storm water NPDES permits.

Municipalities were required to develop and implement an urban runoff management program to address activities to reduce pollutants in urban runoff and storm water discharges that were contributing a substantial pollutant load to their systems. Rather than establishing numeric effluent limits, the EPA established narrative effluent limits for urban runoff, including the requirements to implement appropriate BMPs.

The Phase I regulations were also directed at certain facilities that discharged storm water associated with industrial activity, and construction activities that disturbed five or more acres.

**NPDES Permit Program – Phase II**

The Phase II Final Rule, published in the Federal Register on December 8, 1999, requires NPDES permits for storm water discharges from:

- Certain regulated small Municipal Separate Storm Sewer Systems (MS4); and
- Construction activity disturbing between one and five acres of land (i.e., small construction activities).

In addition to expanding the NPDES Program, the Phase II Final Rule included minor revisions for certain industrial facilities. As with Phase I, the Phase II Program requires the development and implementation of storm water management plans to reduce pollutant discharges. As discussed below under the “State Regulations” heading, the NPDES permit program is administered in California by the SWRCB and its RWQCBs. The Project is located within the boundaries of the Santa Ana RWQCB.

**National Flood Insurance Program**

The National Flood Insurance Program was created in 1968 with the passage of the National Flood Insurance Act (1968 Act). In 1973 the Flood Disaster Protection Act amended the 1968 Act. The Flood Disaster Protection Act requires property owners located in special flood hazard areas to purchase flood insurance. In addition to the requirements to purchase flood insurance, the NFIP sets forth flood plain management criteria for communities seeking to obtain flood insurance eligibility (44 CFR Section 60.2) and flood plain management criteria for flood-prone areas (44 CFR, Section 60.3).

Chapter 8.12 Flood Damage Prevention and Implementation of National Flood Insurance Program (NFIP) of the Moreno Valley Municipal Code sets forth the process by which Moreno Valley implements the NFIP.

**State Regulations****Porter-Cologne Water Quality Control Act and the Basin Plan**

The Porter-Cologne Water Quality Control Act, Division 7 of the California Code, authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface and groundwater), and directs the RWQCB to develop regional basin plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The *Water Quality Control Plan for the Santa Ana River Basin (Region 8)* is designed to preserve and enhance the quality of water resources in the Santa Ana Region for the benefit of present and future generations. The purpose of the Plan is to designate beneficial uses of the region’s surface and groundwaters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

The Basin Plan sets forth water quality objectives for constituents that could potentially cause an adverse effect or impact on the beneficial uses of water. Specifically, the Basin Plan is designed to accomplish the following:

- Designate beneficial uses for surface and groundwaters;

- Set the narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy;
- Describe implementation programs to protect the beneficial uses of all waters within the region; and
- Describe surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan.

The Basin Plan incorporates by reference all applicable SWRCB and RWQCB plans and policies.

All projects resulting in discharges, whether to land or water, are subject to Section 13263 of the California Water Code and are required to obtain approval of Waste Discharge Requirements (WDRs) from the RWQCB. Land and groundwater related WDRs (i.e., non-NPDES WDRs) regulate discharges of process and wash-down wastewater and privately or publicly treated domestic wastewater. WDRs for discharges to surface waters also serve as NPDES permits.

The SWRCB administers the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size. In order to obtain coverage under the General Construction Permit (Order No. 99-08-DWQ), a Waste Discharge Identification Number (WDID) must be obtained, and an effective site-specific Storm Water Pollution Prevention Plan (SWPPP) developed. The SWPPP must identify potential on-site pollutants, and identify and implement an effective combination of erosion control and sediment control measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges.

#### **Clean Water Act Section 401**

Section 401 of the CWA requires that any person applying for a federal permit or license which may result in a discharge of pollutants into waters of the United States must obtain a state water quality certification that activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Further, no license or permit may be issued if certification has been denied. CWA Section 404 permits and authorizations are subject to Section 401 certification by the RWQCB.

#### **Implementation of NPDES Permit Program**

In California, the SWRCB and its RWQCBs administers the NPDES permit program. The NPDES permits cover all construction and subsequent drainage improvements that disturb one acre or more, industrial activities, and MS4. Construction and industrial activities are typically regulated under statewide general permits that are issued by the SWRCB. The SWRCB also issues statewide general small MS4 storm water NPDES permits for public agencies that fall under the Phase II NPDES regulations.

Water Quality Management Plans (WQMPs) are required to address the quality of storm water or urban runoff that flows from a developed site after construction is completed and the facilities or structures are occupied and/or operational. A site-specific WQMP describes the BMPs that will be implemented and maintained throughout the life of a project and is used by property owners, facility operators,

tenants, facility employees, maintenance contractors, etc., to prevent and minimize water pollution that can be caused by storm water or urban runoff. A site-specific WQMP will be required as part of future facility-specific applications for discretionary approval. Final site-specific WQMPs must be approved prior to issuance of building and grading permits for future development.

The NPDES MS4 permit applicable within the Moreno MDP is Order No. R8-2010-0033, NPDES No. CAS 618033 adopted by the Santa Ana Regional Water Quality Control Board on January 29, 2010 for the Santa Ana River region. This MS4 Permit is the first to incorporate requirements directly addressing the WLAs for Lake Elsinore and Canyon Lake and required preparation of the CNRP. (CDM, p. 1-4) The District is the designated Principal Permittee; Moreno Valley, along with other cities in the watershed, is a Co-Permittee (Urban Runoff Management Program, p. 1). For purposes of implementing the MS4 permit, any future project that is considered a “new development and significant redevelopment project,” is required to comply with the provisions of the MS4 Permit (Urban Runoff Management Program, p. 29).

#### **Construction Storm Water Permits**

The SWRQCB administers the NPDES permit program regulating storm water from construction activities for projects greater than one acre in size. The main compliance requirement of the NPDES permits is the development and implementation of a SWPPP. The purpose of a SWPPP is to identify potential on-site pollutants and identify and implement appropriate storm water pollution prevention measures to reduce or eliminate discharge of pollutants to surface water from storm water and non-storm water discharges.

Storm water BMPs to be implemented during construction and grading will be outlined in the SWPPP prepared for each MDP Facility as well as future development or infrastructure projects approved within the Moreno MDP Boundary, and will be consistent with the District’s *Design Handbook for Low Impact Development Best Management Practices*. Examples include: detention basins for capture and containment of sediments, use of silt fencing, sandbags or straw bales to control runoff, and identification of emergency procedures in case of hazardous materials spills. All future development and infrastructure projects in the Moreno MDP Boundary will be required to obtain a construction NPDES permit prior to site disturbance.

On September 2, 2009, the California State Water Resources Control Board voted to adopt major revisions to the statewide *General Permit for Discharges of Storm water Associated with Construction Activities* (Construction General Permit). The permit took effect on July 1, 2010 and applies to projects that disturb one or more acres, or projects that disturb less than one acre but are part of a larger common plan of development that disturbs more than one acre in total (e.g., large linear utility projects). The revised permit requires that projects implement a SWPPP that contains specific BMPs and establishes numeric effluent limitations to meet water quality and technology-based standards. It also provides greater clarity so that the public can determine whether permittees are in compliance.

## Regional and Local Plans and Regulations

### Comprehensive Nutrient Reduction Plan for Lake Elsinore and Canyon Lake (CNRP)

The CNRP was prepared by CDM Smith and approved by the District on July 2, 2012. The CNRP is a long term plan designed to achieve compliance with wasteload allocations (WLAs) established in the Lake Elsinore and Canyon Lake Nutrient Total Maximum Daily Loads (“Nutrient TMDLs”). The CNRP fulfills the MS4 permit requirement. (CDM, p. 1-1)

Through its bi-annual water quality assessment process, the Regional Board determined that Lake Elsinore was not attaining its water quality standards due to excessive nitrogen and phosphorus. This finding led to the Regional Board placing Lake Elsinore on the 303(d) list in 1994 as a result of the impairment of the following uses: warm water aquatic habitat (WARM), and water contact and non-water contact recreation (REC1 and REC2). Similarly, a Regional Board water quality assessment of Canyon Lake identified excessive nutrients causing impairment of the lake. Accordingly, Canyon Lake was listed on the 303(d) list in 1998. The following uses were identified as impaired by nutrients: municipal water supply (MUN), warm water aquatic habitat (WARM), and water contact and non-water contact recreation (REC1 and REC2). (CDM, p. 1-2)

Regional Board staff prepared the Lake Elsinore Nutrient TMDL Problem Statement and the Canyon Lake Nutrient TMDL Problem Statement in October 2000 and October 2001, respectively. These reports documented the impairment caused by excessive nutrients and provided preliminary recommendations for numeric targets to ensure beneficial uses of both lakes would be protected. The Regional Board used the data developed from the above studies to develop the Nutrient TMDLs. (CDM, p. 1-2) The applicability of the CNRP is limited to the MS4 Permittees in the following jurisdictions: Riverside County and the cities of Beaumont, Canyon Lake, Hemet, Menifee, Moreno Valley, Murrieta, Perris, Riverside, San Jacinto, and Wildomar (CDM, p. 1-5).

The Riverside County MS4 Permittees have developed a CNRP that is designed to achieve compliance with the urban WLAs by the compliance date of December 31, 2020. Compliance with the urban WLAs can be measured using one of the two following methods:

1. Directly, using relevant monitoring data and/or approved modeling procedures to estimate actual nitrogen and phosphorus loads being discharged to the lakes; or
2. Indirectly, using water quality monitoring data and other biological metrics approved by the Regional Board, to show water quality standards are being consistently attained (as measured by the response targets identified in the Nutrient TMDLs). Compliance with the urban WLAs may also be accomplished through the trading of pollutant allocations among sources to the extent that such allocation tradeoffs optimize point and non-point source control strategies to achieve the compliance in an efficient manner. A Pollutant Trading Plan (PTP) is being prepared separately from the CNRP to provide a basis for pollutant trading. (CDM, p. 1-6)

Compliance with the urban WLAs will require implementation of nutrient mitigation activities in both the watershed and the lakes. The CNRP is built around a framework that includes both watershed-based BMPs and in-lake remediation activities. Coupled with this framework is a monitoring program to evaluate progress towards compliance with urban WLAs and an adaptive implementation program to provide opportunity to make adjustments to the CNRP, where deemed necessary to achieve the urban WLAs. Regarding watershed-based BMPs, the CNRP identifies the specific ordinance and BMPs that will be implemented by the MS4 Permittees in the watersheds that drain to Lake Elsinore or Canyon Lake. These activities focus on targeting and mitigating nutrients at their source, prior to discharge during wet weather events. (CDM, p. 1-6) These BMPs include both non-structural programmatic BMPs and post-construction BMPs associated with the implementation of WQMP requirements for new development and significant redevelopment activities. Watershed-based BMPs include the following activities (CDM, p. 2-2):

- Ordinance Development;
- Street Sweeping/Debris Removal;
- Low Impact Development and Land Use Conversion (WQMP Implementation);
- Septic System Management;
- Public Education and Outreach; and
- Inspections and Enforcement.

As Riverside County and Moreno Valley are MS4 Permittees, compliance with this CNRP is required, which will considerably contribute to water quality improvements in Lake Elsinore and Canyon Lake.

#### **Moreno Valley Municipal Code**

The Moreno Valley Municipal Code (MVMC) contains provisions regulating the management of flood plains, discharge of storm water, and changes in hydrology.

#### Chapter 3.50 National Pollutant Discharge Elimination System (NPDES) Regulatory Rate for New Residential, Common Interest, Commercial, Industrial, and Quasi-Public Use Developers

MVMC Chapter 3.50 sets forth the establishment and collection of the annual NPDES regulatory rate to fund requirements of the Regional Board regarding water pollution contained in storm water runoff to remain in compliance with federal mandates.

#### Chapter 8.10 Stormwater/Urban Runoff Management and Discharge Controls

MVMC Chapter 8.10 regulates discharges into the City's sewer and storm drain systems, and implements the City's requirements under the MS4 permit. Among other things, this Chapter prohibits discharges to the City's sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. This Chapter gives the City of Moreno Valley enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

Chapter 8.12 Flood Damage Prevention and Implementation of National Flood Insurance Program (NFIP)  
MVMC Chapter 8.12 sets forth the manner in which Moreno Valley administers the NFIP. This chapter designates the City Engineer as the floodplain administrator and authorizes the City Engineer to administer, implement, and enforce the NFIP by granting or denying development permits.

Chapter 8.21 Grading Regulations

MVMC Chapter 8.21 governs all grading activities in Moreno Valley. Per Section 8.21.170 of the MVMC, most grading exceeding one acre requires a NPDES permit. To obtain a grading permit from Moreno Valley, applicants must supply a grading plan, and if applicable, must demonstrate compliance with the *General Construction Storm water Permit* described above.

**Moreno Valley General Plan (MVGP)**

The Conservation Element of the MVGP set forth the following objective and policy with respect to hydrology and water quality (MVGP, p. 9-36 and 9-37):

**Conservation Element:**

- **Objective 7.1:** Minimize erosion problems resulting from development activities (MVGP, p. 9-36).
- **Policy 7.1.1:** Require that grading plans include appropriate and feasible measures to minimize erosion, sedimentation, wind erosion and fugitive dust (MVGP, p. 9-36).
- **Policy 7.1.2:** Circulation patterns within newly developing portions of Moreno Valley, particularly in hillside areas, should follow natural contours to minimize grading (MVGP, p. 9-36).
- **Objective 7.2:** Maintain surface water quality and the supply and quality of groundwater (MVGP, p. 9-36).
- **Policy 7.2.2:** The City shall comply with the provisions of its permit(s) issued by the Regional Water Quality Control Board for the protection of water quality pursuant to the National Pollutant Discharge Elimination System (MVGP, p. 9-36).
- **Policy 7.4.3:** Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels (MVGP, p. 9-37).

**5.4.3 Significance Threshold Criteria**

The Initial Study Environmental Checklist form (IS) found in Appendix G of the State *CEQA Guidelines* defines thresholds of significance for Hydrology and Water Quality. The Notice of Preparation for the Draft PEIR included the Initial Study Environmental Checklist to show the areas being analyzed in the Draft PEIR; refer to Appendix A of this Draft PEIR. Accordingly and based on the IS, the Project may be considered to have a significant impact on hydrology and water quality in the following areas if the Project would:

- (Threshold A) Violate any water quality standards or waste discharge requirements;

- (Threshold B) Result in substantial discharges of typical storm water pollutants (e.g., sediment from construction activities, hydrocarbons, and metals from motor vehicles, nutrients and pesticides from landscape maintenance activities, metals of other pollutants from industrial operation,) or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity;
- (Threshold C) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- (Threshold D) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; and/or
- (Threshold E) Place structures or fill within a 100-year flood hazard area, which would impede or redirect flood flows.

#### 5.4.4 Project Design Considerations

The proposed Project consists of revisions to the 1991 Moreno MDP from mainly concrete open channels, to more environmentally friendly alternatives; such as soft bottom channels which allow infiltration and can trap pollutants better. Mainline facilities have been aligned to reduce diversions proposed in the 1991 Moreno MDP and better recreate existing drainage patterns. To account for the higher rainfall rate<sup>3</sup> and increased land use density, Line F-2 will have to be reconstructed.

The proposed Project identifies conceptual locations for the future drainage needs of Moreno Valley and the surrounding area in response to the existing and planned land use within the Moreno MDP Boundary. The Moreno MDP Facilities along with street improvements will contain the 100-year flood discharge.

#### 5.4.5 Environmental Impacts before Mitigation

**Threshold A:** *Violate any water quality standards or waste discharge requirements.*

Construction of the proposed Project may result in the discharge of sediment and other construction by-products. This will be minimized, however, by compliance with the NPDES general construction permit issued by the SWRCB. Coverage under the general construction permit requires that a SWPPP be prepared prior to construction activities for sites with a disturbance area of one acre or more. The

<sup>3</sup> The rainfall data contained in the District Hydrology Manual is based on NOAA Atlas II rainfall. This underlying data (with some adjustments to match local gauge data available at the time) was used in the development of the 1991 Moreno MDP. However, the most current rainfall data available, NOAA Atlas 14 rainfall values are higher than the earlier NOAA Atlas II rainfall values and were used in development of the Moreno MDP Revision.



SWPPP will incorporate applicable BMPs to reduce loss of topsoil, substantial erosion, or discharge of polluted runoff associated with construction of the MDP Facilities.

Implementation of the proposed Project will not add significant amounts of impervious surfaces to the Project area, as the proposed MDP Facilities will be underground storm drain pipelines, earthen trapezoidal channels (except for two lined sections of channels), and earthen basins (detention and debris). The 1991 Moreno MDP previously established a comprehensive storm water drainage system in the Project area. The Moreno MDP Revision provides adequate drainage for the Moreno MDP Boundary area to protect life and property as the area is developed in accordance with land uses identified in the *Moreno Valley General Plan*. The proposed MDP Facilities will convey storm water emanating from residential, commercial, industrial, and construction areas. Although the proposed MDP Facilities will not create new sources of pollutants, there is potential for pollutants to be conveyed within the proposed MDP Facilities and discharged into the San Jacinto River, Canyon Lake, Lake Elsinore, and ultimately Santa Ana River.

As previously discussed in the subsections entitled “Status of Surrounding Water Bodies” and “State Regulations,” water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the RWQCB is designed to minimize and control discharges to surface and groundwater within the region, largely through permitting, such that water quality standards are effectively attained.

MDP Facilities will either be constructed as part of a future development project, hereinafter referred to as “site-specific” or as a stand-alone Facility-specific project. Site-specific projects are future approved private developments that will also construct applicable Moreno MDP Facilities. Site-specific projects are considered “new development and significant redevelopment projects” and are required to comply with the provisions of the MS4 permit by preparing a site-specific SWPPP and WQMP (Urban Runoff Management Program, p. 29). However, because Facility-specific projects entail only the construction of Moreno MDP Facilities, only a Facility-specific SWPPP is required. A WQMP is not required for MDP Facilities constructed as Facility-specific projects. In the unlikely event that a Facility-specific project entails less than one acre of disturbance and does not require preparation of a Facility-specific SWPPP, mitigation measure **MM HYD 1** will be implemented, which requires the preparation of an erosion control plan to identify necessary erosion control BMPs.

Additionally, the Project also incorporates unlined reaches of channels and basins, which can serve to attenuate peak-flow rates and allow for infiltration of storm water. As discussed under **Threshold C**, below, the proposed Project includes the construction of three detention basins (Sinclair Basin, Cactus Basin, and Quincy Basin) and two debris basins (Reche Canyon Debris Basin and Ironwood Debris Basin) that together have the capability to infiltrate approximately 95 to 336 acre-feet per day. As shown in **Table 5.4-E – Treatment Control BMPs and Effectiveness**, detention basins have a medium efficiency for the removal of sediment/turbidity, nutrients, and metals, which are impairments for one or more of the Project’s receiving waters. Additional water quality control measures may be implemented at the time

of construction of the MDP Facilities and private development projects in order to comply with Total Maximum Daily Load (TMDL) requirements established by the RWQCB within the watershed.

The proposed Project (site-specific and/or Facility-specific projects) will comply with the various statutory requirements necessary to achieve regional water quality objectives and waste discharge requirements. **Therefore, the potential impacts related to water quality or waste discharge remain less than significant for projects greater than one acre in size and less than significant with mitigation for projects less than one acre in size.**

**Threshold B:** *Result in substantial discharges of typical storm water pollutants (e.g., sediment from construction activities, hydrocarbons, and metals from motor vehicles, nutrients and pesticides from landscape maintenance activities, metals of other pollutants from industrial operation) or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity.*

Pollutants of Concern from existing and planned land use designations within the Project area include: sediment/turbidity; nutrients; organic compounds; trash and debris; oxygen demanding substances; bacteria and viruses; oil and grease; pesticides; and metals (refer to **Table 5.4-D – Potential Pollutants Generated by Land Use Type**). Pollutants of Concern resulting from future development within the Moreno MDP could potentially reduce the quality of receiving water bodies, which would violate the CWA. However, because all future site-specific projects within the boundary of the Moreno MDP must comply with the provisions of the CWA, in addition to the requirements of the NPDES General Construction Permit, treatment control BMPs, as well as site design and source control BMPs, will be used to reduce the pollutant load into receiving water bodies. Additionally, BMP effectiveness gathered from the District's *Design Handbook for Low Impact Development Best Management Practices* will be implemented, as shown in **Table 5.4-E – Treatment Control BMPs and Effectiveness**.

As discussed in Threshold A, above, site-specific and Facility-specific SWPPPs, in accordance with the SWRCB General Permit for Construction Activities, will be required. Per the requirements of the General Permit, a SWPPP must identify an effective combination of erosion control and sediment control BMPs to minimize or eliminate the discharge of pollutants into receiving waters. In addition, BMPs for managing sources of non-storm water discharges and waste are required to be identified in the SWPPP. In the unlikely event that a Facility-specific project entails less than one acre of disturbance and does not require preparation of a Facility-specific SWPPP, mitigation measure **MM HYD 1** will be implemented, which requires the preparation of an erosion control plan to identify necessary erosion control BMPs.

Additionally, following construction of a private site-specific project, the preparation and approval of a site-specific WQMP will be required to identify BMPs that ensure water quality of downstream receiving waters are not degraded. It is imperative that site-specific WQMPs minimize changes to hydrology to ensure that post-development runoff rates and velocities from a site do not adversely impact downstream erosion, sedimentation, or stream habitat. The goals of site design techniques identified in a site-specific WQMP are to reduce the pollutant loads from developed areas; achieve post development runoff flow rates, volumes, velocities, and duration that prevent significant increase in

downstream erosion compared to the pre-development condition; and prevent significant adverse impacts to stream habitat during the 2-year and 10-year, 24-hour rainfall events.

**Therefore, because the proposed Project (site-specific and/or Facility-specific projects) will comply with existing regulatory requirements to reduce storm water pollutants and achieve water quality requirements, the potential impacts related to storm water pollutants and water quality will remain less than significant for projects greater than one acre in size, and less than significant with mitigation for projects less than one acre in size.**

**Threshold C:** *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).*

The proposed Moreno MDP identifies existing and proposed Facilities to convey storm water through the MDP Boundary. Implementation of the Moreno MDP does not involve the extraction of groundwater, nor will it create a substantial addition of impervious surfaces such that existing areas of groundwater recharge are altered.

The Moreno MDP proposes three detention basins: Sinclair Basin, Cactus Basin, and Quincy Basin and two debris basins: Reche Canyon Debris Basin and Ironwood Debris Basin, which will provide opportunity for additional regional groundwater recharge as storm water flows are conveyed through the MDP Facilities. **Table 5.4-F –Infiltration Projections for the Proposed Basins**, summarizes the approximate potential infiltration volumes for the MDP’s proposed basins. It is important to note that the infiltration rates presented below are projections based on the hydrological soil groups as classified by the Natural Resources Conservation Service (NRCS) and the basins are not specifically intended for recharge. Recharge and infiltration is an incidental benefit of the detention and debris basins.

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**Table 5.4-F – Infiltration Projections for the Proposed Basins**

Basin Name	Basin Footprint (acres) <sup>1</sup>	Portion of Basin in Soil Type "A" <sup>2</sup>	Portion of Basin in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Sinclair Basin	25.0	18%	82%	30 to 116
Cactus Basin	21.7	0%	100%	22 to 43
Quincy Basin	22.5	0%	100%	23 to 45
Reche Canyon Debris Basin	10.0	55%	45%	16 to 100
Ironwood Debris Basin <sup>4</sup>	3.1	62%	0%	4 to 32
Total All Basins	82.3	N/A	N/A	95 to 336

Notes:

<sup>1</sup> Basin Footprint per PEIR **Table 3-B – Moreno MDP Facilities Overview.**

<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.

<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>.)

<sup>4</sup> Approximately 38% of the Ironwood Debris Basin has Type "C" or "D" soils. The infiltration rate for these soils ranges from 0.34 feet/day to 0.54 feet/day for Type "C" soil and from 0.004 feet/day to 0.2 feet/day and is considered negligible, thus infiltration from these soils types are not shown in this table.

As shown in the table above, the total projected infiltration ranges from 95 to 336 acre-feet per day after construction of the proposed detention and debris basins. For comparative purposes, the existing Nason Basin has an approximate potential infiltration volume ranging from approximately 21 to 94 acre-feet per day.<sup>4</sup>

In addition to the three basins, the Moreno MDP Revision includes earthen bottom (unlined) channels in Line F, Line G, Line G-7, and Line K. These proposed unlined channels will contribute to regional groundwater recharge as storm water flows are conveyed through them. As shown in **Table 5.4-G – Infiltration Projections for the Proposed Unlined Channels**, collectively the bases of Line F, Line G, Line G-7, and Line K encompass approximately 11.4 acres<sup>5</sup> and have a projected infiltration volume ranging from 12.4 to 43.9 acre-feet per day.

<sup>4</sup> Based on a basin size of 20.05 acres of which 20% is in Soil Type "A" and 62% is in Soil Type "B." Infiltration rates for Soil Type "A" ranges from 2 feet/day to 8.3 feet/day. Infiltration rate for Soil Type "B" ranges from 1 foot/day to 2 feet/day. Low end of projected infiltration is calculated as follows: (20.05 acres\*20%\*2 feet/day) + (20.05 acres\*62%\*1 foot/day) = 20.9 acre-feet/day. High end of projected infiltration is calculated as follows: (20.05 acres\*20%\*16.6 feet/day) + (20.05 acres\*62%\*2 feet/day) = 93.5 acre-feet/day. Approximately 18% of the Nason Basin has Type "C" soil. The infiltration rate for this soil ranges from 0.34 feet/day to 0.54 feet/day and is considered negligible; thus it is not included in the infiltration projection.

<sup>5</sup> Surface area of the base of the earthen channels was determined by multiplying the channel base by the facility length as shown in the PEIR **Table 3-B – Moreno MDP Update Facilities Overview.**

**Table 5.4-G –Infiltration Projections for the Proposed Unlined Channels**

Channel Name	Channel Footprint (acres) <sup>1</sup>	Portion of Channel in Soil Type "A" <sup>2</sup>	Portion of Channel in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Line F	5.05	11.4%	88.6%	5.6 to 18.5
Line G <sup>4</sup>	2.88	16.0%	75.2%	3.1 to 12.0
Line G-7	0.65	0.0%	100.0%	0.7 to 1.3
Line K <sup>5</sup>	2.64	18.0%	79.0%	3.1 to 12.1
Total all Channels	11.22	N/A	N/A	12.4 to 43.9

Notes:

<sup>1</sup> Determined by multiplying the length of each channel by its width as shown in PEIR **Table 3-B – Moreno MDP Facilities Overview.**

<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.

<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>.)

<sup>4</sup> Approximately 8.8% of Line G has Type "D" soil. The infiltration rate for this soil ranges from 0.004 feet/day to 0.2 feet/day and is considered negligible, thus it is not shown in this table.

<sup>5</sup> Approximately 3.0% of Line K has Type "C" soil. The infiltration rate for this soil ranges from 0.34 feet/day to 0.54 feet/day and is considered negligible, thus it is not shown in this table.

Based on the above analysis and the Project design features, projected infiltration from the proposed basins and unlined channels is greater than the existing Nason Basin and will not negatively alter groundwater, but instead will have a positive impact by increasing groundwater recharge. **Therefore, impacts related to substantially depleting groundwater supplies or interfering substantially with groundwater recharge such that there would be a net deficit in the aquifer volume or lowering the groundwater level, will be less than significant.**

**Threshold D:** *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.*

The proposed MDP Facilities were revised from the 1991 Moreno MDP to reduce significant diversions and better emulate the historic and natural drainage of the area. The general drainage pattern of the watershed for storm water discharge in the Moreno MDP Boundary begins at the canyon mouths of Reche Canyon and San Timoteo Badlands foothills, then sheet flows overland across natural and urban landscapes to the south toward the Mount Russell foothills due to the lack of natural watercourses and any substantial drainage facilities. Construction of the MDP Facilities, which are intended to provide flood protection for existing and proposed development set forth in the MVGP, will alter this existing drainage pattern by constructing a drainage system of open channels and underground storm drains that will divert, redirect, and concentrate storm flows and runoff into facilities with capacity to safely accommodate such flows, including storm water peak discharges. These storm flows will ultimately be conveyed downstream to Line F and towards the San Jacinto River. By conveying storm water runoff

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

through the MDP Watershed towards the San Jacinto River channel, the proposed MDP Facilities will eliminate the primary sources of flooding currently experienced during significant storm events in the Moreno MDP Watershed. When completed, the MDP Facilities along with street improvements will provide a comprehensive system to convey runoff through the Moreno MDP Watershed. (MDP Report, p. 15)

The inclusion of earthen bottom facilities proposed in the Moreno MDP Revision will allow for increased infiltration rates as compared to the concrete lined facilities identified in the 1991 Moreno MDP. The proposed detention basins will reduce the existing condition high inflow rates to substantially lower outflow rates, and this peak rate reduction allows the use of smaller and less costly downstream facilities for the Moreno MDP Project. The unlined channels will also slow storm flow

The proposed Line F will be the drainage system's most downstream location, and will likely receive the greatest quantity of storm flow. After the MDP Watershed has been built-out per the MVGP and the proposed MDP Facilities have been constructed along with street improvements, the District has determined that the estimated peak 100 year discharge at the confluence of Line F and Line G will be 3,755 cubic feet per second (cfs). The 1991 Moreno MDP estimated a 100-year peak discharge of 3,210 cfs at the confluence of Line F and Line G (1991 MDP, Exhibit 1). Although the total volume of runoff may somewhat increase as a result of development in the watershed, the peak discharge rate is decreased as a result of the proposed MDP Facilities by approximately 545 cfs,<sup>6</sup> which takes into account the updated rainfall data. This is attributable to the detention basins, which are intended to reduce peak flows (MDP Report, p. 2). Therefore, the proposed Project will not increase the amount of storm water flow into the San Jacinto River or adversely impact the existing floodplain because the proposed MDP Facilities will reduce peak discharge and the amount of the debris and sediment that could be conveyed downstream. Impacts related to altering the existing drainage pattern of the site or increasing the rate or amount of surface runoff to result in flooding will be less than significant.

However, while the MDP Facilities themselves essentially function as mitigation measures for flooding within the MDP Boundary, the individual MDP Facilities will be constructed by either a public agency or private developer over time as development within the Moreno Watershed takes place. In addition, some of the MDP Facilities may never be realized. Thus, there exists the possibility the cohesion of the MDP Facilities' design may be fractured, and a MDP Facility will not operate as intended due to the lack of a connection with an adequate outlet, which may result in unforeseen flooding. For this reason, to ensure potential impacts remain less than significant, mitigation will be incorporated. **Mitigation measure MM HYD 2 will require the development of the each MDP Facility to ensure storm flows from that Facility will be conveyed to an adequate outlet, and potential impacts of flooding are avoided. Therefore, impacts will be less than significant with mitigation.**

<sup>6</sup> This is the difference between the estimated peak discharge for the proposed MDP Revision (3,755 cfs) and the 1991 MDP (3,210).

**Threshold E:** *Place structures or fill within a 100-year flood hazard area, which would impede or redirect flood flows.*

Portions of the proposed Moreno MDP will be constructed within mapped 100-year flood hazard areas (see **Figure 5.4-3 – Flood Hazards Zone**). However, placement of these MDP Facilities within 100-year flood hazard areas is needed to contain the 100-year storm flows. The proposed MDP Facilities will re-direct sheet flows across the Moreno Watershed into basins, open channels, and underground storm drains; and convey these flows towards the San Jacinto River. When completed, the MDP Facilities along with street improvements will provide 100-year protection and eliminate the major flood hazards in the MDP Boundary. (MDP Report, p. 9) **Therefore, impacts with regards to placing structures or fill within a 100-year flood hazard area are less than significant and no mitigation measures are necessary.**

#### 5.4.6 Proposed Mitigation Measures

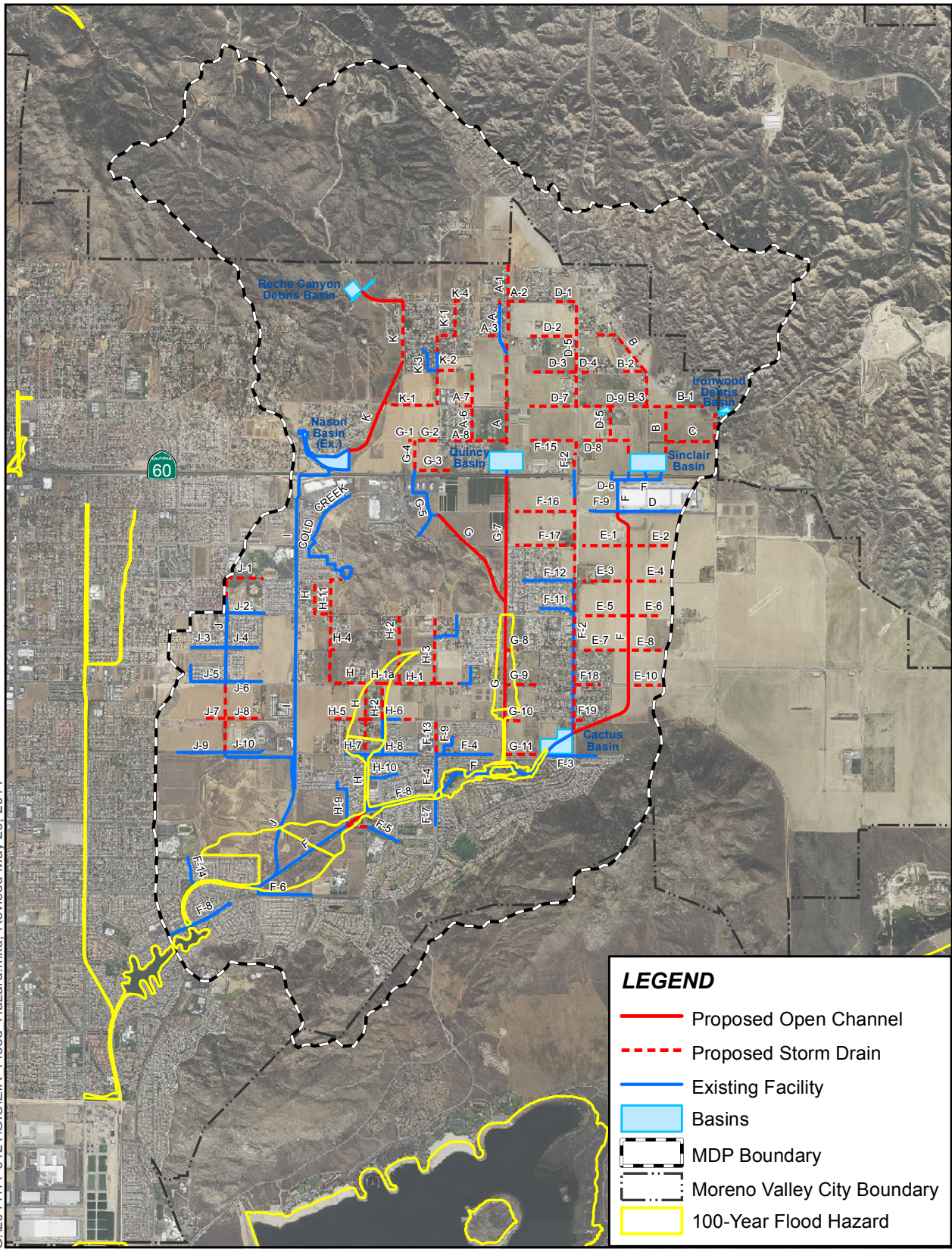
An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate the potential significant adverse impacts to water quality and waste discharge requirements, to below the level of significance.

**MM HYD 1:** Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion. The erosion control plan may be prepared by the Construction Contractor or designee. The erosion control plan shall be retained at the construction site and available for inspection upon request.

**MM HYD 2:** Prior to approval of any Moreno MDP Facility, the design and plans shall demonstrate storm flows and runoff from that specific Facility will be conveyed to an adequate outlet system to the satisfaction of the Riverside County Flood Control and Water Conservation District. As feasible, development of the MDP Facilities shall occur in appropriate phases as to ensure conveyance of storm flows and runoff will have adequate outlets.

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G:\2011\11-0121\GIS\EIR Flood Hazard.mxd; Revised May 20, 2014



Source: County of Riverside GIS, 2014; FEMA, 2010; RCFC&WCD 2014; Eagle Aerial, 2012.

**LEGEND**

- Proposed Open Channel
- - - Proposed Storm Drain
- Existing Facility
- Basins
- MDP Boundary
- Moreno Valley City Boundary
- 100-Year Flood Hazard

**Figure 5.4-3 - FEMA Mapped Flood Hazard Zones**  
Moreno Master Drainage Plan Revision



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### 5.4.7 Environmental Effects after Mitigation Measures are Implemented

Construction of the MDP Facilities must comply with various statutory requirements necessary to achieve regional water quality objectives and protect groundwater and surface waters from polluted storm water runoff. Site-specific projects are considered “new development and significant redevelopment projects” and are required to comply with the provisions of the MS4 permit by preparing a site-specific SWPPP and WQMP including compliance with CNRP. However, because Facility-specific projects entail only the construction of Moreno MDP Facilities, only a Facility-specific SWPPP is required. A WQMP is not required for MDP Facilities constructed as Facility-specific projects. In the unlikely event that a Facility-specific project entails less than one acre of disturbance and does not require preparation of a Facility-specific SWPPP, mitigation measure **MM HYD 1** will be implemented, which requires the preparation of an erosion control plan to identify necessary erosion control BMPs. To make sure that each specific MDP Facility discharges into an adequate outlet system, mitigation measure **MM HYD 2**, which requires demonstration to the satisfaction of the District that the Facility will discharge to an adequate outlet system, will be implemented. Therefore, potentially significant impacts on hydrology and water quality will be **less than significant with mitigation**.

### 5.4.8 Cumulative Environmental Effects after Mitigation Measures are Implemented

A cumulatively considerable impact will occur if the Project, in conjunction with other future projects, results in a significant impact to hydrology and water quality. As this Project is analyzed at the programmatic level, cumulative impacts are assessed by the MVGP FEIR. The MVGP accounts for the long-term development of Moreno Valley and its Sphere of Influence, which includes the locations of the proposed MDP Facilities. The cumulative impacts analysis regarding hydrology and water quality as part of the MVGP FEIR determined that the implementation of measures related to the statutory requirements required as part of obtaining appropriate permits will mitigate impacts of future projects to a less than significant level (MVGP FEIR, pp. 7-4–7-5). Thus, this Project’s impacts will be mitigated to a less than significant level and other future projects will also be mitigated to a less than significant level, as necessary, in order to be approved and implemented. It is reasonably assumed, then, that the project-specific assessments and mitigation will satisfactorily avoid significant impacts, which will prevent cumulatively considerable impacts to hydrology and water quality. **Therefore, cumulative impacts will be less than significant.**

### 5.4.9 References

In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- California Regional Water Quality Control Board, Santa Ana Region, *Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporated Cities of Riverside County Within the Santa Ana Region, Area-Wide Urban Runoff Management Program*, January 29, 2010. (Available at [http://rcflood.org/downloads/NPDES/Documents/SA\\_SM\\_DAMP/](http://rcflood.org/downloads/NPDES/Documents/SA_SM_DAMP/))

App%20B%20Fourth-term%20Santa%20Ana%20Region%20MS4%20Permit.pdf, accessed March 27, 2012.) [Cited as Urban Runoff Management Program]

- California Regional Water Quality Control Board, Santa Ana Region, *Water Quality Control Plan Santa Ana River Basin*, February 2008 update. (Available at [www.swrcb.ca.gov/rwqcb8/water\\_issues/programs/basin\\_plan/index.shtml](http://www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml), accessed March 27, 2012.) [Cited as Basin Plan]
- California State Water Resources Control Board, *2010 Santa Ana Region 303(d) List of Water Quality Limited Segments*, USEPA Final Approval October, 11, 2011. (Available at: [http://www.waterboards.ca.gov/santaana/water\\_issues/programs/tmdl/docs/303d/2010\\_303d.pdf](http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf), accessed May 8, 2014.) [Cited as 303(d) List]
- CDM Smith, *Comprehensive Nutrient Reduction Plan for Lake Elsinore and Canyon Lake*, July 2, 2012. (Available at [http://waterboards.ca.gov/santaana/water\\_issues/programs/stormwater/riverside\\_permit\\_cnrp.shtml](http://waterboards.ca.gov/santaana/water_issues/programs/stormwater/riverside_permit_cnrp.shtml), accessed September 11, 2012.) [Cited as CDM]
- City of Moreno Valley, *City of Moreno Valley General Plan*, July 11, 2006. (Available at [http://www.moreno-valley.ca.us/city\\_hall/general-plan/06gppfinal/gp/gp-tot.pdf](http://www.moreno-valley.ca.us/city_hall/general-plan/06gppfinal/gp/gp-tot.pdf), accessed March 27, 2012.) [Cited as MVGP]
- City of Moreno Valley, *Final Environmental Impact Report City of Moreno Valley General Plan, Volume 1, SCH# 20091075*, July 2006. (Available at [http://www.moreno-valley.ca.us/city\\_hall/general-plan/06gppfinal/ieir/eir-tot.pdf](http://www.moreno-valley.ca.us/city_hall/general-plan/06gppfinal/ieir/eir-tot.pdf), accessed March 27, 2012.) [Cited as MVGP FEIR]
- City of Moreno Valley, *Moreno Valley Municipal Code*, August 2011. (Available at <http://qcode.us/codes/morenovalley/>, accessed March 27, 2012.)
- Code of Federal Regulations, *Appendix E, NFIP Regulations*, (Available at [http://www.fema.gov/pdf/floodplain/nfip\\_sg\\_appendix\\_e.pdf](http://www.fema.gov/pdf/floodplain/nfip_sg_appendix_e.pdf), accessed October 1, 2013.) [Cited as 44 CFR]
- Riverside County, *Moreno Valley Ranch Specific Plan/EIR* [SCH No: 1984050907] certified October 1985. (Available at Moreno Valley Planning Department) [Cited as MVR SP/EIR]
- Riverside County Flood Control and Water Conservation District, *Design Handbook for Low Impact Development Best Management Practices*, Revised September 2011. (Available at <http://rcflood.org/NPDES/LIDBMP.aspx>, accessed August 17, 2012.) [Cited as LIDBMP]
- Riverside County Flood Control and Water Conservation District, *Moreno Master Drainage Plan Figure*, April 1991. (Available at <http://rcflood.org/downloads/Master%20Drainage%20Plans/Moreno%20MDP%20%28pdf%29.pdf>, accessed March 27, 2012.) [Cited as 1991 Moreno MDP]
- Riverside County Flood Control and Water Conservation District, *Draft Moreno Master Drainage Plan, Zone 4*, Revision No. 2, April 2014. (Available at the Riverside County Flood Control and Water Conservation District) [Cited as MDP Report]

- Riverside County Flood Control and Water Conservation District, *Riverside County, Storm Water Quality Best Management Practice Design Handbook*, July 21, 2006. (Available at <http://www.floodcontrol.co.riverside.ca.us/downloads/Planning/BMP%20Handbook%20%28draft%208%29.pdf>, accessed March 27, 2012.)
- State Water Resources Control Board, Division of Water Quality, National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ, NPDES No. CAS000002, September 2, 2009. (Available at [http://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/water\\_quality/2009/wqo/wqo2009\\_0009\\_dwq.pdf](http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2009/wqo/wqo2009_0009_dwq.pdf), accessed March 27, 2012.)
- Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups*, August 2001. (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>, accessed March 2012.)
- *Water Quality Management Plan for the Santa Ana Region of Riverside County, Appendix H Glossary*, approved by the Santa Ana Regional Water Quality Control Board, October 22, 2012. (Available at [http://rcflood.org/downloads/NPDES/Documents/SA\\_WQMP/EXHIBIT%20H.pdf](http://rcflood.org/downloads/NPDES/Documents/SA_WQMP/EXHIBIT%20H.pdf), accessed April 2014.) [Cited as Glossary]



## 5.5 Noise

Potential impacts related to:

- Causing a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- Exposing people residing or working in the project area, for a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, to excessive noise levels; and/or
- Exposing people residing or working in the project area, for a project within the vicinity of a private airstrip, to excessive noise levels

were all found to be less than significant in the Initial Study/Notice of Preparation (IS/NOP) prepared for the Project (Appendix A), and will not be discussed further in the Draft PEIR.

The following discussion addresses potential impacts related to:

- Exposing persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposing persons to or generation of excessive ground-borne vibration or ground-borne noise levels; and
- Causing a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

**As discussed below, the Project's potential to expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; expose persons to or generation of excessive ground-borne vibration or ground-borne noise levels, and result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project, is considered to be less than significant with mitigation.**

### 5.5.1 Setting

This section presents a discussion of noise fundamentals applicable to the Project, together with an assessment of existing ambient noise levels and noise sources in the Project vicinity.

#### Characteristics of Sound

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound in subjective terms such as "noisy" or "loud." To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. The analysis of a project's noise impact defines

the noise environment of that project area in terms of sound intensity and its effect on adjacent land uses and receivers.

**Quantification of Sound**

Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which defines the level of sound in decibels (dB). Because human hearing is not equally sensitive to sound at all frequencies, the A-weighting system is used to adjust quantified or measured sound levels to approximate this frequency-dependent response; A-weighted sound is expressed as dBA. As a source of reference, common indoor and outdoor noise sources, presented in terms of dBA, are shown in relation to the approximate corresponding noise level in **Table 5.5-A – Representative Environmental Noise Levels**.

**Table 5.5-A – Representative Environmental Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	rock band
jet fly-over at 1,000 feet	105	
	100	
gas lawnmower at 3 feet	95	
	90	
diesel truck, 50 mph at 50 feet	85	food blender at 3 feet
	80	garbage disposal at 3 feet
noisy urban area during daytime	75	
gas lawnmower at 100 feet	70	vacuum cleaner at 10 feet
commercial area	65	normal speech at 3 feet
heavy traffic at 300 feet	60	
	55	large business office
quiet urban area during daytime	50	dishwasher in next room
	45	
quiet urban area during nighttime	40	theater, large conference room (background)
quiet suburban area during nighttime	35	
	30	library
quiet rural area during nighttime	25	bedroom at night, concert hall (background)
	20	
	15	broadcast/recording studio
	10	
	5	
lowest threshold of human hearing	0	lowest threshold of human hearing

Source: California Department of Transportation, *Technical Noise Supplement*, 2009, Table 2-5, p. 2-21

Noise consists of pitch, loudness, and duration; therefore, it is difficult to describe noise with a single unit of measure. Federal and state agencies have established noise and land use compatibility guidelines that use averaging methods to noise measurement. Two measurement scales commonly used in

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California are the Community Noise Equivalent Level (CNEL) and the day-night level (DNL or  $L_{dn}$ ). To account for increased human sensitivity at night, CNEL adds a 5 dB weighting to the  $L_{dn}$  for noise that occurs between 7:00 p.m. and to 10:00 p.m., and a 10 dB weighting to the  $L_{dn}$  for noise that occurs between 10:00 p.m. and 7:00 a.m. (MVGP FEIR, p. 5.4-1). Typically, for a given 24-hour period, CNEL is typically within one dBA of the  $L_{dn}$  and are normally interchangeable. (Caltrans, p. 2-53)

Other noise rating scales of importance when assessing the annoyance factor includes the peak or maximum noise level ( $L_{max}$ ) and the equivalent noise level ( $L_{eq}$ ).  $L_{max}$  is the highest exponential, time-averaged sound level that occurs during a stated period and reflects acoustical peaks and the annoying aspects of intermittent noise.  $L_{eq}$  is a measurement of the sound energy level averaged over a specified time period (usually one hour) and represents the average amount variable sound energy received by a receiver over a time interval in a single numerical value. Short-term noise impacts in the Draft PEIR are specified in terms of both  $L_{max}$  and  $L_{eq}$ .

Noise can be particularly problematic when noise-sensitive land uses are affected. Noise-sensitive land uses are defined as uses where one would typically find activities that are interrupted by noise, such as residential uses, schools, hospitals, churches, performing arts facilities, and hotels and motels.

### Ground-borne Vibration

Ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed.

Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. The effects of ground-borne vibration include “feelable” movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called ground-borne noise. In extreme cases, the vibration can cause damage to buildings.

There are several different methods used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is typically measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body.



The RMS amplitude is defined as the squared amplitude of the signal. The PPV and RMS velocity are normally described in inches per second in the United States and meters per second in the rest of the world. Although it is not universally accepted, decibel notation VdB is in common use for vibration.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source. Sensitive receptors for vibration include structures (especially older masonry structures); people (especially residents, the elderly, and the sick) and vibration sensitive equipment.

### **Existing Site and Surrounding Conditions**

The proposed Project is generally bounded by Nason Street on the west and Theodore Street on the east. The mountain range to the north and the Mount Russell area foothills to the south, define the northern and southern boundaries of the drainage area within the city of Moreno Valley (Moreno Valley) and unincorporated Riverside County.

The construction of MDP Facilities will affect properties in portions of Moreno Valley and unincorporated Riverside County. Land use designations within the portion of the MDP Boundary located within Moreno Valley are: Residential (R1, R2, R3, R5, R10, R15, R20, and R5/15), Rural Residential, Hillside Residential, Residential/Office, Office, Commercial, Business Park/Light Industrial, Open Space, Floodplain, and Public Facilities. The portions of the MDP Boundary located within unincorporated Riverside County are designated as Rural Residential, Rural Mountainous, Rural Community-Very Low Density Residential, Conservation Habitat, Open Space Rural, and Open Space Recreation.

### **Existing Noise Levels**

The predominant noise characterizing the Project site and the surrounding area is vehicular noise from area roadways, which include local streets and a state highway. Transportation noise is concentrated along the transportation corridors and can vary with the volume of traffic, the vehicular speed, the truck mix and the road cross-section. High traffic volumes and speeds along State Route 60 and arterial roadways contribute to high noise levels (MVGFP FEIR).

## **5.5.2 Related Regulations**

### **Federal**

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce;
- Assisting State and local abatement efforts; and
- Promoting noise education and research.

The federal Office of Noise Abatement and Control was initially tasked with implementing the Noise Control Act. However, the Office of Noise Abatement and Control has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The United States Department of Transportation assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration and Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by transportation sources, the local agencies, in this instance Moreno Valley and Riverside County are restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The proposed Project will comply with the appropriate OSHA regulations relative to worker exposure to noise during Project construction and operation.

## State

### California Government Code

California Government Code Section 65302 mandates the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The MVGP contains a noise-related goals and policies within its Safety Element that ranks land use compatibility as required by the California Government Code. The MVGP Safety Element is discussed in Section 5.5.4.3, below.

## Local

### Moreno Valley General Plan (MVGP)

The MVGP Safety Element contains the following policy regarding noise that is applicable to the Moreno MDP Revision.

#### **Safety Element:**

- **Policy 6.5.2:** Construction activities shall be operated in a manner that limits noise impacts on surrounding uses. (MVGP, p. 9-32)

Construction of MDP Facilities will be consistent with Policy 6.5.2. Long-term operation and maintenance of the MDP Facilities are not anticipated to be noise generators.

**Moreno Valley Municipal Code**

Moreno Valley’s Noise Ordinance (Title 11, Chapter 11.80 of the Moreno Valley Municipal Code) adopted to secure and promote the public health, safety, welfare, and quality of life within the city. (MVMC, Section 11.80.010.C) and identifies the maximum permitted sound levels as summarized in **Table 5.5-B – Maximum Continuous and Impulsive Sound Levels.**

**Table 5.5-B – Maximum Continuous and Impulsive Sound Levels (dBA)<sup>a</sup>**

Continuous Sound		Impulsive Sound <sup>b</sup>	
Duration per Day Continuous Hours	Sound Level in dBA	Number of Repetitions per 24-Hour Period	Sound Level in dBA
8	90	1	145
6	92	10	135
4	95	100	125
3	97		
2	100		
1.5	102		
1	105		
0.5	110		
0.25	115		

Notes:  
<sup>a</sup> Source: Moreno Valley Municipal Code, Tables 11.80.030-1 and 11.80.030-1A  
<sup>b</sup> Section 11.80.020 of the Moreno Valley Municipal Code defines Impulsive Sound as sound of short duration, usually less than one second, with an abrupt onset and rapid decay. Examples of sources of impulsive sound include explosions, drop forge impacts, and discharge of firearms.

In addition to the maximum continuous and impulsive sound level thresholds identified in **Table 5.5-B**, above, Section 11.80.030.C of the Moreno Valley Municipal Code establishes maximum sound levels for daytime and nighttime hours for residential and commercial land uses as shown in the following table.

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**Table 5.5-C – Maximum Sound Levels for Source Land Uses (dBA)<sup>a, b</sup>**

Residential <sup>c</sup>		Commercial <sup>d</sup>	
Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
60	55	65	60
Notes: <sup>a</sup> Source: Moreno Valley Municipal Code, Table 11.80.030-2. <sup>b</sup> For sound originating on public –right-of-way, public pace, or other publicly owned property, sound is measured from a distance of 200 feet from the source. (MVMC, Section 11.080.030.C.) <sup>c</sup> Residential means all land uses primarily for dwelling units, as well as hospitals, schools, colleges and universities, and places of religious assembly. (MVMC, Section 11.80.020) <sup>d</sup> Commercial means all land uses not classified as Residential per Section 11.80.020 of the Moreno Valley Municipal Code.			

The Moreno Valley Noise Ordinance does not include any exemptions for construction noise and establishes the following standards addressing construction activities and construction noise:

- **Construction and Demolition.** No person shall operate or cause the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between the hours of eight p.m. and seven a.m. the following day such that the sound there from creates a noise disturbance, except for emergency work by public service utilities or for other work approved by the city manager or designee. (MVMC, Section 11.80.030(D)(7))

Moreno Valley has not established quantified vibration thresholds. However, the following standard provides general guidance:

- **Vibration.** No vibration shall be permitted which can be felt at or beyond the property line. (MVMC, Section 9.10.170)

Moreover, as Moreno Valley has no vibration threshold and in order to provide a conservative analysis, the *Transportation and Construction Induced Vibration Guidance Manual* prepared for California Department of Transportation was used to provide methods with which to estimate construction induced ground-borne vibration, and establish potential criteria for acceptable levels of ground-borne vibration for human perception and damage to buildings. This information is summarized **Table 5.5-D – Potential Vibration Damage Threshold Criteria for Human Response** and **Table 5.5-E – Potential Vibration Damage Threshold Criteria for Structures**.

**Table 5.5-D – Potential Vibration Damage Threshold Criteria for Human Response**

Human Response	Maximum PPV <sup>a</sup> (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely Perceptible/Threshold of Perception	0.035	0.006-0.19
Distinctly Perceptible/ Readily Perceptible	0.24	0.08
Strongly Perceptible/Begins to Annoy	0.90	0.10
Severe/Unpleasant	2.00	0.4-0.6
Notes: <sup>a</sup> Peak Particle Velocity Source: Adapted from <i>California Department of Transportation: Transportation and Construction Induced Vibration Guidance Manual</i> –Table 5: Human Response to Continuous Vibration from Traffic & Table 6: Human Response to Transient Vibration		

**Table 5.5-E – Potential Vibration Damage Threshold Criteria for Structures**

Structure and Condition	Maximum PPV <sup>a</sup> (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50
Notes: <sup>a</sup> Peak Particle Velocity Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment. Source: Adapted from <i>California Department of Transportation: Transportation and Construction Induced Vibration Guidance Manual</i> - Table 19: Guideline Vibration Damage Potential Threshold Criteria		

The Moreno Valley Municipal Code restricts grading equipment and activity as conditions of issuance of a grading permit. “Grading” is defined by the Moreno Valley Municipal Code to mean any excavation or filling or combination thereof, and the grading permit is an official document or certificate issued by the city engineer authorizing grading activity as specified by approved plans and specifications (MVMC Section 8.21.040). Moreno Valley Municipal Code Section 8.21.050(O) restricts the hours of grading to only be completed between the hours of 7:00 a.m. and 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends on holidays. The Moreno Valley city engineer may, permit grading or equipment operations before or after these hours of operation if it is determined that such operations are not detrimental to the health, safety, or welfare of residents or the general public.

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### 5.5.3 Significance Threshold Criteria

The Initial Study Environmental Checklist form (IS) found in Appendix G of the State *CEQA Guidelines* defines thresholds of significance for Noise. The Notice of Preparation for the Draft PEIR included the Initial Study Environmental Checklist to show the areas being analyzed in the Draft PEIR; refer to Appendix A of this Draft PEIR. Accordingly and based on the IS, the Project may be considered to have a significant impact on noise in the following areas if the Project would result in:

- (Threshold A) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (Threshold B) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels; and/or
- (Threshold C) Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

### 5.5.4 Project Design Considerations

At the request of Moreno Valley, the Quincy Basin, and Sinclair Basin are located adjacent to the State Route 60 to minimize the need for sound walls that would otherwise hide businesses along the freeway. In addition to providing noise attenuation for future development, construction noise for these basins will be somewhat masked by noise from freeway traffic. Moreover, when feasible, proposed MDP Facilities have been located so as to avoid traversing through developed areas.

### 5.5.5 Environmental Impacts before Mitigation

Note to Reader: The following two noise thresholds evaluated in this Draft PEIR have been combined to avoid repetitive discussion:

**Threshold A:** *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

**Threshold C:** *Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*

There are two types of noise impacts associated with implementation of the Moreno MDP, noise resulting from construction of the MDP Facilities and noise resulting from the operation and maintenance of the MDP Facilities.

#### Impacts Resulting from Project Construction

Construction noise levels vary according to the type(s) of equipment utilized and size of the active construction zone. Construction of MDP Facilities will entail the use of heavy equipment such as backhoes, excavators, dozers, scrapers, water trucks, wheeled loaders, and dump trucks. As shown in **Table 5.5-F – Typical Construction Equipment Noise Levels**, maximum noise levels for this type of equipment can range from approximately 64 dBA to 75 dBA  $L_{max}$  at 200 feet with the  $L_{eq}$  ranging from

approximately 60 dBA to 69 dBA at 200 feet from the equipment assuming no shielding. Noise shielding is anything that breaks or partially breaks the line of sight between the receiver and the noise source.

**Table 5.5-F – Typical Construction Equipment Noise Levels**

Construction Equipment	Impact Device?	$L_{max}$ at 200 Feet (dBA)	$L_{eq}$ at 200 Feet (dBA)
Backhoe	No	65.5	61.5
Dozer	No	69.6	65.6
Dump Trucks	No	64.4	60.4
Excavator	No	68.7	64.7
Front End Loader	No	67.1	63.1
Grader	No	73.0	69.0
Scraper	No	71.5	67.6
Tractor	No	72.0	68.0
Notes: $L_{eq}$ calculated using the Federal Highway Administration Construction Noise Model (FHWA-HEP-05-054) also known as the Roadway Construction Noise Model (RCNM) Source: U.S. Department of Transportation, Federal Highway Administration, <i>FHWA Roadway Construction Noise Model Users Guide</i> , January 2006. (Available at <a href="http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook">http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook</a> , accessed April 10, 2011.)			

As indicated in the above table, noise associated with the equipment anticipated to be used to construct the proposed MDP Facilities will not exceed the continuous sound level maximums shown above in **Table 5.5-B**. Further, assuming all pieces of construction equipment are operating simultaneously in the same location, the total  $L_{eq}$  at 200 feet without shielding is estimated to be approximately 75 dBA, which is also below the maximum sound levels in **Table 5.5-B**. Moreover, impacts from impulsive noise are not anticipated as impact devices are not necessary for construction of the Facilities.

As indicated in the **Table 5.5-F**, noise associated with the equipment anticipated to be used to construct MDP Facilities may exceed the maximum noise levels for residential and commercial land uses shown in **Table 5.5-C**. However, it is important to note that the noise levels reported in **Table 5.5-F** assumes no shielding or noise attenuation. Because residential structures offer substantial amounts of attenuation from exterior noise sources, it is industry practice to utilize a very conservative residential structure noise attenuation assumption that a 12 dBA noise reduction is afforded to a residential structure's interior spaces if the windows are open and a 20 dBA noise reduction is afforded to a residential structure's interior spaces if the windows are closed. If these attenuation factors are applied, construction noise inside a residential structure 200 feet away from the noise source will range from 52 dBA to 63 dBA  $L_{max}$  and from 52 dBA to 57 dBA  $L_{eq}$  with the windows open and from 44 dBA to 55 dBA  $L_{max}$  and from 40 dBA to 49 dBA  $L_{eq}$  with windows closed. In both the windows closed and open scenarios, the  $L_{eq}$  assuming all construction equipment is operating simultaneously is less than the

maximum noise levels shown in **Table 5.5-C**. Additionally, the proposed storm drains and channels are linear Facilities, that is, the noise source will move along the alignment as construction of these Facilities occurs.

Limiting exposure of persons to construction-related noise impacts will be primarily achieved via time constraints as established by the Moreno Valley Municipal Code, which limits construction activities on weekdays from 6:00 a.m. to 8:00 p.m., and from 7:00 a.m. to 8:00 p.m. on weekends and holidays (MVMC, Section 11.80.030.D.8); and which limits grading activities on weekdays from 7:00 a.m. to 6:00 p.m., and from 8:00 a.m. to 4:00 p.m. on weekends and holidays (MVMC 8.21.050.O); times when many people are not at home (mitigation measure **MM NOI 1**). Additional mitigation is achieved by maintaining construction equipment in good working order, informing sensitive receptors of pending construction, using electricity from power poles when feasible as required by mitigation measures **MM NOI 2** through **MM NOI 4**. Moreover, mitigation measure **MM Air 2**, discussed previously in Section 5.1 – Air Quality and Greenhouse Gas Emissions, will also reduce construction noise by restricting engine idling times to five minutes.

**Given the temporary nature of construction noise impacts in conjunction with the implementation of mitigation measures MM NOI 1 through MM NOI 3 as well as MM Air 2, potential impacts regarding the exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies will be less than significant with mitigation.**

#### **Impacts Resulting from Project Operation**

Operation and maintenance of the MDP Facilities will generate noise, but at a much smaller scale than construction. Operation and maintenance will occur as needed, typically less than once a year for each Facility. In addition, maintenance activities are very short in duration, typically less than one day, and would also take place during daytime hours, pursuant to the MVMC. Therefore, impacts in that regard will be less than significant.

**Threshold B:** *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels*

Ground vibration can be annoying to people and the degree to which a person is annoyed depends on the activity in which they are participating at the time of the disturbance. For example, someone sleeping or reading will be more sensitive than someone who is running on a treadmill. Reoccurring primary and secondary vibration effects often lead people to believe that the vibration is damaging their home, although vibration levels may well be below minimum thresholds for damage potential. (Vibration Guidance, p. 13)

Vibration generated by construction activity also has the potential to damage structures. This damage could be structural damage, such as cracking of floor slabs, foundations, columns, beams, or wells, or cosmetic architectural damage, such as cracked plaster, stucco, or tile. (Vibration Guidance, p. 13)



Although construction of the proposed MDP Facilities is not anticipated to require the use of impact devices (**Table 5.5-F**), excavators and scrapers are expected to be used. The effects of these types of equipment are anticipated to be similar to those of a large bulldozer. **Table 5.5-G – Potential Construction Induced Vibration**, presents the peak particle velocity—that is the amount of vibration—associated with the types of construction equipment anticipated to be used to construct the proposed Moreno MDP Facilities.

**Table 5.5-G – Potential Construction Induced Vibration<sup>a</sup>**

Construction Equipment	PPV <sup>b</sup> at 25 ft. (in/sec)	PPV at 50 ft. (in/sec) <sup>c</sup>
Large Bulldozer	0.089	0.042
Loaded Trucks	0.076	0.035
Small Bulldozer	0.003	0.001
Notes: <sup>a</sup> Source: Adapted from <i>California Department of Transportation: Transportation and Construction Induced Vibration Guidance Manual</i> - Table 18: Vibration Source Amplitudes for Construction Equipment <sup>b</sup> Peak Particle Velocity <sup>c</sup> Where $PPV_{Equipment} = PPV_{Ref} (25/D)^n$ (in/sec) and $PPV_{Ref}$ = reference PPV at 25 ft, "D" = distance from equipment to the receiver in ft. and "n" = 1.1 (the value related to the attenuation rate through the ground).		

In comparing the estimated vibration shown in **Table 5.5-G**, with the threshold criteria presented in **Table 5.5-D** and **Table 5.5-E**, at a distance of 50 feet estimated vibration is expected to be "Barely Perceptible" to humans and significantly below the vibration damage threshold for older residential structures. At a distance of 25 feet, the estimated vibration is expected to be "Distinctly Perceptible" to humans; however, it is still below the significantly below the vibration damage threshold for older residential structures.

Since the estimated vibration is expected to be within levels perceived as barely perceptible at 50 feet, potential impacts regarding vibration are less than significant at that distance and mitigation regarding construction-related vibration impacts is not required. However, at distances of less than 50-feet, vibration from construction equipment is above the threshold of perception and has the potential to be "Distinctly Perceptible" to humans although it is not anticipated to achieve the level of "Strongly Perceptible/Begins to Annoy." The Project will implement mitigation measure **MM NOI 1**, which limits construction hours, which will limit sensitive receptor's exposure to construction-related vibration. **Impacts associated with ground-borne vibration resulting from the construction of proposed MDP Facilities will be less than significant with mitigation.**

### 5.5.6 Proposed Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4).

### Construction and Maintenance

To assure construction and maintenance-related noise impacts resulting from Project implementation are not substantial and results in a less than significant impact, the following mitigation measures shall be implemented:

**MM NOI 1:** To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of ~~6~~7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.

**MM NOI 2:** To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer's specifications to the satisfaction of the District or Moreno Valley, as appropriate. Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.

**MM NOI 3:** To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors' roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.

### 5.5.7 Environmental Effects after Mitigation Measures are Implemented

Depending on the final location and construction footprint, portions of the following proposed storm drains and channels may entail construction within 200-feet of residential units:<sup>1</sup> Lines A, A-1, A-2, A-3, A-6, A-7, A-8, D-1, D-2, D-3, D-4, D-7, E-3, E-7, F-2, F-11, F-12, F-17, F-18, F-19, G, G-7, G-9, G-11, G-12, H, H-3, H-5, H-11, J (north portion), K-1, K-2, and K-4. Although construction activities will produce noise that will be perceptible by these receivers, this impact will be short-term and will cease upon completion of construction. The temporary nature of this impact in conjunction with mitigation measures **MM NOI 1** through **MM NOI 3** as well as **MM Air 2** will reduce potential noise impacts to **less than significant**.

<sup>1</sup> The MDP identifies the conceptual location of its proposed storm drains and channels. Because the precise alignment of the storm drains and channels is not known, the construction footprint of the Facilities may be greater than 200-feet away from an occupied residence.

Mitigation measures **MM NOI 1**, **MM NOI 2**, and **MM Air 2** are qualitative measures in that there are no quantifiable reductions associated with them. **MM NOI 1** limits the times during which construction may occur to the daytime hours during which humans are less sensitive. **MM NOI 2** requires that all utilized construction equipment has properly working factory-installed noise reduction device. This will serve to ensure that the projected noise levels, based on manufacturer specifications and monitored levels of properly operating equipment, will not be exceeded. **MM Air 2** prohibits idling of vehicles and construction equipment in excess of five minutes, which will reduce the amount of noise generated by vehicles and equipment when not in use.

**MM NOI 3** does not provide a specific noise reduction value but will provide a mechanism for people to report potential exceedances in noise levels so that they can be properly handled.

Operation and maintenance of the MDP Facilities are not expected to result in substantial noise; construction of the proposed MDP Facilities. Therefore, with implementation of the mitigation measures identified above, Project-related noise impacts are **less than significant**.

### 5.5.8 Cumulative Noise Effects after Mitigation Measures are Implemented

The Project will not contribute cumulatively to significant sources of noise in the Project site vicinity. The operational or long-term noise associated with the Project is nominal, and Facility construction noise will be temporary and will cease once construction is completed. Furthermore, the MDP Facilities will be constructed intermittently over a span of many years, and each Facility will mitigate noise impacts as required. Therefore, the cumulative impact will be less than significant.

### 5.5.9 References

In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- California Department of Transportation, *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, September 2013. (Available at [http://www.dot.ca.gov/hq/env/noise/pub/TeNS\\_Sept\\_2013B.pdf](http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf), accessed March 27, 2014) [Cited as Caltrans]
- California Department of Transportation, *Transportation and Construction Induced Vibration Guidance Manual*, September 2013. (Available at [http://www.dot.ca.gov/hq/env/noise/pub/TCVGM\\_Sep13\\_FINAL.pdf](http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf), accessed March 27, 2014.) [Cited as Vibration Guidance]
- City of Moreno Valley, *City of Moreno Valley General Plan*, Adopted July 11, 2006. (Available at City of Moreno Valley and at [http://www.moreno-valley.ca.us/city\\_hall/general\\_plan.shtml](http://www.moreno-valley.ca.us/city_hall/general_plan.shtml), accessed March 28, 2012.) [Cited as MVGP]
- P&D Consultants, *Final Environmental Impact Report City of Moreno Valley General Plan, City of Moreno Valley*, July 2006. (Available at the City of Moreno Valley and at [http://www.moreno-valley.ca.us/city\\_hall/general\\_plan.shtml](http://www.moreno-valley.ca.us/city_hall/general_plan.shtml), accessed March 28, 2012.) [Cited as MVGP FEIR]

- City of Moreno Valley, *Municipal Code*, August 2011. (Available at <http://qcode.us/codes/morenovalley/>, accessed January 12, 2012.) [Cited as MVMC]



## Section 6 – Other CEQA Topics

The State *CEQA Guidelines* set forth several general content requirements for an EIR, including certain potential impacts which must be addressed. Those impact areas applicable to this Project include the potential for the Project to cause cumulative impacts (Section 15130); unavoidable adverse impacts (Section 15126(b)); growth inducing impacts (Section 15126(d)); or significant irreversible changes caused by a project (Section 15126.2(c)). Section 15125(d) of the State *CEQA Guidelines* also requires an EIR to discuss any inconsistencies between the proposed Project and applicable general and regional plans. This section addresses each of these general requirements.

### 6.1 Cumulative Impact Analysis

#### 6.1.1 Introduction

CEQA requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to a project alone (State *CEQA Guidelines* Section 15130(b)).

As stated in State *CEQA Guidelines* Section 15130(a), an EIR “shall discuss cumulative impacts of a project when the project’s incremental effect is cumulatively considerable.” “Cumulatively considerable” means that “the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130.” State *CEQA Guidelines* Section 15355 states that “cumulative impacts” occur from “...the change in the environment which results from the incremental impact of a project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.”

The EIR must examine “reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project” (State *CEQA Guidelines* Sections 15130(a)(3) and 15130(b)(5)). A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through mitigation fee payment programs.

#### 6.1.2 Cumulative Analysis Setting

This Draft PEIR utilizes the “summary of projections” approach in the cumulative analysis. State *CEQA Guidelines* Section 15130(d) states that, “Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master, or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the

proposed project have been adequately addressed, as defined in Section 15152(f), in a certified EIR for that plan.” Additionally, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact. (State *CEQA Guidelines* Section 15130(e))

The geographic scope (or cumulative impact area) for each environmental issue can generally vary depending on the potential area of effect. For the following environmental issues, however, the geographic scope consists of the MDP Boundary and the greater Moreno Valley area. While the MDP Boundary includes a relatively small amount of abutting, unincorporated land within Riverside County’s jurisdiction, of the proposed MDP Facilities, only the Ironwood Debris Basin is located within that area. This unincorporated land within the MDP Boundary consists of a hilly topography and is designated by the Riverside County General Plan as Open Space – Rural, Conservation – Habitat, Rural Mountainous, and Very Low Density Residential. The Ironwood Debris Basin is proposed to be located just beyond Moreno Valley’s existing city limits at the northeastern intersection of Ironwood Avenue and Theodore Street, and is within Moreno Valley’s Sphere of Influence. As such, the long-term development of the area containing the proposed Ironwood Debris Basin is articulated in the Moreno Valley General Plan. For this reason, the cumulative impact analysis for the proposed Project is based on information contained in the certified Moreno Valley General Plan Final Program EIR, SCH# 20091075 (MVGP FEIR). This document is utilized because the geographic scope addressed in this document encompasses the Moreno Watershed (the MDP Boundary) and where MDP Facilities are most likely to be sited, and all portions of the surrounding area that could be potentially impacted by the proposed Project’s contribution to cumulative impacts. The Moreno Valley General Plan and MVGP FEIR are hereby incorporated by reference and are available for review at the location cited for these documents in Section 6.6 – References.

### 6.1.3 Assessment of Cumulative Impacts

#### Air Quality and Greenhouse Gas Emissions

##### Criteria Pollutants

Due to the defining geographic and meteorological characteristics of the South Coast Air Basin (Basin), the cumulative area for air quality impacts is the Basin itself. As previously stated in Section 5.1.2 - Related Regulations, under the subheading “Criteria Air Pollutants,” the portion of the Basin within which the Moreno MDP is located is designated as a non-attainment area for NO<sub>2</sub> under state standards, and for ozone, PM-10 and PM-2.5 under both state and federal standards.

Emissions within the context of SCAQMD’s regional emissions thresholds provide an indicator of potential cumulative impacts within the Basin. Cumulative localized impacts for pollutants are also considered, and reflect air pollutant emissions in the context of ambient conditions in the Moreno MDP vicinity.

As discussed in Section 5.1.5 – Environmental Impacts before Mitigation, Section 5.1.7 –Environmental Effects after Mitigation Measures are Implemented, and Appendix B (the Project’s AQIA), the Moreno MDP’s short-term emissions are above regional thresholds before and after mitigation during construction. The proposed Moreno MDP is in conformance with the AQMP and the short-term emissions are directly related to short-term construction impacts that are by their very nature temporary. **However, because the Moreno MDP’s short-term emissions exceed SCAQMD thresholds after implementation of mitigation, the incremental contribution to criteria pollutant emissions is considered to contribute to a cumulatively considerable impact to air quality.**

#### GHG Emissions

Greenhouse gases (GHG) are those gases that will contribute to global climate change; therefore, the cumulative impact area for GHG emissions is the earth’s atmosphere. Implementation of the proposed Moreno MDP along with the cumulative development projects will contribute GHG emissions to the atmosphere.

The Moreno MDP’s annual GHG emissions from the representative project are below the draft GHG screening threshold developed by South Coast Air Quality Management District (SCAQMD) for commercial projects, and do not generate a significant amount of GHG emissions. **Considering the Moreno MDP’s small contribution to GHG emissions, the Moreno MDP does not incrementally contribute to a cumulatively significant effect and cumulative impacts related to GHG emissions are considered less than significant.**

#### Biological Resources

The environmental impact analysis contained in Section 5.2 – Biological Resources, determined that potential impacts to biological resources will be less than significant with mitigation. Because biological resources are evaluated in this Draft PEIR at a programmatic level, mitigation measure **MM BIO 1**, requires a Facility-specific biological resources assessment that includes recommendations for subsequent surveys and mitigation measures, if needed, and a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP for any proposed MDP Facility that is not being constructed as part of a private development project for which a general biological resources assessment has been conducted. The MDP Boundary does not occur within the NEPSSA and/or CAPSSA, and thus, focused plant surveys will not be required pursuant to the MSHCP for individual projects.

Special-status wildlife species that may be affected by the Project include burrowing owl, least Bell’s vireo, listed fairy shrimp, Los Angeles pocket mouse, Stephens’ kangaroo rat, and raptor foraging habitat. Mitigation for these species is provided by mitigation measures **MM BIO 2** through **MM BIO 7**. Specifically, **MM BIO 2** will require individual burrowing owl habitat assessments for individual MDP Facilities, including focused burrow surveys if needed; **MM BIO 3** will require Facility-specific pre-construction surveys prior to ground disturbance and avoid take of active nests; **MM BIO 4** will require Facility-specific riparian/ riverine surveys; **MM BIO 5** will require individual Facilities within areas of suitable riparian habitat to conduct protocol presence/absence surveys for the least Bell’s vireo and require additional measures for positive surveys and **MM BIO 6** will require a qualified biologist to



conduct presence/absence surveys for listed fairy shrimp for Facilities within potentially suitable habitat and require additional measures for positive surveys; and **MM BIO 7** will require individual projects located within the MSHCP Los Angeles pocket mouse survey area to conduct a habitat assessment and require additional measures for positive surveys. Moreover, regarding riparian and sensitive habitat, **MM BIO 4** will also address potential impacts related to adversely affecting riparian habitat, and **MM BIO 8** will require Facility-specific jurisdictional delineations to determine whether biological features will be subject to the jurisdictions of the ACOE, RWQCB, and CDFG. Further, regarding native or migratory fish or wildlife species, **MM BIO 9** will require seasonal avoidance of vegetation removal and/or nesting bird surveys to ensure that migratory birds (and their nests) will not be directly harmed. Lastly, the Project will comply with MSHCP and SKR HCP and thus the goals and policies of the District, Moreno Valley, and Riverside County.

#### **Summary of Cumulative Environmental Effects from the Moreno Valley General Plan**

The geographic scope for cumulative biological impacts is the Western Riverside County MSHCP Area. Development within the MDP Watershed per the Moreno Valley General Plan has the potential to impact biological resources. However, the Moreno Valley General Plan is consistent with and will facilitate implementation of the applicable policies and programs identified in the MSHCP, which is designed to protect and establish a 500,000-acre Reserve in Western Riverside County in exchange for biological impacts that may happen outside that Reserve Area. As discussed under the subheading “Related Regulations, Regional” of Section 5.2, the District, Moreno Valley, and Riverside County are Permittees under the MSHCP and are legally obligated to comply with its provisions. Additionally, the Moreno Valley General Plan includes policies and programs designed to reduce impacts to biological resources over the long term. **Therefore, implementation of these policies and programs and mitigation described in the Moreno Valley General Plan FEIR will reduce cumulative impacts to biological resources within the MDP Watershed to less than significant.**

#### **Proposed Mitigation Measures**

Mitigation measures addressing construction and maintenance have been incorporated into the Project to reduce Project-level biological impacts. The proposed Project must also comply with the MSHCP, and each individual Facility is expected to mitigate at the project level. To address the potential impacts associated with the cumulative loss of habitat for special status wildlife the proposed project and each individual Facility shall comply with all pertinent MSHCP requirements. Please refer to Section 5.2 – Biological Resources of this Draft PEIR.

#### **Cumulative Environmental Effects after Mitigation Measures are Implemented**

Through compliance with the MSHCP, the Project will not result in or contribute to a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species listed in the MSHCP as implementation of the MSHCP benefits Covered Species by preserving their habitat in order to address their life cycle needs. Thus, through compliance with the MSHCP and based on the features of the MSHCP itself, impacts to Covered Species are mitigated below a level of significance. (MSHCP EIR/EIS, p. 5.1-7)

As described in the MSHCP EIR/EIS, implementation of the MSHCP will result in cumulatively significant impacts on the Non-Covered Species because the issuance of incidental take permits will remove an impediment to development outside of the MSHCP Conservation Area. Non-Covered Species would receive little or no protection outside the reserves under existing ordinances and regulations. However, within the MDP Boundary, there are no threatened or endangered species known or likely to be on site, which are not on the 146-species list covered by the MSHCP. **Therefore, cumulative impacts to Non-Covered MSHCP species are less than significant.**

**The Project will not cause adverse cumulative effects related to the reduction of sensitive vegetation communities; as the MDP Watershed is located within the MSHCP Plan Area and the MSHCP itself is designed to preserve sufficient acreage of the sensitive vegetation communities present in western Riverside County.** Similarly, build out of the MDP Watershed in compliance with the Moreno Valley General Plan will not cause adverse cumulative effects related to interference with the movement of any native resident or migratory fish or wildlife species or obstruction of genetic flow for the identified Planning Species. Part of the purpose and goals of the MSHCP is to use regional planning efforts to assemble a reserve that will preserve contiguous blocks of habitat in large enough areas to ensure that the reserve will allow movement of species and flow of genetic information. (MSHCP EIR/EIS, pp. 5.1-7 - 5.1-8)

**The proposed Project will not cause adverse cumulative impacts by conflicting with the provisions of any adopted Habitat Conservation Plan, Natural Communities Conservation Plan or other approved local, regional, or state habitat conservation plan either within or outside of the MSHCP boundary.**

The MSHCP has been designed specifically to complement existing HCPs, such as the Stephens' kangaroo rat long-term HCP. Through compliance with the MSHCP and existing HCPs, local, regional, and state plans, cumulative impacts are considered less than significant. (MSHCP EIR/EIS, p. 5.1-8)

Cumulative effects associated with the proposed MSHCP take authorization would involve direct loss of habitat and species associated with ground disturbance in take authorized areas as development occurs in accordance with growth per the Moreno Valley General Plan. Cumulative indirect effects would occur to species and habitats within the MSHCP Conservation Area and would be associated with development of proposed land uses and activities in take authorized areas in proximity to the MSHCP Conservation Area. Indirect effects primarily result from adverse "edge effects" and may be short-term indirect effects related to construction or long-term indirect effects associated with development or land use practices in proximity to conserved habitat areas. (MSHCP EIR/EIS, p. 5.1-8)

Cumulative indirect impacts resulting from construction activities include dust, noise, and general human presence that may temporarily disrupt species and habitat vitality and construction-related soil erosion and runoff. Edge effects at the boundary between natural lands and human-occupied lands ("urban edge effects") arise due to human-related intrusions such as lighting, noise, invasive species, exotic predators (e.g., dogs and cats), hunting, trapping, off-road activities, dumping, and other forms of recreation and disturbance. Human-induced edge effects are generally unfavorable to native species and are considered cumulative as edge increases throughout the landscape. (MSHCP EIR/EIS, p. 5.1-8)

Cumulative significant indirect impacts associated with edge effects and increased development outside the conservation areas established by the proposed MSHCP are addressed in the provisions of Section 6.1.4 of the MSHCP. Edge effects will result as development occurs in proximity to habitat; however, the MSHCP contains provisions that will reduce the adverse impacts associated with edge effects. The MSHCP provides take authorization for Covered Species. The MSHCP would not directly cause edge effects, but it would dictate where such effects could occur through the reserve assembly process. **Thus, cumulative indirect impacts associated with edge effects are considered less than significant.** (MSHCP EIR/EIS, p. 5.1-8)

### Cultural Resources

The environmental impact analysis contained in Section 5.3 – Cultural Resources, determined that potential impacts to cultural resources will be less than significant with mitigation. Impacts related to historic and archaeological resources were found to be less than significant within or adjacent to proposed MDP Facilities. However, the locations of the proposed MDP Facilities are conceptual at this time and may change as more detailed information becomes available during the final design process. Subsequent CEQA documentation in the form of a Notice of Exemption, Addendum to this PEIR, Mitigated Negative Declaration, Negative Declaration, Subsequent EIR, or Supplemental EIR may be required if the final location of an MDP Facility were to change from the locations evaluated in the *Phase I Archaeological Assessment* (included as Appendix D.1) or the *Paleontological Resources Report* (included as Appendix D.2). Mitigation measure **MM CR 1** requires the proponent for any specific proposed MDP Facility for which there is a change in the location or size of disturbance area from what was evaluated in the Draft PEIR, to prepare a Facility-specific archaeological assessment. Mitigation measures **MM CR 2**, includes provisions for the accidental discovery of archaeological resources. Mitigation measure **MM CR 3**, requires the proponent of each MDP Facility to notify local Native American tribes prior to ground-disturbing activities and may allow tribal monitors to be present during grading, excavation, and other ground-disturbing activities if the Facility-specific assessment required by **MM CR 1** identifies the potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance.

No unique geologic feature is known to exist and no fossils have been documented within or adjacent to the proposed MDP Facilities. However, the Project footprint is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Ground-disturbing activities resulting from construction of the proposed Project could damage or destroy previously undocumented unique fossils, if located within the footprint of proposed MDP Facilities. Mitigation measures **MM CR 4** through **MM CR 7**, outline specific measures that will be taken if certain soil types or any artifacts deemed to be rare, substantial, or otherwise, unique are unearthed during construction activities.

The Project's Initial Study determined that the potential impact regarding human remains will be less than significant. The Project's likelihood of discovering human remains is low, and if in the unlikely event human remains were discovered, the Project would adhere to California Health & Safety Code Section 7050.5, California Resources Protection Code Section 5097.98, and the terms of the District's Master Agreement with the Pechanga Tribe should human remains be discovered during construction of the

Ironwood Debris Basin. The other future projects would assess their potential to unearth human remains on a project-by-project basis and would also be subject to the identified state codes regarding accidental discovery.

#### **Summary of Cumulative Environmental Effects from the Moreno Valley General Plan**

The geographic scope for cumulative impacts to cultural resources is the city of Moreno Valley and its Sphere of Influence. Historical, archaeological, and paleontological resources in the MDP Watershed could be cumulatively impacted by future development per the Moreno Valley General Plan. **However, implementation of programs and mitigation described in the Moreno Valley General Plan EIR will reduce cumulative impacts to cultural resources within the MDP Watershed to less than significant.**

#### **Proposed Mitigation Measures**

Mitigation measures have been incorporated into the Project to reduce Project-level impacts. Please refer to Section 5.4 – Cultural Resources of this Draft PEIR. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

#### **Cumulative Environmental Effects after Mitigation Measures are Implemented**

Development within the MDP Watershed per the Moreno Valley General Plan will not result in cumulative impacts to cultural resources because such impacts will be reduced to a less than significant level by either retaining historic (structures), archaeological, and paleontological resources or mitigating the impact. Mitigation will occur at the development project-level or MDP Facility-level by implementing Moreno Valley's and Riverside County's cultural resource protection policies and, where needed, implementing development-specific mitigation measures. **Therefore, with implementation of mitigation measures MM CR 1 through MM CR 7, potential cumulative impacts to cultural resources will be reduced to less than significant.**

#### **Hydrology and Water Quality**

The environmental impact analysis contained in Section 5.4 – Hydrology and Water Quality, determined impacts to hydrology and water quality will be less than significant with mitigation. Construction of the proposed MDP Facilities will address specific structural and non-structural BMPs as part of the existing NPDES and MS4 permitting requirements as well as various statutory requirements necessary to achieve regional water quality objectives and protect surface waters from polluted storm water runoff. The Project will also not negatively alter groundwater as total infiltration volumes from the proposed basins are greater than the existing Nason Basin and the detention basins are expected to facilitate groundwater recharge. Erosion and siltation will be prevented by the design of the MDP Facilities, which includes two debris basins. Moreover, the implementation of the Moreno MDP Revision combined with street improvements will provide protection from 100-year flood hazards in the MDP Watershed. Because not all MDP Facilities will require preparation of a SWPPP, mitigation measure **MM HYD 1** requires preparation and approval of an erosion-control plan for any MDP Facility for which a SWPPP is not prepared. Since phasing and construction of the MDP Facilities will be in response to development within the MDP Watershed, mitigation measure **MM HYD 2**, which requires demonstration that storm flows and runoff associated with each specific MDP Facility will be conveyed to downstream facilities

with adequate capacity. The Project's Initial Study determined a number of potential hydrology and water quality impacts will be less than significant, specifically regarding the alteration of an existing drainage pattern resulting in substantial erosion or siltation on or off site; creating or contributing to runoff water exceeding the capacity of an existing or planned storm water drainage system; siting housing in a 100-year flood hazard area; exposing people or structures to an increased risk of flooding, including flooding from levee or dam failure; and/or exposing people or structures to an increased risk of loss, injury, or death from inundation by seiche, tsunami, or mudflow.

#### **Summary of Cumulative Environmental Effects from the Moreno Valley General Plan**

The geographic scope for cumulative impacts to hydrology and water quality is the San Jacinto River watershed, specifically within the Santa Ana River Reach 3 watershed. As development proceeds in the San Jacinto River watershed, the amount of pollutants in runoff will increase, this in turn may impact surface and groundwater quality. The amount of impervious surfaces will increase as development proceeds and erosion and sedimentation impacts on surface water will occur during grading and construction activities. However, Moreno Valley will implement mitigation described in its General Plan EIR that requires: all components of its storm drain system to conform to the District's master drainage plans and FEMA requirements, and compliance with the provisions of NPDES permits to protect water quality issued by the Regional Water Quality Control Board. (MVGP FEIR p. 5.7-13).

#### **Proposed Mitigation Measures**

Mitigation measures will be incorporated into the Project to reduce Project-related impacts to hydrology and water quality. Please refer to Section 5.4 – Hydrology and Water Quality. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

#### **Cumulative Environmental Effects after Mitigation Measures are Implemented**

The MDP Facilities will be designed and constructed to capture stormwater runoff from existing and future development in the Moreno MDP Watershed. Construction of the MDP Facilities and all development projects within Moreno Valley will be required to comply with the current NPDES permits, which includes specific requirements to substantially reduce the problem. Flood control and infrastructure maintenance needs can be met by the application of standard engineering practices.

**Therefore, through implementation of proposed mitigation measures and regulatory compliance, potential cumulative impacts to water quality will be less than significant.**

#### **Noise**

As discussed in Section 5.5 – Noise, operation and maintenance of the MDP Facilities will not result in significant permanent noise. Construction of the MDP Facilities, which will entail the use of heavy equipment such as backhoes, excavators, dozers, scrapers, water trucks, wheeled loaders, and dump trucks, will generate short-term noise that will cease when construction is complete. Noise from the construction equipment is anticipated to range from 65.5 dBA  $L_{max}$  to 73.0 dBA  $L_{max}$  200-feet<sup>1</sup> from the construction site. This is less than the maximum continuous and impulsive sound level limits and greater

<sup>1</sup>Per Section 11.080.030.C of the Moreno Valley Municipal Code, sound originating on public-right-of-way, public space, or other publicly-owned property is measured from a distance of 200-feet from the source.

than the maximum sound levels for source land uses established in the Moreno Valley Municipal Code. However, by limiting the hours of construction (mitigation measure **MM NOI 1**), requiring construction equipment to be properly tuned and muffled (mitigation measure **MM NOI 2**), providing notice to nearby properties (mitigation measure **MM NOI 3**), and limits to idling required by the SCAQMD (mitigation measure **MM AIR 2**), **short-term noise impacts will be less than significant with mitigation, and long-term noise impacts would be less than significant due to the infrequent nature of facility maintenance.** Construction of the MDP Facilities is not expected to require the use of impact devices; thus, no perceptible impacts are anticipated in regards to impulsive noise or vibration.

The Project's Initial Study determined that noise impacts would be less than significant for the following thresholds: substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project; being located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; for a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels, will be less than significant. The MDP Boundary is not within a two-mile vicinity of a public airport or private airstrip. And, a substantial permanent ambient noise increase is not anticipated due to the temporary nature of construction noise impacts and the infrequent nature of facility maintenance.

#### **Summary of Cumulative Environmental Effects from the Moreno Valley General Plan**

The geographic scope for cumulative noise impacts is Moreno Valley and surrounding area. Development per the Moreno Valley General Plan will increase traffic volumes and associated noise levels in the region. High noise levels already occur along many of the region's transportation corridors and implementation of the Moreno Valley General Plan will generate additional vehicular traffic that will result in an incremental increase in noise levels along these corridors. However, the incremental noise impact of build-out per the Moreno Valley General Plan is so small it will make only a negligible contribution to the cumulative noise impact within the region. Therefore, implementation of the Moreno Valley General Plan will not contribute to a significant cumulative noise impact in the region. (MVGP FEIR, pp. 7-3-7-4)

#### **Proposed Mitigation Measures**

Mitigation measures will be incorporated into the Project to reduce Project-related construction noise impacts. Please refer to Section 5.5 – Noise. Additional mitigation measures addressing potential cumulative impacts are unnecessary.

#### **Cumulative Environmental Effects after Mitigation Measures are Implemented**

Construction of the proposed Facilities identified in the Moreno MDP Revision will result in less than significant noise impacts due to the temporary nature of the noise source and implementation of mitigation measures. **Because the Project is not contributing to any permanent increase in ambient noise and cumulative noise impacts resulting from development per the Moreno Valley General Plan**

is less than significant, no potentially significant cumulative effects related to noise will result from implementation of the Moreno MDP Revision.

## 6.2 Significant Unavoidable Adverse Impacts

This topic is intended to address any significant impacts that cannot be mitigated to below a level of significance (State *CEQA Guidelines* Section 15126.2). As discussed in detail throughout Section 5 – Potentially Significant Environmental Effects of this Draft PEIR, implementation of the Moreno MDP Revision will not result in any Project-specific or cumulatively significant unavoidable adverse impacts related to greenhouse gas emissions, biological resources, cultural resources, hydrology/water quality, or noise. Additionally, the Project’s Initial Study (included as Appendix A) determined that no significant impacts will occur to the following issue areas: aesthetics, agriculture and forest resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, population and housing, public services, recreation, transportation and traffic, and utilities and service systems.

Impacts to air quality are considered significant if the proposed Moreno MDP will violate any air quality standards or contribute substantially to an existing or projected air quality violation. Depending on the specific MDP Facility or combination of Facilities constructed at any given time, SCAQMD regional significance thresholds for VOC (if more than one activity occurs at the same time) and NO<sub>x</sub> would be exceeded during construction after implementation of mitigation. **Although these are direct, short-term impacts that will cease once construction is complete, they remain unavoidable and are unmitigable due to NO<sub>x</sub> emissions.**

## 6.3 Growth Inducing Impacts

According to State *CEQA Guidelines* Section 15126.2(d), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria:

- A project would remove obstacles to population growth;
- Increases in the population may tax existing community service facilities, causing significant environmental effects; or
- A project would encourage and facilitate other activities that could significantly affect the environment.

As discussed in Section 3 – Project Description of this Draft PEIR, the Project will revise the existing Moreno MDP to readdress current and future drainage needs of the eastern Moreno Valley area in response to growth planned for by the *Moreno Valley General Plan*. The Moreno Valley area has, in large part, been developing at a faster rate than anticipated in the 1991 Moreno MDP (which was last revised in 1991). The Moreno MDP Revision includes open channels, detention basins, debris basins, and subterranean storm drains, and is designed to function in conjunction with street improvements to contain the 100-year flood discharge. Full implementation of the Moreno MDP Revision will occur over time. It should also be noted that locations of the MDP Facilities are conceptual, and some of the MDP Facilities may not be realized.

The MDP Boundary is generally located in an area that is quickly urbanizing with residential, commercial, and light industrial uses. The Project in and of itself, will not generate an increased demand on infrastructure or utilities, but instead, is a revision of planned flood control infrastructure that will be integrated with future development and build out of the MVGP. For this reason, implementation of the Moreno MDP Revision will not directly or indirectly induce population growth or remove obstacles to population growth; it is in response to existing and projected population growth.

Operation of the Moreno MDP Revision will not generate new employment opportunities as it is expected existing District personnel will address maintenance issues as they arise over the lifespan of the MDP Facilities. At most, construction of each MDP Facility may result in temporary construction employment opportunities. However, given the nature of the work and the availability of labor in Riverside County, it is reasonable to assume that the construction of a new MDP Facility will be completed by companies already in business and doing business in the area and will not result in an indirect population growth. Thus, implementation of the Moreno MDP Revision will not result in any significant growth inducing impacts.

#### 6.4 Significant Irreversible Environmental Changes from the Project

The intent of this section of the Draft PEIR is to discuss primary and secondary impacts of the Project that result in significant irreversible changes to the environment. State *CEQA Guidelines* Section 15126.2(c) identifies examples such as use of nonrenewable natural resources, irreversible changes in land use, and irreversible damage to the environment resulting from environmental accidents associated with a project.

Nonrenewable resources, such as fossil fuels, will be consumed during construction of the proposed MDP Facilities. These resources are used for vehicles traveling to and from the Project site and used to construct each Facility. However, once in operation, these nonrenewable resources will no longer be consumed except by vehicles addressing maintenance issues as they may arise. As such, the operation of the Moreno MDP Revision is not considered a long-term obligation or investment of fossil fuels due to the infrequency of the visits and continually improving fuel technology, which is anticipated to significantly lessen consumption of fossil fuels in the future, especially in vehicles. Therefore, as the long-term effect of implementation of the Moreno MDP Revision will not change the development intensity within the MDP Watershed, but instead follow with it, and the Moreno MDP Revision does not involve a significant long-term investment of nonrenewable resources, the construction, operation, and maintenance of MDP Facilities will not result in significant irreversible environmental changes.

#### 6.5 Consistency with Regional Plans

Section 15125(d) of the State *CEQA Guidelines* also requires an EIR to “to discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans.” The regional plans applicable to the proposed Project that are discussed in the environmental impact analysis are the *Moreno Valley General Plan*, the MSHCP, SKR HCP, and the AQMP. The following table identifies the location in which each of these plans is discussed in the Draft PEIR.



**Table 6-A – Location in the Draft PEIR in which Consistency with Regional Plans is Discussed**

Plan	Location of Discussion
Moreno Valley General Plan	Environmental impact analysis section for each environmental issue under the heading "Related Regulations"
MSHCP	Section 5.2.2 Biological Resources, Related Regulations, Regional, Western Riverside County Multiple Species Habitat Conservation Plan
SKR HCP	Section 5.2.2 Biological Resources, Related Regulations, Regional, Stephens' Kangaroo Rat Habitat Conservation Plan
AQMP	Section 5.1.2 Air Quality, Related Regulations, Criteria Air Pollutants
SCAG Regional Transportation Plan	Section 6.5.1 Other CEQA Topics, Consistency with Regional Plans, Southern California Association of Governments' Regional Transportation Plan and Compass Growth Visioning
SCAG Compass growth Visioning Principles	Section 6.5.1 Other CEQA Topics, Consistency with Regional Plans, Southern California Association of Governments' Regional Transportation Plan and Compass Growth Visioning

Implementation of the Moreno MDP Revision will not generate traffic; thus, no discussion on the Riverside County Congestion Management Plan or Transportation Uniform Mitigation Fee (TUMF) is required. Additionally, because implementation of the Moreno MDP Revision does not entail the construction of new housing or the need for replacement housing, no discussion of any housing plan is required.

### 6.5.1 Southern California Association of Governments' Regional Transportation Plan and Compass Growth Visioning

The Southern California Association of Governments (SCAG) is the Metropolitan Planning Organization for Ventura, Los Angeles, Orange, Riverside, San Bernardino, and Imperial counties and is charged by the federal government to research and prepare plans for transportation, growth management, hazardous waste management, and air quality. The following tables discuss the proposed Project's consistency with goals and principles of SCAG's Regional Transportation Plan (RTP) and Compass Growth Visioning (CGV) on **Table 6-B – Proposed Project Consistency with the Regional Transportation Plan Goals** and **Table 6-C – Proposed Project Consistency with the Compass Growth Visioning Principles**, respectively. As shown on the following tables, the Project will be consistent with the goals and principles of the SCAG plans.

**Table 6-B – Proposed Project Consistency with the Regional Transportation Plan Goals <sup>a</sup>**

Goal Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
RTP G1	Maximize mobility and accessibility for all people and goods in the region.	<p><b>Not Applicable:</b> The Project constitutes a revision to a master drainage plan intended to provide for the drainage needs of existing and anticipated future development through the construction of channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within the MDP Boundary. This Project does not involve people or goods mobility, or transportation.</p>
RTP G2	Ensure travel safety and reliability for all people and goods in the region.	
RTP G3	Preserve and ensure a sustainable regional transportation system.	
RTP G4	Maximize the productivity of our transportation system.	
RTP G7	Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies	
RTP G5	Protect the environment, improve air quality and promote energy efficiency.	<p><b>Consistent:</b> The impact on the environment as a result of Project implementation has been analyzed in this Draft PEIR pursuant to CEQA. Mitigation measures, as appropriate, have been identified to reduce air quality impacts to the maximum extent practicable, with the limited available construction details at this programmatic level. As determined by this Draft PEIR, some individual MDP facilities may cause short-term construction impacts. However, the District practices strict adherence to the SCAQMD Rules and BMPs, and expects that when it comes to actually constructing the MDP Facilities, most air quality impacts can be mitigated at the project level. Regarding energy efficiency, the nature of this Project generally does not require a long-term commitment of resources. The energy required for construction is not anticipated to be substantial and mitigation measures intended to reduce air quality, GHG emissions, and noise will also contribute to energy efficiency.</p>
RTP G6	Encourage land use and growth patterns that complement our transportation investments and improves the cost-effectiveness of expenditures.	<p><b>Not Applicable:</b> The Project will address drainage issues for current and anticipated future development to a greater degree than the currently adopted 1991 MDP Revision, and is not intended to encourage land use and growth patterns in and of itself.</p>

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Goal Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
<p><sup>a</sup> Source of applicable policies: Southern California Association of Governments, <i>RE: SCAG Comments on the Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision [I20120067]</i>, prepared by Jacob Lieb, Manager of Environmental and Assessment Services, April 30, 2012. (Appendix A.)</p>		

**Table 6-C – Proposed Project Consistency with the Compass Growth Visioning Principles <sup>a</sup>**

Principle Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
<b>Principle 1: Improve mobility for all residents</b>		
GV P1.1	Encourage transportation investments and land use decisions that are mutually supportive.	<b>Not Applicable:</b> The Project will address drainage issues for current and anticipated future development to a greater degree than the currently adopted 1991 MDP Revision through the construction of channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within the MDP Boundary. This Project does not involve people or goods mobility, or transportation. Further, the Project is not intended to encourage land use and growth patterns.
GV P1.2	Locate new housing near existing jobs and new jobs near existing housing.	
GV P1.3	Encourage transit-oriented development.	
GV P1.4	Promote a variety of travel choices.	
<b>Principle 2: Foster livability in all communities</b>		
GV P2.1	Promote infill development and redevelopment to revitalize existing communities.	<b>Not Applicable:</b> The Project will address drainage issues for current and anticipated future development to a greater degree than the currently adopted 1991 MDP Revision through the construction of channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within the MDP Boundary. This Project does not involve people or goods mobility, or transportation. Further, the Project is not intended to encourage land use and growth patterns.
GV P2.2	Promote developments that provide a mix of uses.	
GV P2.3	Promote “people scaled,” pedestrian-friendly (walkable) communities.	
GV P2.4	Support the preservation of stable, single-family neighborhoods.	
<b>Principle 3: Enable prosperity for all people</b>		
GV P3.1	Provide, in each community, a variety of housing types in	<b>Not Applicable:</b> The Project will address drainage issues for current and anticipated future development to a greater degree than the

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Principle Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
	each community to meet the housing needs of all income levels.	currently adopted 1991 MDP Revision through the construction of channels, storm drains, levees, basins, dams, or any other conveyance capable of feasibly relieving flooding problems within the MDP Boundary. This Project does not involve people or goods mobility, or transportation. Further, the Project is not intended to encourage land use and growth patterns.
GV P3.2	Support educational opportunities that promote balanced growth.	
GV P3.3	Ensure environmental justice regardless of race, ethnicity or income class.	
GV P3.4	Support local and state fiscal policies that encourage balanced growth.	
GV P3.5	Encourage civic engagement.	
<b>Principle 4: Promote sustainability for future generations</b>		
GV P4.1	Preserve rural, agricultural, recreational and environmentally sensitive areas.	<b>Consistent:</b> The Project is intended to correspond with the anticipated future development within the MDP Boundary, which is also an area that is quickly urbanizing with residential, commercial, and light industrial uses. However, there is land currently designated for agricultural uses, but full implementation of the Project will impact a relatively small footprint. It should be recognized that the Project will comply with the objectives of MVGP, and thereby, with Moreno Valley’s preferred long-term direction. Environmentally sensitive areas with a potential to be affected by this Project include wetland/riparian/riverine habitats. Prior to the construction of specific Facilities, a subsequent, Facility-specific analysis will be conducted to assess the potential for such habitats and adequate mitigation, if necessary, will be incorporated into that specific project and implemented as to ensure impacts are not significant.
GV P4.2	Focus development in urban centers and existing cities.	<b>Not Applicable:</b> The proposed Project is a MDP, which would inherently not be applicable to this policy.
GV P4.3	Develop strategies to accommodate growth that uses resources efficiently, eliminate pollution and significantly reduce waste.	<b>Consistent:</b> The Project’s design will achieve regional water quality and waste discharge requirements of the Regional Water Quality Control Board, which will reduce storm water pollutants and allow infiltration/groundwater recharge.
GV P4.4	Utilize “green” development techniques.	<b>Consistent:</b> The Project will revise the currently-adopted 1991 Moreno MDP from mainly concrete open channels to more environmentally friendly alternatives, such as soft bottoms channels

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Principle Number	Policy Text	Statement of Consistency, Non-Consistency, or Not Applicable
		which allow infiltration and can trap pollutants better. The Project will also not add significant amounts of impervious surfaces within the MDP Boundary as the Facilities will be underground stormdrain pipelines, earthen trapezoidal channels (except for two lined sections of channels), and earthen basins (detention and debris). Further, the Project will be designed to minimize and control discharges to surface and groundwater within the region.
<sup>a</sup> Source of applicable principles: Southern California Association of Governments, <i>RE: SCAG Comments on the Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision [I20120067]</i> , prepared by Jacob Lieb, Manager of Environmental and Assessment Services, April 30, 2012. (Appendix A.)		

**6.6 References**

In addition to other documents, the following references were used in the preparation of this section of the Draft PEIR:

- City of Moreno Valley, *City of Moreno Valley General Plan*, Adopted July 11, 2006. (Available at [http://www.moreno-valley.ca.us/city\\_hall/general-plan/06gpfinal/gp/gp-tot.pdf](http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/gp/gp-tot.pdf), accessed August 20, 2013.) [Cited as MVGP]
- City of Moreno Valley, *Final Environmental Impact Report City of Moreno Valley General Plan (SCH# 200091075)*, Certified July 2006. (Available at [http://www.moreno-valley.ca.us/city\\_hall/general-plan/06gpfinal/ieir/eir-tot.pdf](http://www.moreno-valley.ca.us/city_hall/general-plan/06gpfinal/ieir/eir-tot.pdf), accessed August 20, 2013.) [Cited as MVGP FEIR]
- County of Riverside Transportation and Land Management Agency and United States Fish and Wildlife Service, *Western Riverside County Multiple Species Habitat Conservation Plan Final Environmental Impact Report/Environmental Impact Statement*, June 17, 2003. (Available at [http://www.wrc-rca.org/Permit\\_Docs/mshcp\\_vol4.html](http://www.wrc-rca.org/Permit_Docs/mshcp_vol4.html), accessed August 26, 2013.) [Cited as MSHCP EIR/EIS]
- Southern California Association of Governments, *RE: SCAG Comments on the Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision [I20120067]*, prepared by Jacob Lieb, Manager of Environmental and Assessment Services, April 30, 2012. (Appendix A.)

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## Section 7 – Alternatives to the Proposed Project

The following discussion considers alternatives to implementation of the Project. The discussion examines the potential environmental impacts resulting from each alternative. Through comparisons of these alternatives to the Project, the relative advantage(s) of each can be weighed and analyzed.

State *CEQA Guidelines* Section 15126.6 identifies the parameters within which consideration and discussion of alternatives to the proposed Project should occur. As stated in this section of the guidelines, alternatives must focus on those that are potentially feasible and which attain most of the basic objectives of the Project.

### 7.1 Project Objectives

As stated previously in Section 3.4 of the Draft PEIR, the objectives of the proposed Moreno MDP are as follows:

1. Revise the Moreno MDP to provide a drainage plan which supports the existing and proposed land use as set forth in the “Riverside County General Plan” updated in 2008, “City of Moreno Valley General Plan” updated in July 2006, and any proposed amendments thereto.
2. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of MDP facilities to protect existing and future development.
4. Identify the most economical combination of facilities considering right-of-way acquisition, construction, and maintenance costs.
5. Develop a plan which, when implemented, will result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Moreno MDP.
6. Revise the Moreno MDP to minimize major diversions and perpetuate the natural drainage pattern of the area to the maximum extent practicable.
7. Where feasible, incorporate facilities which encourage infiltration.
8. Minimize environmental impacts to the maximum extent practicable.

### 7.2 Significant Unavoidable Impacts

As determined in Section 5.1 – Air Quality and Greenhouse Gas Emissions, the projected short-term emissions from construction of the MDP Facilities will be above South Coast Air Quality Management District’s regional thresholds for NO<sub>x</sub>, and If basin grading and channel grading of proposed MDP Facilities occurs at the same time, VOC emissions would also exceed the SCAQMD threshold and thus, even with mitigation measures, impacts from construction will be significant and unavoidable. Therefore, a Statement of Overriding Considerations will be required prior to Moreno MDP approval. It should be noted that the referenced section analyzes both impacts to air quality and greenhouse gas

emissions, and only significant short-term construction-related impacts to air quality were determined to result.

### 7.3 Less Than Significant Impacts

The Project's potential impacts to the following environmental topics considered in the Draft PEIR will be less than significant with mitigation incorporated: biological resources, cultural resources, hydrology and water quality, and noise. It should also be noted that impacts related specifically to greenhouse gas emissions were determined to be less than significant without mitigation. The Initial Study determined that the impacts to aesthetics, agriculture and forest resources, geology and soils, hazards and hazardous materials, mineral resources, population and housing, public services, transportation and traffic, and utilities and service systems, would be less than significant and therefore no mitigation is required for these impact areas.

### 7.4 Rationale for Alternative Selection

State *CEQA Guidelines* Section 15126.6(a) requires that an EIR "...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." According to this section of the State *CEQA Guidelines*, "...an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation." An EIR is not required to consider alternatives which are infeasible. The Riverside County Flood Control and Water Conservation District (District), as lead agency, is responsible for selecting a range of project alternatives for examination, and there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the "rule of reason" (State *CEQA Guidelines*, Section 15126.6 (a)). Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and whether the proponent can reasonably acquire, control, or otherwise have access to an alternative. (State *CEQA Guidelines*, Section 15126.6 (f)(1))

With respect to the selection of alternatives to be considered in an EIR, State *CEQA Guidelines* Section 15126.6(b) states "...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." That is, each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed Project. As mentioned, construction impacts to air quality will be significant and unavoidable and impacts to greenhouse gas emissions will be less than significant without mitigation. As such, a Statement of Overriding Considerations for short-term construction air quality impacts will be required prior to Project approval.

The rationale for selecting the alternatives to be evaluated, and a discussion of the “no project” alternative are also required (State *CEQA Guidelines*, Section 15126.6(e)). In addition to the “no project,” this Draft PEIR evaluates four other alternatives: “Alternative 1,” “Alternative 2A,” “Alternative 2B,” and “Alternative 3.”

## 7.5 Alternatives Rejected from Consideration

Section 15126.6(c) of the State *CEQA Guidelines* specify that an EIR should identify alternatives that were considered by the lead agency, but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR if it fails to meet the basic project objectives, is infeasible, or does not avoid significant environmental impacts. None of the alternatives that were considered and rejected would result in fewer environmental impacts than the proposed Project.

### Storm Drains

A number of other alternatives involving minor realignments and underground facilities versus open channel facilities were studied and eventually disregarded as either being too costly or not providing adequate protection.

### Basins

Basins are required in the proposed Project due to revised hydrology and updated land-use which produces higher flow-rates than what was used in the 1991 Moreno MDP.

The following alternate locations for the Cactus Basin were suggested by a commenter:<sup>1</sup>

- (i) an existing basin at the northeast corner of Alessandro Boulevard and Merwin Street;
- (ii) an area south of Alessandro Boulevard and north of Brodiaea Avenue;
- (iii) an area bounded on the east by Redlands Boulevard, on the west by Wilmot Street, on the south by Cactus Avenue, and on the north by Brodiaea Avenue; and
- (iv) an area on the east side of Merwin Street at Brodiaea Avenue.

Existing Line F downstream of Cactus Avenue does not have adequate capacity for the flow-rates used for the proposed Project, thus attenuation of flows must be provided upstream of existing Line F. That is the main purpose and function of the Cactus Basin.

Commenter-suggested location (i) *the existing basin at the northeast corner of Alessandro Boulevard and Merwin Street* is infeasible because there is no basin at this location. This location only contains a couple of berms to direct storm-flows.

<sup>1</sup> Comment letter received from Devlin Engineering, March 21, 2103. A copy of this letter is included in Appendix A.



Commenter-suggested location (ii) *an area south of Alessandro Boulevard and north of Brodiaea* is infeasible because a portion of this site property is part of an entitled subdivision. In addition constructing a basin at this site would require substantial grading along the southern portions of this area due to a hillside. Additionally, this proposed basin site would also involve substantially greater cost when compared to the location identified in the Project.

Commenter-suggested location (iii) *an area bounded on the east by Redlands Boulevard, on the west by Wilmot Street, on the south by Cactus Avenue, and on the north by Brodiaea Avenue* and (iv) *an area on the east side of Merwin Street at Brodiaea Avenue* are infeasible alternatives because these locations will only attenuate flows from the Line F system and not the Line F-2 system. A basin at either of these locations would need to be sized to over-mitigate for the Line F-2 system, which would result in a larger, more costly basin. Additionally the Moreno Valley Planning Department commented that the property to the east of Merwin (Commenter-suggested location (iv)) is no longer within the World Logistics project site and a tentative tract map is currently under review for this location.

The location of the proposed Cactus Basin is more efficient and practicable than the four Commenter-suggested locations because it is upstream of the existing undersized Line F and will collect storm-flows from both the Line F and Line F-2 systems. Portions of the Project's proposed location of the Cactus Basin are currently designated as Open Space and Public Facilities in the Moreno Valley General Plan and the site is currently vacant with no development entitlements. The MDP Revision proposed basin location is also preferred by Moreno Valley (owner of a portion of the proposed basin site), because Moreno Valley wants the option of using the Cactus Basin for a future park. Use of this basin as a park is not a part of the proposed Project; therefore, subsequent CEQA review will be required prior to Moreno Valley approving and developing a park at this location.

## 7.6 Description and Evaluation of Alternatives

This section of the Draft PEIR presents the analysis of four alternatives in comparison to the potential environmental effects associated with the proposed Project. In accordance with State *CEQA Guidelines*, Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed Project.

In preparing the proposed Moreno MDP Revision, a number of alternatives were developed and studied for their hydraulic and economic feasibility. However, due to the limited project boundary; the constraints of existing development; and the necessity of connecting to an existing flood control system, it is reasonable that the range of alternatives considered is relatively narrow. This proposed MDP revision focuses on areas tributary to Line F north of Cactus Avenue; areas tributary to Quincy Channel (Line G); and those areas north of State Route 60 not tributary to the Nason Basin. New hydrology was developed for this portion of the Moreno Watershed based on updated rainfall data.<sup>2</sup> New hydrology studies of the other portions of the watershed were not deemed necessary because many of the

<sup>2</sup> NOAA Atlas 14, version 4 rainfall values were used in the new hydrology calculations for the Project.

facilities have already been constructed and were designed based on 1991 MDP flow rates and alignments (MDP Report, p. 3)

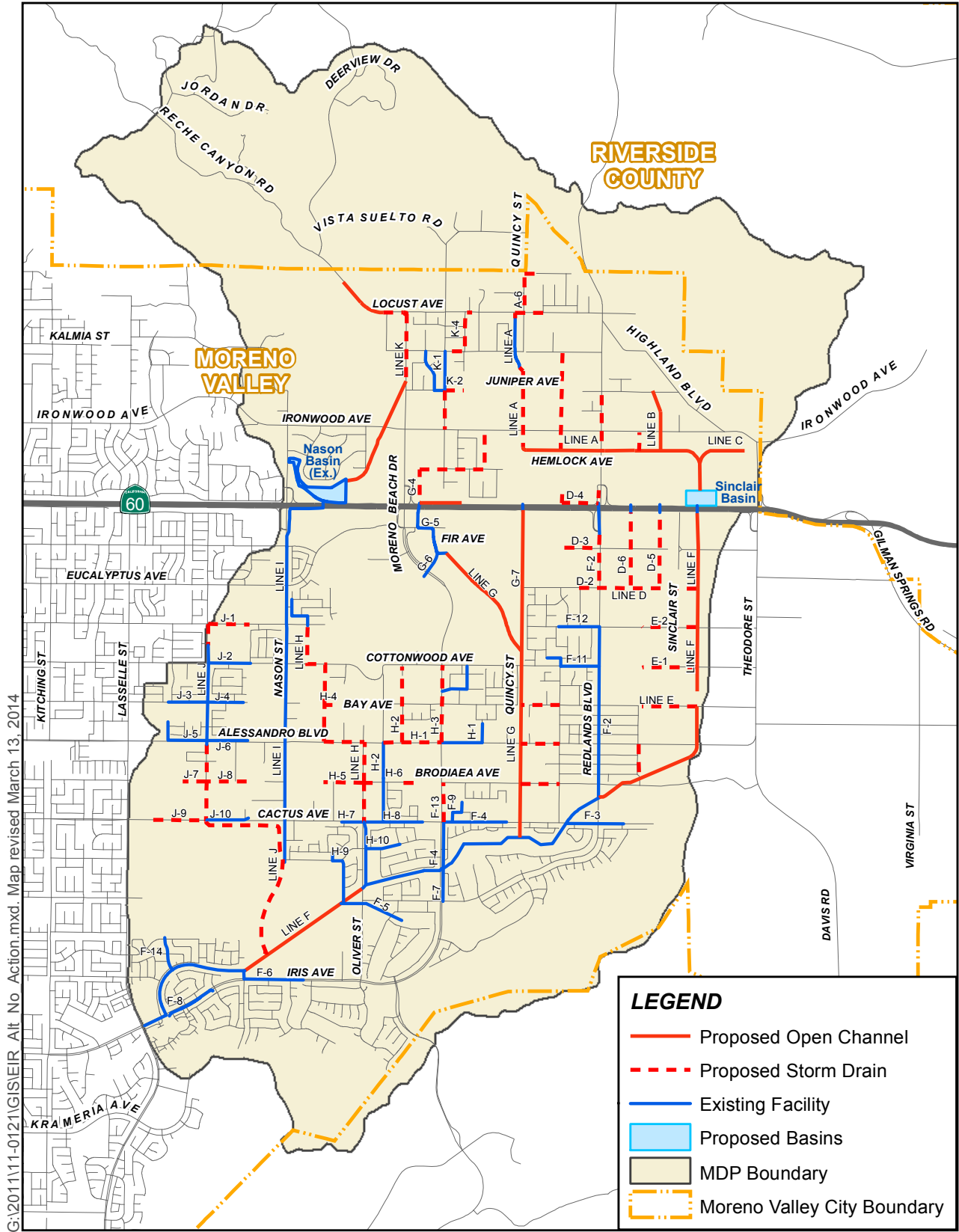
The Project proposes facilities based on updated land use patterns, updated rainfall data, and expected debris flow in the northern parts of the Moreno Watershed. This plan revision also focused on providing opportunities for infiltration by incorporating earthen channels (with rock-lined side slopes) in the various plan alternatives; perpetuating the natural drainage pattern within the watershed; and minimizing the need for right of way acquisition by proposing most facilities as underground systems within existing and future street rights of way, where feasible. In addition, the updated hydrology identified higher flow rates that require several detention basins within the watershed to attenuate peak flows to match the hydraulic capacity of the exiting Line F system downstream of Cactus Avenue. The increase in storm runoff was mainly attributed to an increase in point precipitation for the 100-year storm event, and also the change in land use reflected in the 2006 Moreno Valley General Plan. Finally, in developing the alternatives, the District and Moreno Valley mutually agreed that the existing Line F-2 Storm Drain, which is currently sized for 10-year storm events, should be reconstructed to provide 100-year flood capacity (MDP Report, p. 13). The alternatives are described in the following paragraphs and a comparison of alternatives matrix is presented in Section 7.7.

### 7.6.1 No Project Alternative

Pursuant to State *CEQA Guidelines*, Section 15126.6(e)(3)(A), when a project is the revision of an existing land use or regulatory plan, the “no project” alternative will be the continuation of the existing plan, policy or operation into the future. Pursuant to State *CEQA Guidelines*, Section 15126.6(e)(3)(C), the impacts of the No Project Alternative should also be evaluated by projecting what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved based on current plans.

Accordingly, the No Project Alternative is analyzed herein as the continued implementation of the originally adopted 1980 and revised 1991 Moreno MDP (see **Figure 7-1 – No Project Alternative**). If no revision was made to the existing MDP, the proposed Project benefits would not be realized, such as those that would result in the eastern portion and western portion of the Moreno MDP. Furthermore, the updated MVGP, approved zone changes, updated rainfall data, expected debris production, and the significant increase in growth within the area, would not be reflected with the continued implementation of the 1991 Moreno MDP, and the area would be underserved relative to flood protection. In addition, the proposed concrete open channels from the previously adopted Moreno MDP would not be revised to more environmentally friendly alternatives such as soft bottom channels, which allow infiltration and are better in trapping pollutants. Since much of the land in the western portion of the Moreno MDP Boundary has been mostly developed and accounted for, it would be the eastern portion that would be mainly affected by the continued implementation of the 1991 Moreno MDP. With the continued growth in the eastern portion of the Moreno MDP Boundary, a 100-year flood discharge cannot be contained at the level the Project proposes in its design. Therefore, flooding would occur and opportunities for infiltration could not be realized with the continued implementation of the 1991 Moreno MDP.





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Source: County of Riverside GIS, 2014; RCFC&WCD, 2012.

Figure 7-1. No Project Alternative  
Moreno Master Drainage Plan Revision

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## 7.6.2 Alternative 1

Alternative 1 consists of the same types of facilities (i.e., storm drains and channels) and alignments as the 1991 Moreno MDP (see **Figure 7-2 – Alternative 1**). In addition, Alternative 1 includes three basins encompassing approximately 75.3 acres. Two detention basins are proposed along the Line F channel alignment, the Sinclair Basin, located north of State Route 60, and the Bay Basin, located on the north side of Bay Avenue. In addition to the detention basins, Alternative 1 includes the Reche Canyon Debris Basin, which is intended to capture debris upstream of Line K. Under Alternative 1 all channels will be concrete lined and the existing highway drainage culverts located under State Route 60 will be used.

As shown in the below table, the infiltration volume for the Alternative 1 Basins is projected to range from 96 to 460 acre-feet per day.

**Table 7-A –Infiltration Projections for Alternative 1 Basins**

Basin Name	Basin Footprint (acres) <sup>1</sup>	Portion of Basin in Soil Type "A" <sup>2</sup>	Portion of Basin in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Sinclair Basin	28.5	55%	45%	44 to 286
Bay Basin	36.8	0%	100%	37 to 74
Reche Canyon Debris Basin	10.0	55%	45%	16 to 100
Total All Basins	75.3	N/A	N/A	97 to 460

Notes:

<sup>1</sup> Basin Footprint per MDP Report, Table 4, p. 21.

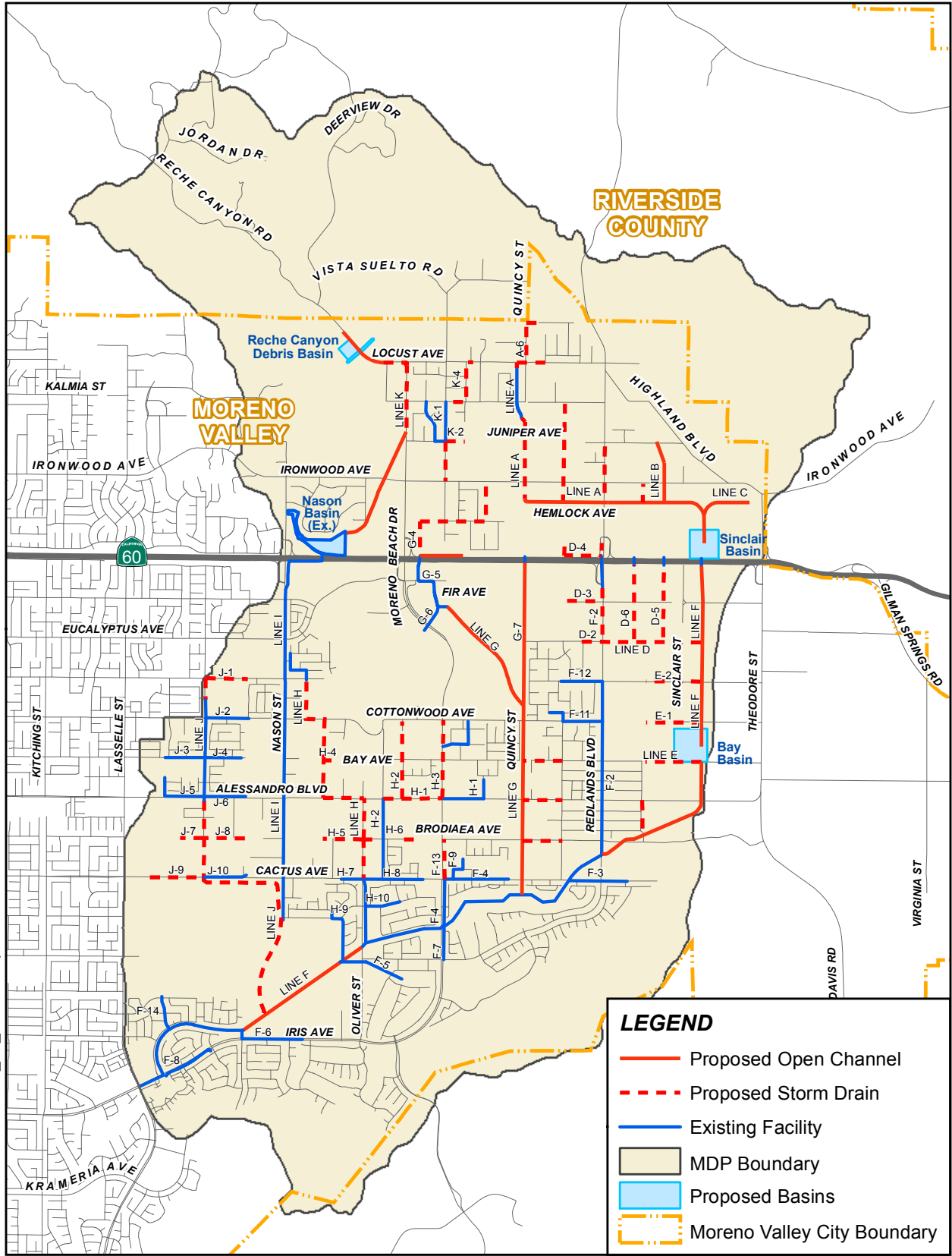
<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.

<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>).

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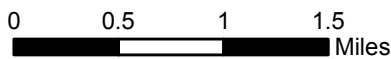


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Source: County of Riverside GIS, 2014; RCFC&WCD, 2013.

Figure 7-2. Project Alternative 1  
Moreno Master Drainage Plan Revision







### 7.6.3 Alternative 2A and Alternative 2B

Alternative 2 consists of the realignment of proposed facilities upstream of State Route 60 in an effort to maintain the natural drainage patterns within the upper watershed. This alternative would eliminate the Line A diversion proposed in the 1991 Moreno MDP, such that the mainline facilities would be aligned north to south, and would drain directly to the existing culverts at State Route 60, instead of draining to the proposed Sinclair Basin. Both Alternative 2A and Alternative 2B propose Line F, Line G and Line K as earthen channels with rock-lined side slopes and also include the Reche Canyon Debris Basin to capture debris upstream of Line K. The primary difference between Alternative 2A and Alternative 2B are the size, number, and location of the proposed detention basins (see **Figure 7-3 – Alternative 2A** and **Figure 7-4 – Alternative 2B**, which follow the tables).

Alternative 2A proposes a total of six basins (five detention basins and the Reche Canyon Debris Basin) encompassing a total of 71.9 acres with a potential infiltration volume of 96 to 490 acre-feet per day (see **Table 7-B – Infiltration Projections for Alternative 2A Basins**). Alternative 2B proposes a total of five basins (four detention basins and the Reche Canyon Debris Basin) encompassing a total of 74.9 acres with a potential infiltration volume of 91 to 388 acre-feet per day (see **Table 7-C – Infiltration Projections for Alternative 2B Basins**), which follows the figures.

**Table 7-B –Infiltration Projections for Alternative 2A Basins**

Basin Name	Basin Footprint (acres) <sup>1</sup>	Portion of Basin in Soil Type "A" <sup>2</sup>	Portion of Basin in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Sinclair Basin	14.0	69%	31%	24 to 169
Bay Basin	17.4	0%	100%	17 to 35
Redlands Basin	6.0	0%	100%	6 to 12
Quincy Basin	13.2	1%	99%	13 to 28
Brodiaea Basin	11.3	75%	25%	20 to 146
Reche Canyon Debris Basin	10.0	55%	45%	16 to 100
Total All Basins	71.9	N/A	N/A	96 to 490

Notes:

<sup>1</sup> Basin Footprint per MDP Report, Table 4, p. 21.

<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.

<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>).

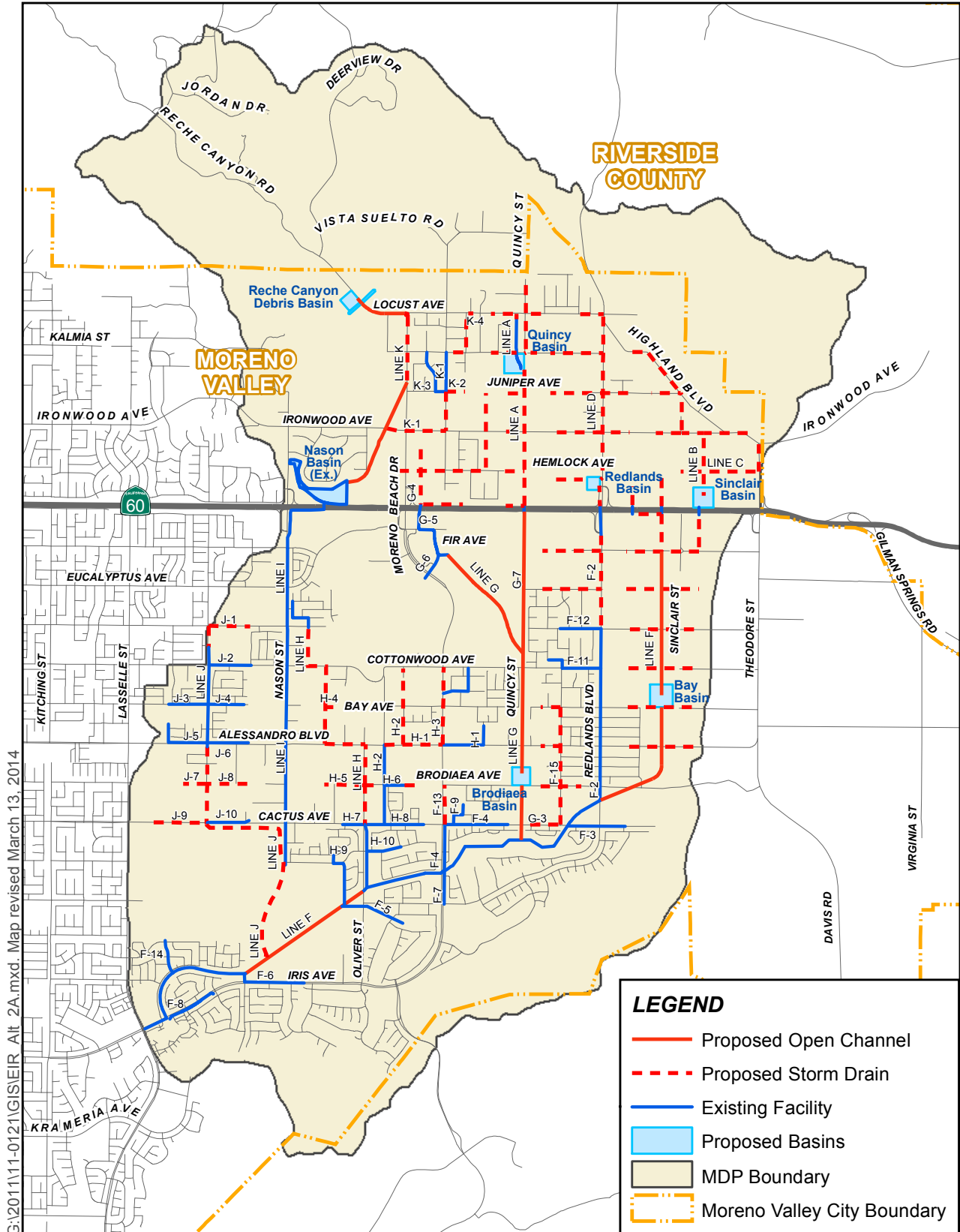
**Table 7-C –Infiltration Projections for Alternative 2B Basins**

Basin Name	Basin Footprint (acres) <sup>1</sup>	Portion of Basin in Soil Type "A" <sup>2</sup>	Portion of Basin in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Highland Basin	14.4	75%	25%	25 to 187
Bay Basin	30.5	0%	100%	31 to 61
Ironwood Basin	13.6	0%	100%	14 to 27
Eucalyptus Basin	6.4	99%	1%	6 to 13
Reche Canyon Debris Basin	10.0	55%	45%	16 to 100
Total All Basins	74.9	N/A	N/A	92 to 388

Notes:  
<sup>1</sup> Basin Footprint per MDP Report, Table 4, p. 21.  
<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.  
<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>).

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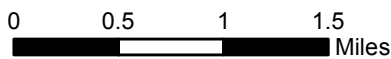
Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



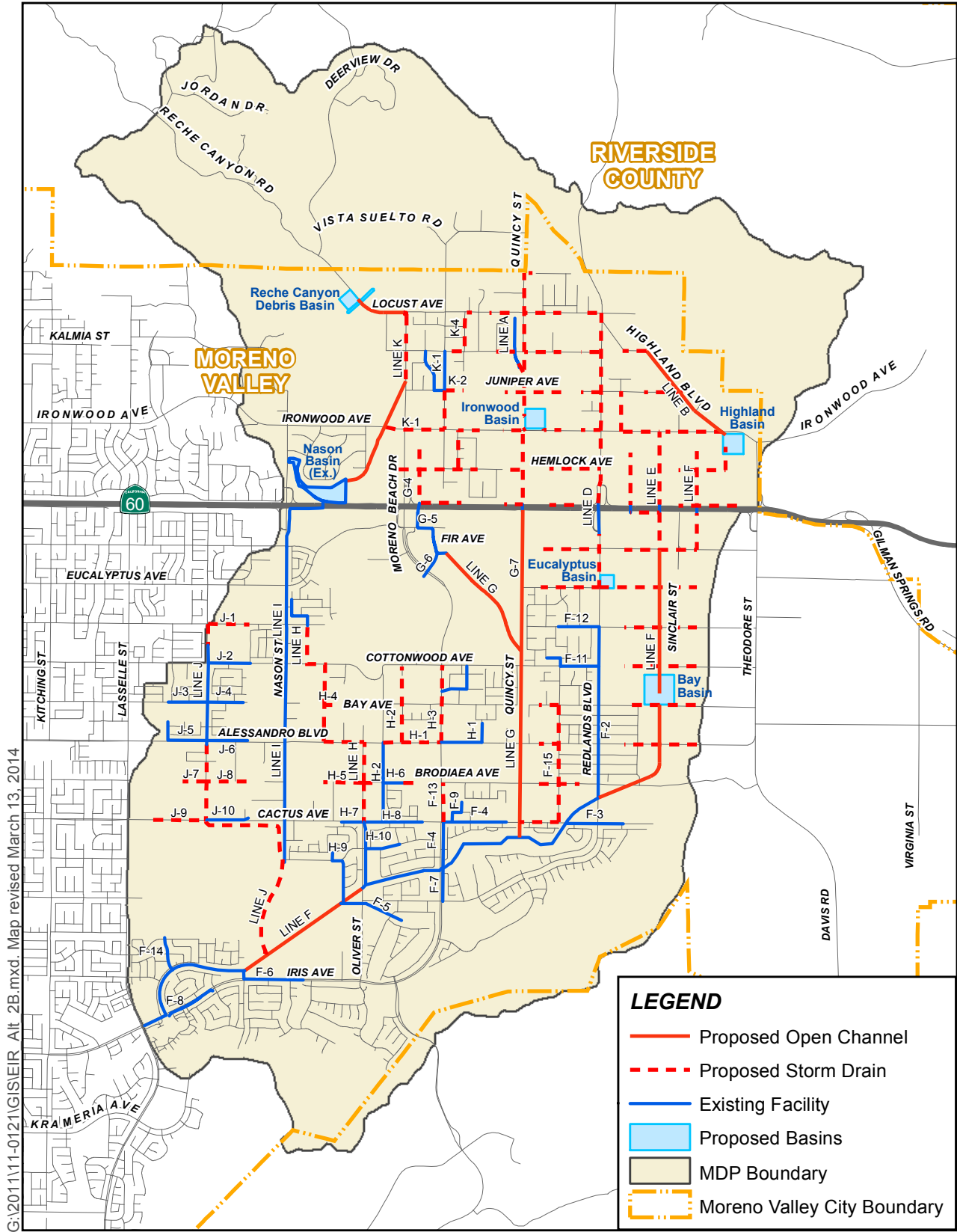
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Source: County of Riverside GIS, 2014; RCFC&WCD, 2013.

Figure 7-3. Project Alternative 2A  
Moreno Master Drainage Plan Revision







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Source: County of Riverside GIS, 2014; RCFC&WCD, 2013.

Figure 7-4. Project Alternative 2B  
Moreno Master Drainage Plan Revision

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### 7.6.4 Alternative 3

Alternative 3 retains the major alignment for Line A, as proposed in Alternative 2A and Alternative 2B but proposes three detention basins downstream of State Route 60 (see **Figure 7-5 – Alternative 3**). Alternative 3 would require upsizing the existing highway drainage culverts under State Route 60 to convey the 100-year flows to the proposed basins. Alternative 3 proposes a total of four basins (three detention basins and the Reche Canyon Debris Basin) encompassing a total of 78.3 acres with a potential infiltration volume of 88 to 301 acre-feet per day (see **Table 7-D – Infiltration Projections for Alternative 3 Basins**). Alternative 3 proposes Line F, Line G, and Line K as earthen channels instead of the concrete lined channels proposed in Alternative 1.

**Table 7-D –Infiltration Projections for Alternative 3 Basins**

Basin Name	Basin Footprint (acres) <sup>1</sup>	Portion of Basin in Soil Type "A" <sup>2</sup>	Portion of Basin in Soil Type "B" <sup>2</sup>	Projected Infiltration (acre-feet/day) <sup>3</sup>
Brodiaea Basin	10.5	42%	58%	15 to 85
Fir Basin	28.3	0%	100%	28 to 57
Cactus Basin	29.5	0%	100%	30 to 59
Reche Canyon Debris Basin	10.0	55%	45%	16 to 100
Total All Basins	78.3	N/A	N/A	88 to 301

Notes:

<sup>1</sup> Basin Footprint per MDP Report, Table 4, p. 21.

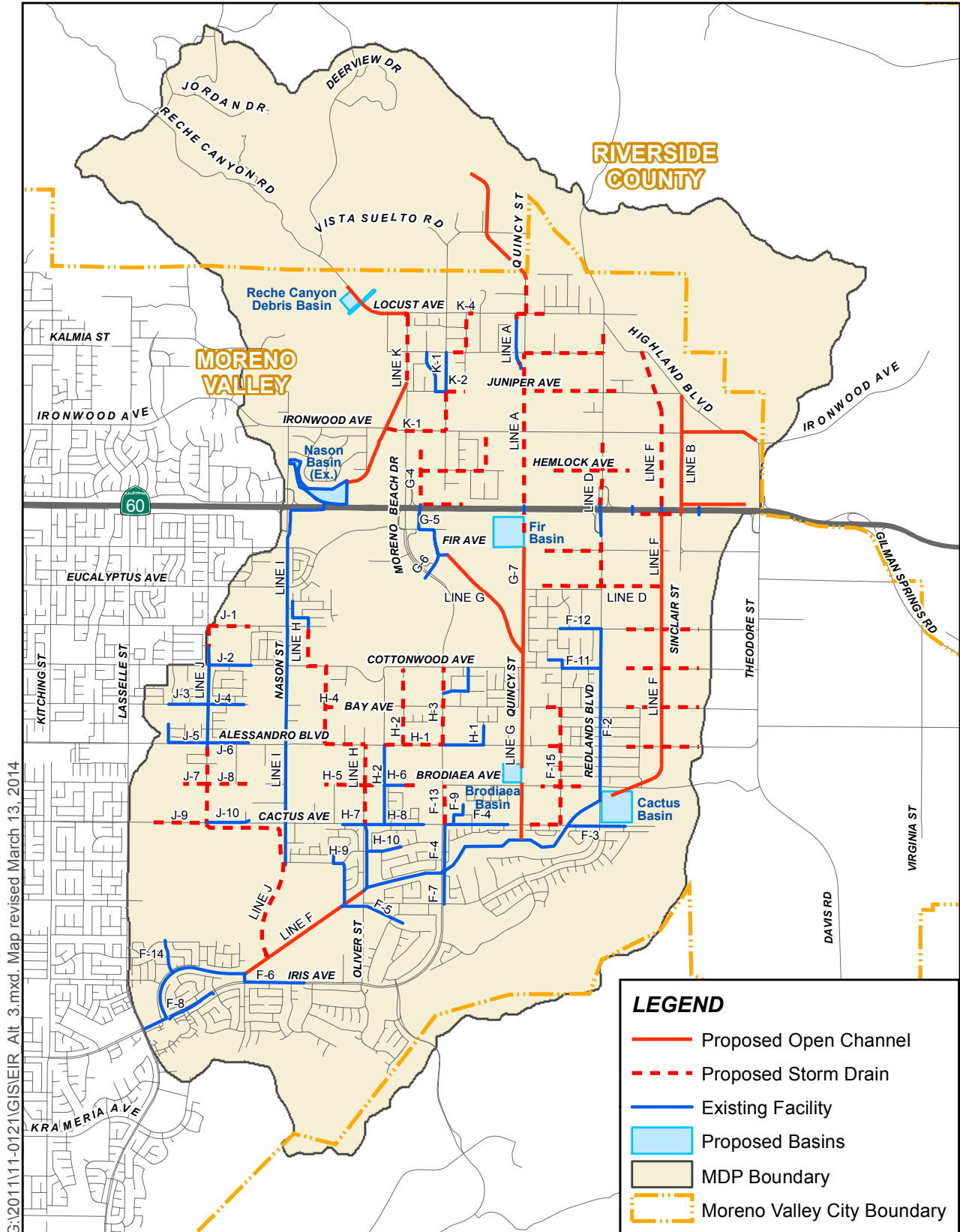
<sup>2</sup> Soil Type refers to the hydrological soil group as classified by the Natural Resources Conservation Service. Soil Types "A" and "B" have the potentially high and moderate infiltration rates, respectively. Soil Types "C" and "D" have low and very low infiltration rates, respectively; therefore these Soil Types are not used in this projection.

<sup>3</sup> Infiltration rate is determined by multiplying the acreage of each soil type by that soil's infiltration rate. Infiltration rate for Type "A" soil ranges from 2 to 16.7 feet/day. Infiltration rate for Type "B" soil ranges from 1 foot/day to 2 feet/day. Infiltration rates per the Ventura Countywide Stormwater Quality Management Program, *Land Development Guidelines, Appendix C Hydrologic Soil Groups* (Available at <http://www.vcstormwater.org/documents/workproducts/landuseguidelines/appC.pdf>).

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Source: County of Riverside GIS, 2014; RCFC&WCD, 2013.

**Figure 7.5. Project Alternative 3**  
Moreno Master Drainage Plan Revision

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## 7.7 Evaluation of Alternatives

Because the Project is the implementation of a revision to the 1991 Moreno MDP, the boundary (not the Facility locations) for all alternatives is the same as the proposed Project. Each alternative, except the No Project Alternative, provides the same level of flood protection (in conjunction with the ultimate street improvements) within the Moreno Watershed. All alternatives were developed to reduce flooding, and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno Watershed. The overall footprint of the proposed lateral facilities (channels and storm drains) is similar among all alternatives (except for the No Project Alternative) and there is only a 10 acre difference in the basin footprints between the proposed Project and Alternatives 1, 2A, 2B, and 3. All of the alternatives evaluated, except for the No Project Alternative, would be subject to the same mitigation measures as the proposed Project. None of the alternatives evaluated, including the No Project Alternative, will reduce the significant short-term air quality impacts that would occur during construction of the proposed basins and channels.<sup>3</sup> Therefore, as shown in **Table 7-E – Comparison of Alternatives Matrix** (on the following page) impacts among the alternatives are similar and there is no single alternative that is clearly environmentally superior to the others.

The matrix approach to comparing the alternatives described in Section 7.6 is used for ease of directly comparing the potential significant adverse effects of the proposed Project with those of the alternatives, per CEQA Guidelines Section 15126.6(d). **Table 7-E** (on the following page) compares the potential environmental impacts of each alternative and ranks the impacts of each alternative as **“Impacts Less than the Project,” “Impacts Same as the Project,”** or **“Impacts Greater than the Project,”** in comparison to the significance determinations that the proposed Project would have with respect to each issue area. The detailed discussion regarding the Projects impacts for each of the environmental issues are included in the following sections of this Draft PEIR:

<b>Environmental Issue</b>	<b>Section</b>
Air Quality and Greenhouse Gas Emissions	5.1
Biological Resources	5.2
Cultural Resources	5.3
Hydrology and Water Quality	5.4
Noise	5.5

<sup>3</sup> As discussed in Section 5.1.7, even with mitigation, construction of the Project’s proposed basins and channels will exceed the SCAQMD threshold for NO<sub>x</sub>. If basin grading and channel grading of proposed MDP Facilities occurs at the same time, VOC emissions would exceed the SCAQMD threshold even with mitigation.



**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<b>Air Quality and Greenhouse Gas Emissions</b> (Threshold A) Air Quality Standards	<p><b>Significant Unavoidable Impact:</b>                      The proposed Project includes five basins with a combined footprint of approximately 82 acres, in addition to multiple channels, and storm drains.</p> <p>The analysis determined that emissions impacts generated by <b>storm drain installation would be less than significant</b>. Long-term air quality impacts associated with the <b>maintenance of the MDP Facilities would be less than significant</b>.</p> <p>However, impacts from the construction of the channels and basins could exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC (if certain construction activities overlap), even with mitigation measures. Therefore, a <b>Statement of Overriding Considerations (SOC) would be required for short-term air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and VOC if certain activities overlap</b>.</p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact:</b>                      The No Project Alternative is the 1991 Moreno MDP, which includes the 12-acre Sinclair Basin, in addition to open concrete-lined channels and storm drains. Although the No Project Alternative includes fewer acres of basins than the proposed Project; this alternative would still entail construction of channel and basin facilities. Therefore, it is anticipated that construction of the Sinclair Basin and the channels identified in the No Project Alternative would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project</p> <p>Maintenance for the Facilities in the No Project Alternative would be the same as the proposed Project; thus, no new long-term emissions would occur.</p> <p><i>Note that although impacts are expected to be significant and unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having "Impacts Less Than the Project."</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 1 includes three basins with a combined footprint of approximately 75 acres, in addition to channels, and storm drains.</p> <p>The basins in Alternative 1 have a slightly smaller footprint (7 fewer acres) than the proposed Project. However, Alternative 1 would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 1 for construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 1 would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 2A includes six basins with a combined footprint of approximately 72 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 2A includes approximately 10 fewer acres of basins than the proposed Project; Alternative 2A would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's six basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 2A for construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 2A would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 2B includes five basins with a combined footprint of approximately 75 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 2B includes approximately 7 fewer acres of basins than the proposed Project; Alternative 2B would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's five basins and construction of its channels would exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 2B for the construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 2B would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 3 includes four basins with a combined footprint of approximately 78 acres, in addition to channels, and storm drains.</p> <p>Although Alternative 3 includes approximately 4 fewer acres of basins than the proposed Project; Alternative 3 would still entail construction of channel and basin Facilities. Therefore, it is anticipated that even with mitigation, excavation of this alternative's four basins and construction of its channels will exceed the SCAQMD regional daily thresholds for NO<sub>x</sub> and possibly VOC, much like the proposed Project.</p> <p>As with the proposed Project, a Statement of Overriding Considerations (SOC) would be required for Alternative 3 for the construction of channel and basin Facilities.</p> <p>As with the proposed Project, maintenance for the Facilities identified in Alternative 3 would be the same as the proposed Project; thus, long-term impacts would be less than significant.</p>

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<p><b>Air Quality and Greenhouse Gas Emissions</b>                      (Threshold B)                      Cumulatively Considerable Contribution to a Criteria Pollutant</p>	<p><b>Significant Unavoidable Impact:</b> The Project is located in a non-attainment area for NO<sub>2</sub> under state standards, and for ozone, PM-10, and PM-2.5 under both state and federal standards.</p> <p>Even through the proposed Project is in conformance with the AQMP, because the short-term construction of MDP Facilities would result in Project-specific impacts to ozone precursors, the Project’s incremental contribution to criteria pollutant emissions is considered potentially cumulatively considerable. Therefore, a <b>Statement of Overriding Considerations (SOC) would be required for the Project’s cumulatively considerable contribution to air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and possibly VOC (both ozone precursors).</b></p> <p>Note that a cumulative contribution of criteria pollutants does not indicate cumulative GHG impacts.</p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact;</b>                      The 1991 MDP is in conformance with the AQMP. However, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in the 1991 MDP is considered potentially cumulatively considerable.</p> <p><i>Note that although impacts are expected to be significant and unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having “Impacts Less Than the Project.”</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 1 is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 1 is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 2A is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 2A is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 2B is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 2B is considered potentially cumulatively considerable.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      Alternative 3 is in conformance with the AQMP. However, as with the proposed Project, because the short-term construction of Facilities would result in project-specific impacts to ozone precursors, the incremental contribution to criteria pollutant emissions from construction of Facilities identified in Alternative 3 is considered potentially cumulatively considerable.</p>
<p><b>Air Quality and Greenhouse Gas Emissions</b>                      (Threshold C)                      Sensitive Receptors</p>	<p><b>Significant Unavoidable Impact:</b> The closest sensitive receptors are immediately adjacent to MDP Facilities. No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities due to the lack of new long-term sources of emissions. Short-term emissions during construction are less than significant on a localized level.</p> <p>However, even with mitigation incorporated, NO<sub>x</sub> (and VOC if certain construction activities overlap) generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p> <p>Therefore, a Statement of Overriding Considerations would be required <b>for short-term air quality impacts related to construction of channel and basin Facilities for NO<sub>x</sub> and possibly VOC.</b></p>	<p><b>Impacts Less Than the Project; Significant Unavoidable Impact;</b>                      The 1991 MDP proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p> <p><i>Note that although impacts are expected to be significant and</i></p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      As with the proposed Project, Alternative 1 proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      As with the proposed Project, Alternative 2A proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      As with the proposed Project, Alternative 2B proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub> emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>	<p><b>Impacts Same as the Project; Significant Unavoidable Impact:</b>                      As with the proposed Project, Alternative 3 proposes Facilities similar to the proposed Project and immediately adjacent to sensitive receptors.</p> <p>No long-term localized impacts would occur as a result of the operation and maintenance of the MDP Facilities. Like the proposed Project, short-term emissions would be less than significant on a localized level. However, even with mitigation incorporated, NO<sub>x</sub>, VOC and PM-10 emissions generated by channel construction and basin excavation would still exceed the SCAQMD threshold.</p>

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
		<i>unavoidable, because the existing MDP proposes fewer Facilities, this No Project Alternative would incrementally generate fewer air quality emissions, which is why it has been identified as having "Impacts Less Than the Project."</i>				
<b>Air Quality and Greenhouse Gas Emissions</b> (Threshold D) Greenhouse Gas Emissions	<b>Less than Significant Impacts:</b> Project-related GHG emissions would result from fuel usage during Project construction and operation (Facility maintenance activities). The total GHG emissions from Project construction is below the lowest SCAQMD recommended screening level of 3,000 MTCO <sub>2</sub> E/yr (for commercial projects). The projected emissions from construction of the MDP, and negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines. Thus, implementation of the proposed Moreno MDP will not generate a significant amount of GHG.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities in the 1991 Moreno MDP would result in GHG emissions similar to the proposed Project. Operational emissions from infrequent maintenance vehicles will remain unchanged.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 1 would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 2A would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 2B would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Construction of the Facilities identified in Alternative 3 would result in similar GHG emissions compared to the proposed Project. Negligible operational emissions from infrequent maintenance vehicles will not result in additional sources of emissions when compared to existing maintenance routines.
<b>Biological Resources</b> (Threshold A) Candidate, Sensitive, or Special-Status Plant Species	<b>Less than Significant Impacts with Mitigation:</b> Biological resources were evaluated at a program level in the Draft PEIR. Special status species, such as the burrowing owl, least Bell's vireo, and fairy shrimp, Los Angeles pocket mouse, Stephen's kangaroo rat, and raptors have the potential to occur within the boundaries of the Moreno MDP Watershed.  The proposed Project includes five basins with a combined footprint of approximately 82 acres, in addition to channels, and storm drains Through compliance with the provisions of the MSHCP and implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> that require focused surveys, replacement of lost habitat, and seasonal avoidance of vegetation removal or nesting bird surveys, impacts would be reduced to less than significant.	<b>Impacts Less than the Project; Less than Significant Impacts:</b> The No Project Alternative is the 1991 Moreno MDP, which includes the 12-acre Sinclair Basin, in addition to open concrete-lined channels and storm drains.  As with the proposed Project, Facilities proposed by this alternative are located in areas that have the potential to support special status species. Because this alternative is anticipated to have an approximately 70 acre smaller footprint than the proposed Project it would impact less habitat.  The District and Moreno Valley are Permittees under the MSHCP; therefore, construction of any	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 1 are located in areas that have the potential to support special status species. Because the footprint for Alternative 1 is only approximately 7 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 2A are located in areas that have to potential to support special status species. Because the footprint for Alternative 2A is only approximately 10 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Facilities proposed by Alternative 2B are located in areas that have to potential to support special status species. Because the footprint for Alternative 2B is only approximately 7 acres smaller than the proposed Project, it would not affect significantly less habitat than the propose Project and comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, Facilities proposed by Alternative 3 are located in areas that have to potential to support special status species. Because the footprint for Alternative 3 is only approximately 4 acres smaller than the proposed Project, it would not affect significantly less habitat than the proposed Project and would comply with the provisions of the MSHCP and implement mitigation measures <b>MM BIO 1 through MM BIO 9</b> .

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
		Facility shall be in compliance with the MSHCP, which would reduce potential impacts to less than significant.				
<b>Biological Resources</b> (Threshold B) Riparian Habitat portion	<b>Less than Significant Impacts with Mitigation:</b> Riparian habitat is present within the Moreno MDP Watershed. Per the MSHCP, identification of riparian/riverine habitats and avoidance of these habitats are required where possible. If riparian/riverine features cannot be avoided, then approval of a DBESP that identifies appropriate mitigation will be required. Thus, through compliance with the provisions of the MSHCP and implementation of mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> , impacts would be less than significant.	<b>Impacts Less than the Project Less than Significant Impacts:</b> Because the No Project Alternative is anticipated to have an approximately 70 acre smaller footprint than the Project, it may impact less riparian/riverine habitat. Because the District and Moreno Valley are MSHCP Permitted construction of Facilities identified in the 1991 Moreno MDP must comply with the MSHCP and if avoidance is not possible, then a DBESP must be prepared and approved. Through compliance with the MSHCP, impacts would be less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 1 is anticipated to have a slightly smaller (approximately 7 acre) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 2A is anticipated to have a slightly smaller (approximately 10 acres) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement of mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Although Alternative 2B is anticipated to have a slightly smaller (approximately 7 acres) footprint than the Project, certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> Alternative 3 is anticipated to have essentially the same-sized footprint as the Project and certain Facilities may impact riparian/riverine habitat. As with the Project, this alternative would comply with the MSHCP and implement mitigation measures <b>MM BIO 4</b> and <b>MM BIO 8</b> .
<b>Biological Resources</b> (Threshold B) Jurisdictional Water Features portion	<b>Less than Significant Impacts with Mitigation:</b> Potentially jurisdictional areas are present within the boundaries of the Moreno MDP Watershed. Potentially jurisdictional areas are in proximity to various components of the MDP Revision. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Less than the Project Less than Significant Impacts:</b> Potentially jurisdictional areas are in proximity to various components of the No Project Alternative. However, because there is only one basin with this alternative, the impacts would be slightly less than the proposed Project, with five basins to mitigate. Nonetheless, through compliance with the MSHCP, and compliance with any related permits from the Resource Agencies, any potential impacts would be less than significant	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 1. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 2A. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, potentially jurisdictional areas are in proximity to various components of Alternative 2B. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.	<b>Impacts Same as the Project Less than Significant Impacts with Mitigation:</b> As with the Proposed Project, jurisdictional areas are in proximity to various components of Alternative 3. However, any impacts would be mitigated with implementation of mitigation measure <b>MM BIO 8</b> , and compliance with the MSHCP and compliance with any related permits from the Resource Agencies. Therefore, any potential impacts would be mitigated to less than significant.

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<b>Biological Resources</b> (Threshold C) Native Resident or Migratory Fish or Wildlife Species	<b>Less than Significant Impacts with Mitigation:</b> According to the MSHCP, there are no special linkage corridors within the Moreno MDP Watershed and no recognized wildlife nursery sites.  The MDP Watershed contains trees, shrubs, and herbaceous vegetation with the potential to support nesting birds. Construction of MDP Facilities will entail removing vegetation suitable for nesting migratory birds. The MBTA and California Fish and Game Code prohibit impacts to nesting bird; however, with implementation of mitigation measure <b>MM BIO 9</b> , potential impacts to migratory birds would be less than significant.	<b>Impacts Less than the Project; Less than Significant Impacts:</b> Construction of Facilities identified in the No Project Alternative will entail removal of vegetation suitable for nesting migratory birds. However, because the combined Facility footprint for this alternative is approximately 70 acres smaller than the proposed Project, it is assumed that substantially less vegetation removal would be required.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 1 will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 1 would implement mitigation measure <b>MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 2A will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 2A would implement mitigation measure <b>MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 2B will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is slightly smaller than the proposed Project, slightly less vegetation removal may be required. As with the proposed Project, Alternative 2B would implement mitigation measure <b>MM BIO 9</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, construction of Facilities in Alternative 3 will entail removal of vegetation suitable for nesting migratory birds. Because the footprint for this alternative is essentially the same size as the proposed Project, it is anticipated a similar amount of vegetation removal may be required. As with the Project, Alternative 3 would implement mitigation measure <b>MM BIO 9</b> .
<b>Biological Resources</b> (Threshold D) Conflict with local policies or ordinances protecting biological resources	<b>Less than Significant Impacts:</b> The Project will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 1 will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 2A will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 2B will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Alternative 3 will meet the goals and policies of the District, Moreno Valley, and Riverside County through compliance with the MSHCP.
<b>Biological Resources</b> (Threshold E) Conflict with the Provisions of an adopted HCP.	<b>Less than Significant Impacts with Mitigation:</b> The Moreno Watershed is located within the boundaries of the MSHCP; however none of the MDP Facilities are located within the MSHCP Criteria Areas and none of the potential footprints of the MDP Facilities are targeted for conservation (i.e., within a Criteria Cell).  In addition to Criteria Cell requirements, the MSHCP requires consistency with Sections 6.1.2 (Protection of Species within Riparian/Riverine Areas and Vernal Pools), 6.1.3 (Protection of Narrow Endemic Plant Species), 6.1.4 (Urban and Wildlands Interface), 6.3.2 (Additional Survey Needs and Procedures), Appendix C (Standard Best Management Practices), and 7.5.3	<b>Impacts Same as the Project; Less than Significant Impacts:</b> None of the Facilities for the No Project Alternative are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. The No Project Alternative would be subject to implementation of similar mitigation as the Project, which would be identified at the time individual Facilities are proposed.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 1 are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> , this alternative would comply with the provisions of the MSHCP.	<b>Impacts Same as the Project; Less Than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 2A are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> , this alternative would comply with the provisions of the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 2B are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> , this alternative would comply with the provisions of the MSHCP.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> None of the Facilities for Alternative 3 are within a Criteria Cell. As with the Project, all alternatives are required to be consistent with MSHCP Sections 6.1.2, 6.1.3, 6.1.4, 6.3.2, 7.5.3, and Appendix C. With implementation of mitigation measures <b>MM BIO 1 through MM BIO 9</b> , this alternative would comply with the provisions of the MSHCP.

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
	(Construction Guidelines). With implementation of mitigation measures <b>MM BIO 1</b> through <b>MM BIO 9</b> , the Project would comply with the provisions of the MSHCP.					
<b>Cultural Resources</b> (Threshold A) Historic Resources	<b>Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the proposed MDP Facilities. In the event the actual location and type of any MDP Facility changes during the final design process from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in the 1991 Moreno MDP. As with the proposed Project, the location of the Facilities in the No Project Alternative is conceptual.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of Facilities identified in Alternative 1, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 2A, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 2B, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> No known historic resources are located in the immediate vicinity of the Facilities identified in Alternative 3, which is conceptual at this time. If any Facility is constructed that was not evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012) mitigation measure <b>MM CR 1</b> would be implemented.
<b>Cultural Resources</b> (Threshold B) Archaeological Resources	<b>Less-than-Significant Impacts with Mitigation:</b> Due to extensive ground disturbance in proximity to the proposed MDP Facilities, no impacts to archaeological resources are anticipated. In the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  Additionally, because the proposed location of the MDP Facilities is conceptual, if the actual location and type of any MDP Facility changes during the final design process from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in the No Project Alternative, no impacts to archaeological resources are anticipated. However, as with the proposed Project, the location of the Facilities in the No Project Alternative is conceptual.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 1, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 2A, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 2B, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project, if the actual location and type of any proposed Facility changes from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Due to the extensive ground disturbance in proximity to the Facilities identified in Alternative 3, no impacts to archaeological resources are anticipated. However, as with the proposed Project, in the event of an accidental discovery, mitigation measure <b>MM CR 2</b> would be implemented.  As with the Project if the actual location and type of any proposed Facility changes during from what was evaluated in the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), mitigation measure <b>MM CR 1</b> would be implemented.

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<b>Cultural Resources</b> (Threshold C) Paleontological Resources	<b>Less than Significant Impacts with Mitigation:</b> No unique geologic feature is known to exist and no fossils have been documented within or adjacent to the proposed MDP Facilities. The Moreno MDP Watershed is underlain by deposits that could potentially have a high sensitivity for paleontological resources. Ground-disturbing activities resulting from construction of the proposed Project could damage or destroy previously undocumented unique fossils within the footprint of proposed MDP Facilities. Mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> , outline specific measures that will be taken if certain soil types or any paleontological specimens are unearthed during construction activities.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the Project, no unique geologic feature is known to exist and no fossils have been documented within or adjacent to the Facilities proposed by the No Project Alternative. Although the No Project Alternative has a substantially smaller footprint than the proposed Project, ground-disturbing activities resulting from construction of this alternative could damage or destroy previously undocumented unique fossils.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 1 Facilities could damage or destroy previously undocumented unique fossils; however this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 2A Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 2B Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the Project, construction of Alternative 3 Facilities could damage or destroy previously undocumented unique fossils; however, this alternative would implement mitigation measures <b>MM CR 4</b> through <b>MM CR 7</b> .
<b>Hydrology and Water Quality</b> (Threshold A) Violate any water quality standards or waste discharge requirements	<b>Less than Significant Impacts with Mitigation:</b> Construction of the proposed MDP Facilities may result in the discharge of sediment and other construction by-products. Existing NPDES permitting requires that SWPPPs identify BMPs to control erosion and discharge of polluted runoff during construction. For any Facility for which a SWPPP is not required, mitigation measure <b>MM HYD 1</b> requires an erosion control plan be prepared that identifies appropriate BMPs to be implemented during construction.  The Project proposes three detention basins with a combined footprint of approximately 82 acres. Detention basins have a medium efficiency for the removal of sediment/turbidity, nutrients, and metals, which are impairments for one or more of the Project's receiving water bodies.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> Construction of the No Project Alternative's Facilities has the same potential for construction impacts as the Project and is subject to the same NPDES permit requirements. This alternative would not implement mitigation measure <b>MM HYD-1</b> so an erosion control plan would not be prepared for any Facility for which a SWPPP is not required.  The No Project Alternative includes one, approximately 12-acre detention basin, which is 70 acres smaller than the Project's basins and would not provide as much potential for the removal of sediment/turbidity, nutrients, and metals as the Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 1 Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 1 proposes two detention basins with a combined footprint of approximately 75 acres, which is slightly smaller than the proposed Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 2A Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 2A proposes five detention basins with a combined footprint of approximately 72 acres, which is slightly smaller than the proposed Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 2B Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 2B proposes four detention basins with a combined footprint of approximately 75 acres, which is slightly smaller than the Project's basins and is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, metals as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Construction of the Alternative 3 Facilities has the same potential for construction impacts as the proposed Project; is subject to the same NPDES permit requirements; and would implement mitigation measure <b>MM HYD 1</b> .  Alternative 3 proposes three detention basins with a combined footprint of approximately 78 acres, which is anticipated to provide a similar potential for the removal of sediment/turbidity, nutrients, and metals as the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold B) Substantial discharges of	<b>Less than Significant Impacts with Mitigation:</b> The proposed Project is designed to collect and convey stormwater runoff from within the Moreno MDP Watershed. This runoff is expected to contain the following pollutants:	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The pollutants would be the same as for the proposed Project and would be minimized through implementation	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 1 as for the proposed Project and would be	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 2A as for the proposed Project and would	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 2B as for the proposed Project and would	<b>Impacts Greater than the Project; Less than Significant Impacts with Mitigation:</b> The pollutants would be the same for Alternative 3 as for the proposed Project and would be

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
typical storm water pollutants or substantial changes to surface water quality	Nutrients, bacteria and viruses (pathogens), organic compounds, oxygen demanding substances, oil and grease, sediment, pesticides, trash and debris, and metals. The discharge of pollutants would be minimized through implementation of the NPDES MS4 permits, which requires preparation of a SWPPP that identifies appropriate BMPs and implementation of mitigation measure <b>MM HYD 1</b> , which requires an erosions control plan when a SWPPP is not required..  The proposed Project includes two debris basins and three detention basins with a combined footprint of 82 acres that may have a beneficial impact on downstream water quality, particularly with regard to the removal of sediment/turbidity.	of the NPDES MS4 permits. Although Facilities for which a SWPPP is not required will not have an erosions control plan.  Because the No Project Alternative does not include any debris basins and only one detention basin; it may not have as much of a beneficial impact on downstream water quality as the Project, particularly with regard to the removal of sediments/turbidity.	minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 1 proposes one debris basin and two detention basins with a combined footprint of 75 acres. Because Alternative 1 includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.	be minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 2A proposes one debris basin and five detention basins with a combined footprint of 72 acres. Because Alternative 2A includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed as the proposed Project.	be minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 2B proposes one debris basin and four detention basins with a combined footprint of 75 acres. Because Alternative 2B includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.	minimized through implementation of the NPDES MS4 permits and mitigation measure <b>MM HYD 1</b> .  Alternative 3 proposes one debris basin and three detention basins with a combined footprint of 78 acres. Because Alternative 3 includes only one debris basin, it may not have as much of a beneficial impact on downstream water quality with regard to the removal of sediments/turbidity as the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold C) Substantially deplete groundwater supplies or interfere with groundwater recharge.	<b>Less than Significant:</b> The proposed Project does not involve the extraction of groundwater and it will not create a substantial addition of impervious surfaces within the Moreno MDP Watershed such that existing areas of groundwater recharge are affected.  The proposed project includes three detention basins and two debris basins with a total projected infiltration potential of 95 to 336 acre-feet per day as stormwater flows are conveyed through the Project Facilities.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The No Project Alternative does not involve groundwater extraction and it will not interfere with groundwater recharge.  The No Project Alternatives includes one detention basin with a projected infiltration potential of 24 to 94 acre-feet per day as stormwater flows are conveyed through the 1991 Moreno MDP Facilities. The No Project Alternative has substantially less potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than significant Impacts:</b> As with the proposed Project, Alternative 1 does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 1 includes two debris basins and one detention basins with a total projected infiltration potential of 97 to 460 acre-feet per day as stormwater flows are conveyed through the Alternative 1 Facilities. Alternative 1 has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 2A does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 2A includes one debris basin and five detention basins with a total projected infiltration potential of 96 to 490 acre-feet of per day as stormwater flows are conveyed through the Alternative 2A Facilities. Alternative 2A has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 2B does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 2B includes one debris basin and four detention basins with a total projected infiltration potential of 92 to 338 acre-feet per day as stormwater flows are conveyed through the Alternative 2B Facilities. Alternative 2B has essentially the same potential for infiltration as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, Alternative 3 does not involve groundwater extraction and it will not interfere with groundwater recharge.  Alternative 3 includes one debris basin and three detention basins with a total projected infiltration potential of 88 to 301 acre-feet of per day as stormwater flows are conveyed through the Alternative 3 Facilities. Alternative 3 has essentially the same potential for infiltration as the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold D) Substantially alter existing drainage patterns or increase surface runoff that would	<b>Less than Significant with Mitigation:</b> The proposed Project's Facilities were designed and sized to follow the historic and natural drainage conditions. Existing drainage patterns includes sheet flows due to the lack of natural watercourses and substantial drainage facilities. The Project will modify the existing drainage condition by collecting and conveying the current sheet flows in Project Facilities.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> The No Project Alternative will modify the drainage pattern by collecting and conveying the current sheet flows in Facilities identified in the 1991 Moreno MDP. The No Project Alternative includes Facilities that constitutes a major diversion of the	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 1 would modify the existing drainage condition by collecting and conveying the current sheet flows, but Alternative 1 does not follow the natural and historic drainage conditions to the same	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 2A would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 2A revises a number of alignments and mimics existing	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 2B would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 2B mimics existing drainage conditions to a similar	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> As with the proposed Project, Alternative 3 would modify the existing drainage condition by collecting and conveying the current sheet flows. Alternative 3 mimics existing drainage conditions to a similar extent as the proposed

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
result in flooding	When completed the Project’s Facilities combined with street improvement will provide a comprehensive drainage system to convey runoff through the Moreno MDP Watershed. Implementation of mitigation measure <b>MM HYD 2</b> would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding.	natural drainage course upstream of State Route 60; thus it is expected to have slightly greater impacts than the Project. The Facilities in the No Project Alternative were sized based on outdated land use and rainfall data.	degree as the proposed Project. However, Alternative 1 includes a debris basin and peak reduction basin to account for the expected debris volumes and higher rainfall rates. In addition, as with the proposed Project, Alternative 1 would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	drainage conditions to a marginally greater extent than the proposed Project. Alternative 2A would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	extent as the proposed Project and Alternative 2B would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	Project and Alternative 3 would implement mitigation measure <b>MM HYD 2</b> , which would ensure that individual Project Facilities are completed so that storm flows from each Facility will be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.
<b>Hydrology and Water Quality</b> (Threshold E) Place structures within a 100-year Flood Hazard Area	<b>Less than Significant:</b> Portions of the Moreno MDP Facilities will be constructed within 100-year flood hazard areas due to the flat topography, but will help contain the 100-year storm flows.	<b>Impacts Greater than the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Facilities identified in the 1991 Moreno MDP will be constructed within the 100-year flood hazard area. However, because the 1991 Moreno MDP Facilities were designed and sized based on older land use assumptions and older rainfall data, these facilities will not contain the 100-year storm flows to the same extent as the proposed Project Facilities.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 1 Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 2A Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 2B Facilities will be constructed within 100-year flood hazard areas , but will help contain the 100-year storm flows.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> As with the proposed Project, portions of the Alternative 3 Facilities will be constructed within 100-year flood hazard areas but will help contain the 100-year storm flows.
<b>Noise</b> (Threshold A) Exposure or generation of noise in excess of standards  (Threshold C) Substantial Temporary or Periodic Noise Increase	<b>Less than Significant with Mitigation:</b> Long term noise impacts would result from the maintenance of the proposed Project’s Facilities and will be negligible.  Implementation of the Project would entail construction of proposed Facilities within 200-feet of existing residential and commercial uses. Construction noise will be perceptible; however, the noise level at that distance will be below the allowable daytime noise levels set forth in the Moreno Valley Municipal Code.	<b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative would result in the same noise impacts as the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 1 would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2A would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2B would result in the same noise impacts as the proposed Project and implement the same mitigation measures.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 3 would result in the same noise impacts as the proposed Project and implement the same mitigation measures.

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**Table 7-E – Comparison of Alternatives Matrix**

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
	Mitigation measures that limit construction hours ( <b>MM NOI 1</b> ) require properly tuned construction equipment ( <b>MM NOI 2</b> ), inform potential sensitive receivers of pending construction ( <b>MM NOI 3</b> ), and limit equipment idling time ( <b>MM Air 2</b> ) would be implemented.					
<b>Noise</b> (Threshold B) Exposure or generation of excessive ground-borne vibration or ground-borne noise	<b>Less than Significant with Mitigation:</b> Long term noise vibration associated with the maintenance of the proposed Project Facilities will be negligible.  Construction of certain Facilities may take place within 50-feet of residential structures. Vibrational noise may occur during construction of the proposed Project. At a distance of 50 feet vibration would be “Barely Perceptible” and at 25 feet vibration noise would be “Distinctly Perceptible.”  Construction-related vibration is significantly below the vibration damage threshold for any structure. Exposure to vibration would be limited through implementation of mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts:</b> The No Project Alternative would result in the same vibration impacts at the proposed Project.	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 1 would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2A would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than Significant Impacts with Mitigation:</b> Alternative 2B would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .	<b>Impacts Same as the Project; Less than significant Impacts with Mitigation:</b> Alternative 3 would result in the same vibration impacts at the proposed Project and would implement mitigation measure <b>MM NOI 1</b> .
<b>Environmentally Superior to Proposed Project?</b>	<b>Not applicable</b>	<b>Yes</b>	<b>Very slightly, but still has significant and unavoidable impacts</b>	<b>Very slightly, but still has significant and unavoidable impacts</b>	<b>Slightly, but still has significant and unavoidable impacts</b>	<b>No</b>

In addition to trying to minimize significant impacts of a project, a project alternative must be able to feasibility attain most of the basic objectives of the Project. All the alternatives were compared to each other, evaluated against the Project Objectives identified in Section 7.1, and assigned a numerical score of 0, 1, 2, or 3, as follows:

- Alternatives that satisfy a Project Objective in a reasonably comparable manner as the proposed Project or other alternatives are assigned a score of 2
- Alternatives that satisfy a Project Objective less than the proposed Project or other alternatives are assigned a score of 1;

- Alternatives (including the proposed Project ) that satisfy a Project Objective more than those Alternatives assigned a score of 2 are assigned a score of 3; and
- Alternatives (including the proposed Project) that do not satisfy a Project Objective are assigned a score of 0.

Because the Project Objectives are equally important to the District, they are not weighted. There are eight Project Objectives; thus the highest score that can be attained is 24. **Table 7-F - Evaluation of the Proposed Project and the Alternatives Success at Meeting the Project Objectives** provide an assessment of the Project Objectives for the proposed Project and each alternative.





**Table 7-F – Evaluation of the Proposed Project and the Alternatives Success at Meeting the Project Objectives**

Project Objective	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
<p>1. Revise the Moreno MDP to provide a drainage plan which supports the existing and proposed land use as set forth in the “Riverside County General Plan” updated in 2008, “City of Moreno Valley General Plan” updated in July 2006, and any proposed amendments thereto.</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to support to existing and proposed land uses in the 2006 and 2008 updates to the Moreno Valley General Plan and Riverside County General Plan, respectively.</p> <p>The proposed Project is more consistent with the land use designations in the Moreno Valley General Plan because the proposed Cactus Basin is located adjacent to property upon which the Moreno Valley will ultimately develop a park. Additionally, of all the alternatives identified in the MDP Report, the proposed Project is the one preferred by Moreno Valley, which in addition to being a responsible agency for the PEIR is the jurisdiction with land use authority in the Moreno Watershed.</p>	<p><b>Score: 1</b></p> <p>The No Project Alternative is implementation of the 1991 Moreno MDP, which does not support the proposed land uses set forth in the updated (2008) Riverside County General Plan or the updated (2006) Moreno Valley General Plan.</p>	<p><b>Score: 2</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to support to existing and proposed land uses in the 2006 and 2008 updates to the Moreno Valley General Plan and Riverside County General Plan, respectively.</p>	<p><b>Score: 2</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to support to existing and proposed land uses in the 2006 and 2008 updates to the Moreno Valley General Plan and Riverside County General Plan, respectively.</p>	<p><b>Score: 2</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to support to existing and proposed land uses in the 2006 and 2008 updates to the Moreno Valley General Plan and Riverside County General Plan, respectively.</p>	<p><b>Score: 2</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to support to existing and proposed land uses in the 2006 and 2008 updates to the Moreno Valley General Plan and Riverside County General Plan, respectively.</p>
<p>2. The fully implemented plan should, in conjunction with ultimate street improvements for the area within the boundaries of the Moreno MDP, contain the 100-year frequency flows and alleviate the primary sources of flooding.</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements.</p>	<p><b>Score: 1</b></p> <p>The No Project Alternative does not include reconstruction of Line F-2 to accommodate 100-year storm flows, as mutually agreed upon by the District and Moreno Valley. Under the No Project Alternative Line F-2 will remain as a 10-year facility. Additionally, facilities in the No Project Alternative were sized based on older rainfall data and prior to the updates to the</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements.</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements.</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements.</p>	<p><b>Score: 3</b></p> <p>The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements.</p>

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**Table 7-F – Evaluation of the Proposed Project and the Alternatives Success at Meeting the Project Objectives**

Project Objective	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
		Riverside County General Plan and the Moreno Valley General Plan.				
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of MDP facilities to protect existing and future development.  (Criteria for this objective is whether the alternative takes into consideration future land uses the 2006 and 2008 updates to the Moreno Valley and Riverside County General Plans, respectively)	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 are designed to provide the same level of flood protection in conjunction with the street improvements. However, the proposed Project fits best with the City's planned land use, and is preferred by the City, which is the agency with land use authority.	<b>Score: 1</b>  Facilities in the No Project Alternative were sized based on older rainfall data and prior to the updates to the Riverside County General Plan and the Moreno Valley General Plan.	<b>Score: 2</b>  All Alternatives include Facilities that were sized to convey projected flows, in conjunction with the street improvement. However, none satisfy the City's land use plans as well as the proposed Project. The proposed Project and	<b>Score: 2</b>  All Alternatives include Facilities that were sized to convey projected flows, in conjunction with the street improvement. However, none satisfy the City's land use plans as well as the proposed Project.	<b>Score: 2</b>  All Alternatives include Facilities that were sized to convey projected flows, in conjunction with the street improvement. However, none satisfy the City's land use plans as well as the proposed Project.	<b>Score: 2</b>  All Alternatives include Facilities that were sized to convey projected flows, in conjunction with the street improvement. However, none satisfy the City's land use plans as well as the proposed Project.
4. Identify the most economical combination of facilities considering right-of-way acquisition, construction, and maintenance costs.	<b>Score 2</b>  The proposed Project includes three detention basins and two debris basins. Maintenance needs of the proposed Project are considered less than Alternatives 2A and 2B because the additional debris basin would capture debris that would otherwise clog downstream Facilities. Note that debris basins reduce the cost of downstream maintenance; however, no detailed cost analysis was conducted to determine exact savings regarding downstream maintenance.	<b>Score: 3</b>  The No Project Alternative includes only one basin and all channels are concrete-lined. Because scheduling for maintenance activities is expected to increase with the number of basins proposed, this alternative would require the least amount of maintenance.	<b>Score: 3</b>  Alternative 1 includes three basins, which is the fewest number of basins in comparison to the proposed Project, Alternatives 2A, 2B, and 3. The number of basins in combination with Alternative 1's concrete-lined channels is expected to require less maintenance than the Facilities proposed by the proposed Project or Alternatives 2A, 2B, and 3.	<b>Score: 1</b>  Alternative 2A proposes five detention basins and one debris basin, which is among the highest number of basins proposed by any of the alternatives. Because Alternative 2A only includes one debris basin, it would not reduce the maintenance needs of downstream Facilities to the same extent as the proposed Project.	<b>Score: 1</b>  Alternative 2B proposes four detention basins and one debris basin, which is among the highest number of basins proposed by any of the alternatives. Because Alternative 2B only includes one debris basin, it would not reduce the maintenance needs of downstream Facilities to the same extent as the proposed Project.	<b>Score: 2</b>  Alternative 3 proposes three detention basins and one debris basin, which is a fewer number of basins in comparison to the proposed Project. Because Alternative 3 only includes one debris basin, it would not reduce the maintenance needs of downstream Facilities to the same extent as the proposed Project.
5. Develop a plan which, when implemented, will result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Moreno MDP.	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 were developed to reduce flooding and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno	<b>Score: 1</b>  The No Project Alternative was not developed to eliminate FEMA designated Special Flood Hazard Areas within the Moreno Watershed. Flooding in the eastern portion of Moreno	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 were developed to reduce flooding and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 were developed to reduce flooding and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 were developed to reduce flooding and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno	<b>Score: 3</b>  The proposed Project and Alternatives 1, 2A, 2B, and 3 were developed to reduce flooding and allow the removal of FEMA mapped Special Flood Hazard Areas within the Moreno

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**Table 7-F – Evaluation of the Proposed Project and the Alternatives Success at Meeting the Project Objectives**

Project Objective	Proposed Project	No Project Alternative	Alternative 1	Alternative 2A	Alternative 2B	Alternative 3
	Watershed.	Valley would continue to occur.	Watershed.	Watershed.	Watershed.	Watershed.
6. Revise the Moreno MDP to minimize major diversions and perpetuate the natural drainage pattern of the area to the maximum extent practicable.  (Criterion for this objective is the extent to which the major diversion upstream of State Route 60 is reduced.)	<b>Score: 2</b>  The proposed Project and Alternatives 2B and 3 reduces the Line A diversion; however it includes minor diversions primarily related to the proposed Line D alignment.	<b>Score: 0</b>  The No Project Alternative includes a major diversion upstream of State Route 60 (Line A).	<b>Score: 0</b>  Alternative 1 maintains the Line A Diversion that is a part of the 1991 Moreno MDP.	<b>Score: 3</b>  Alternative 2A most effectively removes the Line A diversion in addition to minimizing diversions within the drainage area better than the other alternatives.	<b>Score: 2</b>  Alternative 2B reduces the Line A diversion; however this alternative includes minor diversions primarily related to the proposed Line D alignment.	<b>Score: 2</b>  Alternative 3 reduces the Line A diversion; however this alternative includes minor diversions primarily related to the proposed Line D alignment.
7. Where feasible, incorporate facilities which encourage infiltration.  (Criteria used for this objective is projected infiltration within basins and earthen channels.)	<b>Score: 2</b>  Projected infiltration for the proposed Project is between 95 to 336 acre-feet per day ( <b>Table 5-4-F</b> ), which is similar to Alternative 2B and lower than Alternative 2A. This alternative includes earthen channels.	<b>Score: 0</b>  The only Facility in the No Project Alternative that would provide infiltration opportunities is the Sinclair Basin. All channels are concrete-lined in this alternative.	<b>Score: 1</b>  Projected infiltration for Alternative 1 is between 97 to 460 acre-feet per day ( <b>Table 7-B</b> ), which is the higher than Alternatives 2A, 2B, and 3. However, because this this alternative includes concrete channels it is only scored 1.	<b>Score: 2</b>  Projected infiltration for Alternative 2A is between 96 to 490 acre-feet per day ( <b>Table 7-B</b> ), which is similar to Alternative 1 and higher than Alternatives 2B and 3. This alternative includes earthen channels.	<b>Score: 1</b>  Projected infiltration for Alternative 2B ranges from 92 to 338 acre-feet per day, which is similar to Alternative 3 ( <b>Table 7-C</b> ). This alternative includes earthen channels.	<b>Score: 1</b>  Projected infiltration for Alternative 3 is between 88 to 301 acre-feet per day, which is similar to Alternative 2B ( <b>Table 7-D</b> ). This alternative includes earthen channels.
8. Minimize environmental impacts to the maximum extent practicable.  (Criteria used for this objective includes: basin footprint size, potential for sediment/debris, reduction, and the location of any Facilities that would provide a noise buffer from State Route 60 traffic noise.)	<b>Score: 3</b>  The proposed Project is comparable in basin footprint to Alternative 3. This alternative includes the Reche Canyon and Ironwood Debris Basins to reduce sediment and the Sinclair and Quincy Basins north of State Route 60, which would provide a noise buffer ( <b>Figure 3-2</b> ).	<b>Score: 1</b>  Although the No Project Alternative has the smallest footprint, it does not include any debris basins, thus there would be no reduction of debris from the watershed. In addition, this alternative does not include the placement of any basins to provide noise buffers for the community.	<b>Score: 2</b>  Alternative 1 is comparable in basin footprint to Alternatives 2A and 2B; however, because this alternative includes concrete-lined channels it will have a smaller channel footprint than Alternatives 2A, 2B, and 3. This alternative includes only one debris basin (Reche Canyon Debris Basin) and does not provide any noise buffer ( <b>Figure 7-2</b> ).	<b>Score: 2</b>  Alternative 2A is comparable in basin footprint to Alternatives 1 and 2B; however, because this alternative includes earthen-lined channels it will have a larger channel footprint than Alternative 1. This alternative includes the Reche Canyon Debris Basin to reduce sediment and the Sinclair Basin north of State Route 60, which would provide a noise buffer ( <b>Figure 7-3</b> ).	<b>Score: 2</b>  Alternative 2B is comparable in basin footprint to Alternatives 1 and 2A; however, because this alternative includes earthen-lined channels it will have a larger channel footprint than Alternative 1. This alternative includes the Reche Canyon Debris Basin to reduce sediment but does not include any Facilities that would provide a buffer from State Route 60 traffic noise ( <b>Figure 7-4</b> ).	<b>Score: 2</b>  Alternative 3 has the largest basin footprint. This alternative includes the Reche Canyon Debris Basin to reduce sediment and the Fir Basin south of State Route 60, which would provide a noise buffer ( <b>Figure 7-5</b> ).
<b>Total Score (out of 24):</b>	<b>21</b>	<b>8</b>	<b>16</b>	<b>18</b>	<b>16</b>	<b>17</b>

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



## 7.8 Environmentally Superior Alternative

CEQA requires that an environmentally superior alternative be selected among the alternatives that were analyzed in the PEIR.

Because the Project is the implementation of a revision to the 1991 Moreno MDP, the boundary for all alternatives is the same as the proposed Project; each alternative, except the No Project Alternative, provides the same level of flood protection within the Moreno Watershed; and all alternatives were developed to reduce flooding, and allow the removal of FEMA mapped Special Flood Hazard Areas. Other than the No Project Alternative, all Alternatives include multiple basins with only a 10 acre difference between the overall footprint of the proposed Project and Alternatives 1, 2A, 2B, and 3. None of the alternatives evaluated, including the No Project Alternative, will reduce the amount of NO<sub>x</sub> and VOC generated during project construction to below the SCAQMD thresholds for these pollutants to eliminating the Project's only significant impact. The No Project Alternative includes substantially fewer basins and a substantially smaller basin footprint than the other alternatives. Therefore, even though the No Project Alternative would result significant impacts to air quality, its emissions would be incrementally less than Alternatives 1, 2A, 2B, and 3 and for this reason is considered the environmentally superior alternative.

When the No-Project Alternative is the environmentally superior alternative, an EIR must also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6(e)(2)). In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the Project area and its surrounding environment. As shown in **Table 7-E – Comparison of Alternatives Matrix**, impacts among Alternatives 1, 2A, 2B, and 3 are so similar to the proposed Project and each other that there is no single alternative that is environmentally superior to the others.

As shown in **Table 7-F - Evaluation of the Proposed Project and the Alternatives Success at Meeting the Project Objectives**, none of the alternatives meet the basic Project Objectives as fully as the proposed Project. Additionally CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives. The entire Moreno Watershed is located totally within the corporate limits and sphere of influence of Moreno Valley. Moreno Valley is not only a responsible agency for CEQA purposes it is also the agency with land use authority within the Moreno Watershed. In that capacity, Moreno Valley assisted the District with the establishment of the Project Objectives and the selection of the proposed Project from among the alternatives identified in the MDP Report. Because none of the alternatives evaluated effectively lessens or avoids the significant short-term air quality impacts during construction and the proposed Project most fully meets the Project's objectives, the District may adopt the proposed Project with the mitigation measures identified in this PEIR.



## 7.9 References

The following reference was used in the preparation of this section of the Draft PEIR:

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## Section 8 – References and Persons Consulted

### 8.1 References

The following documents were referred to as general information sources during preparation of this Draft PEIR. They are available for public review at the locations identified after each listing. They are referenced in the Draft PEIR by the acronyms shown at the end of each reference.

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## Section 7 Alternatives to the Proposed Project

- Riverside County Flood Control and Water Conservation District, *Draft Moreno Master Drainage Plan, Zone 4, Revision No. 2, April 2014.*(Available at the Riverside County Flood Control and Water Conservation District) [Cited as MDP Report]

## 8.2 Persons Consulted

### Riverside County Flood Control and Water Conservation District

1995 Market Street  
Riverside, California 92501  
(951) 955-1200

Stuart McKibbin, Chief of Regulatory Division  
Kris Flanigan, Engineering Project Manager  
Joan Valle, Associate Engineer

## 8.3 List of Preparers

### Albert A. Webb Associates

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Cheryl DeGano, Principal Environmental Analyst  
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Brad Perrine, Associate Environmental Analyst  
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Drusilla Maynus, Administrative Assistant



## Section 9 – Final Program Environmental Impact Report Background

The Final Program Environmental Impact Report (Final PEIR), as required pursuant to State *CEQA Guidelines* Sections 15089 and 15132, includes the Draft Program Environmental Impact Report (Draft PEIR) or a revision thereof, comments and recommendations received on the Draft PEIR, a list of persons, organizations, and public agencies commenting on the Draft PEIR, and the responses of the lead agency, which is the Riverside County Flood Control and Water Conservation District (District) for this Project, to significant environmental points raised in the review and consultation process. A Mitigation Monitoring and Reporting Program (MMRP) is also included to ensure compliance during Project implementation (Public Resources Code Section 21081.6, State *CEQA Guidelines* Section 15097).

### 9.1 Information Added Following Distribution of the Draft PEIR

The information added following distribution of the Draft PEIR does not constitute “significant new information” pursuant to State *CEQA Guidelines* Section 15088.5 because this information does not change the Project impacts and/or mitigation measures such that new or more severe environmental impacts result from the Project. The information is added as a result of comments received from responsible agencies, changes in the existing conditions at the site, revised public policies since the Draft PEIR was written, and/or minor corrections or clarifications. The additional information merely “clarifies or amplifies or makes insignificant modifications” in the already adequate Draft PEIR, as is permitted by State *CEQA Guidelines* Section 15088.5(b).

### 9.2 Relationship to the Draft PEIR

Minor changes that clarify or correct minor inaccuracies in the Draft PEIR appear as revised pages in the Corrections, Errata, and Changes from Draft PEIR to Final PEIR section which follows herein. The Draft PEIR considered by the District, as lead agency, has been edited to reflect corrections and responses to comments raised.

### 9.3 Corrections, Errata, and Changes from Draft PEIR to Final PEIR

As explained above, this Final PEIR contains corrections, errata, and additions to the information contained in the Draft PEIR. These changes do not constitute “significant new information” pursuant to State *CEQA Guidelines* Section 15088.5 because they do not change the Project impacts and/or mitigation measures such that new or more severe environmental impacts result from the Project. Such items are sometimes added as a result of comments received from responsible agencies or other commenters, changes in the existing conditions at the site, revised public policies since the Draft PEIR was written, and/or minor corrections or clarifications.

As provided in State *CEQA Guidelines* Section 15088(c), responses to comments may take the form of a revision to a Draft PEIR or may be a separate section in the Final PEIR. This section complies with the latter and provides changes to the Draft PEIR in revision-mode text, i.e., deletions are shown with

strikethrough text (~~example text~~) and additions are shown with double underline text (example text). These notations are meant to provide clarification, corrections, or minor revisions as needed as a result of public comments or because of changes in the Project since the release of the Draft PEIR, as required by State *CEQA Guidelines* Section 15132. None of the corrections and additions constitute significant new information or substantial Project changes requiring recirculation, as defined by State *CEQA Guidelines* Section 15088.5.

The following summary will present the location and types of additions and changes or corrections made within each section of the Final PEIR since the Draft PEIR was published.

### **Section 1 – Executive Summary**

At the request of the City of Moreno Valley, the last paragraph on page 1-1 has been clarified as follows:

If the PEIR is certified and the Project is approved by the Board of Supervisors, as future individual MDP Facilities are proposed, the District or any other jurisdiction having discretionary approval related to the MDP Facility (i.e., City of Moreno Valley or County of Riverside), will be required to examine each Facility on its own merits pursuant to CEQA. Potential Facility-specific CEQA documents include an initial study (IS) leading to a negative declaration or mitigated negative declaration (MND); supplemental environmental impact report (EIR); or subsequent EIR. However, pursuant to Section 15168(c)(2) of the CEQA Guidelines, if the District or any other jurisdiction having discretionary approval related to the MDP facility finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the Lead or Responsible Agency can approve the activity as being within the scope of the Project covered by the PEIR, and no new environmental document would be required. In addition, since many of the MDP facilities may be designed and/or constructed as part of private development projects processed by Moreno Valley, the Facility-specific analysis may be included as part of the environmental documentation and CEQA process for a development project, provided it includes adequate CEQA analysis on any related MDP Facilities.

To reflect a change in the name of **Table 1-A** and identify the updated location of the Mitigation Monitoring and Reporting Program, the last paragraph on page 1-8 of the Draft PEIR has been revised as follows:

The following table, **Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~**, provides a summary of impacts related to the Project pursuant to State *CEQA Guidelines* Section 15123(b)(1). The table identifies any significant environmental impacts resulting from the Project along with applicable mitigation measures required to reduce impacts to a less than significant level, where possible.

Note that the updated Mitigation Monitoring and Reporting Program is contained in its final form under in **Table 11-A** in Section 11 of this document.

To avoid conflict with the organization of the **Table 11-A – Mitigation Monitoring and Reporting Program** of this Final PEIR, the name of **Table 1-A** has been changed from Draft PEIR Impact Summary Matrix/Mitigation Monitoring Program to Draft PEIR Impact Summary Matrix. **Table 1-A** has been revised and the two columns titled “Implementation Timing” and “Responsible Party” have been removed.

In response to comments received from the City of Moreno Valley, the portions of **Table 1-A – Draft PEIR Impact Summary Matrix** containing mitigation measures **MM Air 1** and **MM NOI 1** have been revised as shown below. As a result of a meeting between the District and Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians, the portions of **Table 1-A** containing mitigation measures **MM CR 1**, **MM CR 2**, and **MM CR 3** have been revised as shown below.

**Table 1-A – Draft PEIR Impact Summary Matrix/~~Mitigation Monitoring Program~~<sup>1</sup>**

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
Air Quality and Greenhouse Gas Emissions	Violate any air quality standard or contribute substantially to an existing or projected air quality violation.	<b>MM Air 1:</b> For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers’ specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency <u>or by means of another form of documentation as approved by the Lead Agency</u> (i.e., Moreno Valley, Riverside County, or District).	Significant and unavoidable impacts
Cultural Resources	Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5.	<del><b>MM CR 1</b></del> <u>Before</u> <u>At the project level, prior to the issuance of a Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources, for which there is a change in the location or size of disturbance area from what was evaluated in the</u> <u>The Lead Agency shall consider applicable data and analyses, such as the Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California (CRM TECH, January 31, 2012), Map of Soboba Band of Luiseño Indians Potentially Sensitive</u>	Less than Significant

<sup>1</sup> The table shown here is abridged from the version contained in the Draft PEIR and only shows the text of the affected mitigation measures.

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p><u>Areas dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources-</u> the District, Riverside County, or Moreno Valley Public Works Department shall require the proponent of such MDP Facility to prepare or cause to be prepared a Facility-specific assessment of the potential for archaeological and cultural resources in order to determine the presence or extent of any such resources and evaluate the significance of such resources (if present). This assessment shall include, at minimum a Native American Heritage Commission Sacred Lands File search, a records search at the Eastern Information Center at the University of California Riverside, a walkover survey, and preparation of a written report containing the results of the assessment. The archaeological evaluations shall be completed prior to the commencement of any ground disturbing activities.</p>	
Cultural Resources	Create a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5.	<p><b>MM CR 1</b> (see above)</p> <p><b>MM CR 2:</b> Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State <i>CEQA Guidelines</i>), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Any artifacts collected or recovered shall be cleaned, identified, catalogued, analyzed, and prepared for curation at an appropriate repository with permanent retrievable storage to allow for additional research in the future. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. <u>Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of</u></p>	Less than significant

Impact Category	Impact	Mitigation Measure	Impact After Mitigation
		<p><u>Luiseno</u> Indians.</p> <p><b>MM CR 3:</b> If the Facility-specific assessment required by <b>MM CR 1</b> determines <u>there is a moderate to high</u> potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a <del>building</del> grading permit, or <u>Notice to Proceed with</u> <del>or</del> construction of that proposed MDP Facility, the proponent for that Facility shall notify <del>local Native American tribes</del> <u>the Soboba Band of Luiseno Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing activities.</u> With permission of the Lead Agency (i.e., District, <u>City of Moreno Valley, or Riverside County</u>), tribal monitors may be allowed to monitor, <del>at such tribe's sole cost and expense,</del> all grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys. <u>Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.</u></p>	
Noise	<p>Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; and</p> <p>Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project</p>	<p><b>MM NOI 1:</b> To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of <del>6</del><u>7</u>:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.</p>	Less than significant

**Section 2 – Introduction**

There are no revisions to this section of the Draft PEIR.

**Section 3 – Project Description**

There are no revisions to this section of the Draft PEIR.



#### **Section 4 – Environmental Effects Found Not to be Significant**

The portion of **Table 4-E – Comments Received in Response to the Notice of Preparation** regarding the written comments from the California Department of Transportation (Caltrans) has been revised as follows to correct a section reference.

<b>Commenter</b>	<b>Location in Draft PEIR where Comment is Addressed</b>
California Department of Transportation (Caltrans)	Drainage is addressed in Section 5.4 – Hydrology and Water Quality. Applicable Encroachment permits and/or traffic control plans required from Caltrans are identified in Section <del>3.4.1</del> <u>3.6</u> – Required Permits and Approvals.

#### **Section 5 – Potentially Significant Environmental Effects**

There are no revisions to this section of the Draft PEIR.

##### **Section 5.1 – Air Quality and Greenhouse Gas Emissions**

In response to a comment from the City of Moreno Valley, mitigation measure **MM Air 1** on page 5.1-35 has been clarified as follows:

**MM Air 1:** For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).

##### **Section 5.2 – Biological Resources**

There are no revisions to this section of the Draft PEIR.

##### **Section 5.3 – Cultural Resources**

As a result of a meeting between the District and Mr. Joseph Ontiveros of the Soboba Band of Luiseño Indians, the second full paragraph on page 5.3-10 of the Draft PEIR has been revised as follows:

In a letter dated November 10, 2011, the Soboba Band of Luiseño Indians stated that although the Project is outside their existing reservation it is within their tribal Traditional Use Areas. The letter further states the MDP Watershed is regarded as highly sensitive to the people of Soboba because of its close proximity to known Luiseño village sites and trade routes between the Luiseño and Cahuilla tribes. (CRM-A, Appendix 2) Figure 5.3-1 – Soboba Band of Luiseño Indians Potentially Sensitive Areas, which is included at the end of this section, shows the location of the proposed MDP Facilities in regard to the potentially sensitive resources.

**Figure 5.3-1 – Soboba Band of Luiseño Indians Potentially Sensitive Areas** has been added to the end (page 5.3-17) of this section.

Also resulting from the meeting between the District and Mr. Ontiveros and discussion with the Pechanga Band of Luiseño Indians, mitigation measures **MM CR-1**, **MM CR-2**, and **MM CR-3** have been revised follows:

**MM CR 1:** ~~Before~~ At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources. for which there is a change in the location or size of disturbance area from what was evaluated in the The Lead Agency shall consider applicable data and analyses, such as the Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California (CRM TECH, January 31, 2012), Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources. ~~The District, Riverside County, or Moreno Valley Public Works Department shall require the proponent of such MDP Facility to prepare or cause to be prepared a Facility-specific assessment of the potential for archaeological and cultural resources in order to determine the presence or extent of any such resources and evaluate the significance of such resources (if present). This assessment shall include, at minimum a Native American Heritage Commission Sacred Lands File search, a records search at the Eastern Information Center at the University of California Riverside, a walkover survey, and preparation of a written report containing the results of the assessment. The archaeological evaluations shall be completed prior to the commencement of any ground disturbing activities.~~

**MM CR 2:** Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State *CEQA Guidelines*), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.

**MM CR 3:** If the Facility-specific assessment required by **MM CR 1** determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a ~~building~~ grading permit, or Notice to Proceed with ~~or~~ construction of that proposed MDP Facility, the proponent for that Facility shall notify ~~local Native American tribes~~ the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities. With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor, ~~at such tribe's sole cost and expense,~~ all grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys. Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.

#### **Section 5.4 – Hydrology and Water Quality**

Moreno Valley's enforcement authority has been clarified in the last paragraph on page 5.4-19 of the Draft PEIR as follows:

Chapter 8.10 Stormwater/Urban Runoff Management and Discharge Controls  
MVMC Chapter 8.10 regulates discharges into the City's sewer and storm drain systems, and implements the City's requirements under the MS4 permit. Among other things, this Chapter prohibits discharges to the City's sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. This Chapter gives the City of Moreno Valley enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

#### **Section 5.5 – Noise**

The City of Moreno Valley identified a slight error in the Draft PEIR regarding construction start time for certain construction and maintenance activities. Therefore, pursuant to Municipal Code Section 11.80.030(D)(7), the start time for weekday construction, operational, and maintenance activities has been changed from 6:00 a.m. to 7:00 a.m. in the first full paragraph on page 5.5-11 as follows:

Limiting exposure of persons to construction-related noise impacts will be primarily achieved via time constraints as established by the Moreno Valley Municipal Code, which limits construction activities on weekdays from ~~6~~7:00 a.m. to 8:00 p.m., and from 7:00 a.m. to 8:00 p.m. on weekends and holidays (MVMC, Section 11.80.030.D.8); and which limits grading activities on weekdays from 7:00 a.m. to 6:00 p.m., and from 8:00 a.m. to 4:00 p.m. on weekends and holidays (MVMC 8.21.050.O); times when many people are not at home (mitigation measure **MM NOI 1**). Additional mitigation is achieved by maintaining construction equipment in good working order, informing sensitive receptors of pending construction, using electricity from power poles when

feasible as required by mitigation measures **MM NOI 2** through **MM NOI 4**. Moreover, mitigation measure **MM Air 2**, discussed previously in Section 5.1 – Air Quality and Greenhouse Gas Emissions, will also reduce construction noise by restricting engine idling times to five minutes.

Mitigation measure **MM NOI 1** on page 5.5-13 of the Draft PEIR has been updated as follows:

**MM NOI 1:** To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of ~~6~~7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.

### **Section 6 – Other CEQA Topics**

There are no revisions to this section of the Draft PEIR.

### **Section 7 – Alternatives to the Proposed Project**

Information provided by the City of Moreno Valley that a tentative tract has been submitted will be added to the second full paragraph on page 7-4 to amplify the discussion regarding a potential basin location.<sup>2</sup>

Commenter-suggested location (iii) *an area bounded on the east by Redlands Boulevard, on the west by Wilmot Street, on the south by Cactus Avenue, and on the north by Brodiaea Avenue* and (iv) *an area on the east side of Merwin Street at Brodiaea Avenue* are infeasible alternatives because these locations will only attenuate flows from the Line F system and not the Line F-2 system. A basin at either of these locations would need to be sized to over-mitigate for the Line F-2 system, which would result in a larger, more costly basin. Additionally the Moreno Valley Planning Department commented that the property to the east of Merwin (Commenter-suggested location (iv)) is no longer within the World Logistics project site and a tentative tract map is currently under review for this location.

### **Section 8 – References**

There are no revisions to this section of the Draft PEIR.

<sup>2</sup> The basin location was suggested by Mr. Devlin in a letter dated March 21, 2013, which is included as Appendix A.3 to the Draft PEIR.

## 9.4 Public Review Summary

The complete, EIR process typically consists of three parts: the Initial Study/Notice of Preparation (IS/NOP), Draft PEIR, and Final PEIR. The District distributed the IS/NOP from April 3, 2012, through May 2, 2012, to agencies, local governments, and interested parties of the general public. Pursuant to State *CEQA Guidelines* Section 15082, recipients of the IS/NOP were requested to provide responses within 30 days upon receipt. Copies of both the IS/NOP and comments received are included in Appendix A to the Draft PEIR.

The District circulated a Draft PEIR for the Project for 45 days from May 22, 2014 through July 7, 2014. Notices of Completion and Availability of the Draft PEIR were circulated to the State Clearinghouse, responsible agencies, trustee agencies, and other interested parties on May 22, 2014.

General public Notice of Availability of the Draft PEIR was also given by publication in The Press-Enterprise daily circulation newspaper on May 22, 2014. As required by Public Resources Code Section 21092.3, a copy of the public notice was posted with the Riverside County Clerk on May 22, 2014.

As provided in the public notice and in accordance with State *CEQA Guidelines* Section 21091(d), the District accepted written comments through July 7, 2014. During the public review period for the Project, the District received six comment letters from agencies and a Native American Tribe. No written comments were received subsequent to the close of the public review period.

The Response to Comments, along with the comment letters, are included in Section 2 of this Final PEIR. In accordance with the provisions of Public Resources Code Section 21092.5, the District has provided a written response to each commenting public agency no less than 10 days prior to the proposed certification date.

## 9.5 List of Persons, Organizations, and Agencies that Commented on the Draft PEIR

### 9.5.1 Comments Received During Public Comment Period

The following written comments were received during the Draft PEIR public comment period:

Agency Type	Letter	Name/Agency	Dated
Federal Agency	A	FEMA	May 28, 2014
State Agency	B	Department of Transportation	May 29, 2014
State Agency	C	Governor's Office of Planning and Research	July 8, 2014
Regional/Local Agency	D	City of Moreno Valley Public Works Department	July 3, 2014
Regional/Local Agency	E	City of Moreno Valley Planning Department	July 7, 2014
Other Interested Party	F	Soboba Band of Luiseño Indians	July 7, 2014

**9.5.2 Comments Received After Close of Public Comment Period**

No written comments were received after the close of the public comment period.



## Section 10 – Response to Comments

### 10.1 Overview

Pursuant to State *CEQA Guidelines* Section 15088, the responses to comments presented in this section address specific, relevant comments on environmental issues raised in the submitted comment letters.

All of the comment letters are included in this section. Each comment letter is followed by the responses to each of its comments. Each comment letter is identified by the alphabetic letter designated in Section 9.5 of this Final PEIR, and identifying information for each commenter is provided at the beginning of the corresponding responses. Specific comments are delineated and numbered as well. Corrections and additions resulting from comments on the Draft PEIR are summarized in Section 9.3 of this Final PEIR.





Comment Letter A

RECEIVED  
JUN 03 2014

RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT

U.S. Department of Homeland Security  
FEMA Region IX  
1111 Broadway, Suite 1200  
Oakland, CA. 94607-4052



May 28, 2014

Kris Flanigan, P. E., Engineering Project Manager  
Riverside County Flood Control and Water Conservation District  
1995 Market Street  
Riverside, California 92501

Dear Ms. Flanigan:

This is in response to your request for comments regarding the Notice of Completion and Availability Draft Programmatic Environmental Impact Report, Moreno Master Drainage Plan Revision, State Clearinghouse No. 2012041013, County of Riverside, California.

Please review the current effective countywide Flood Insurance Rate Maps (FIRMs) for the County of Riverside (Community Number 060245) and Moreno Valley (Community Number 065074), Maps revised August 28, 2008. Please note that the City of Moreno Valley, Riverside County, California is a participant in the National Flood Insurance Program (NFIP). The minimum, basic NFIP floodplain management building requirements are described in Vol. 44 Code of Federal Regulations (44 CFR), Sections 59 through 65.

A-1

A summary of these NFIP floodplain management building requirements are as follows:

- All buildings constructed within a riverine floodplain, (i.e., Flood Zones A, AO, AH, AE, and A1 through A30 as delineated on the FIRM), must be elevated so that the lowest floor is at or above the Base Flood Elevation level in accordance with the effective Flood Insurance Rate Map.
- If the area of construction is located within a Regulatory Floodway as delineated on the FIRM, any *development* must not increase base flood elevation levels. **The term *development* means any man-made change to improved or unimproved real estate, including but not limited to buildings, other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and storage of equipment or materials.** A hydrologic and hydraulic analysis must be performed *prior* to the start of development, and must demonstrate that the development would not cause any rise in base flood levels. No rise is permitted within regulatory floodways.

A-2

www.fema.gov

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

Kris Flanigan, P. E., Engineering Project Manager  
Page 2  
May 28, 2014

- Upon completion of any development that changes existing Special Flood Hazard Areas, the NFIP directs all participating communities to submit the appropriate hydrologic and hydraulic data to FEMA for a FIRM revision. In accordance with 44 CFR, Section 65.3, as soon as practicable, but not later than six months after such data becomes available, a community shall notify FEMA of the changes by submitting technical data for a flood map revision. To obtain copies of FEMA's Flood Map Revision Application Packages, please refer to the FEMA website at <http://www.fema.gov/business/nfip/forms.shtm>.

A-2

**Please Note:**

Many NFIP participating communities have adopted floodplain management building requirements which are more restrictive than the minimum federal standards described in 44 CFR. Please contact the local community's floodplain manager for more information on local floodplain management building requirements. The Moreno Valley floodplain manager can be reached by calling Ahmad Ansari, Public Works Director/City Engineer, at (951) 413-3100. The Riverside County floodplain manager can be reached by calling Michael Lara, Director, at (951) 955-2514.

A-3

If you have any questions or concerns, please do not hesitate to call Frank Mansell of the Mitigation staff at (510) 627-7191.

Sincerely,



Gregor Blackburn, CFM, Branch Chief  
Floodplain Management and Insurance Branch

cc:  
Ahmad Ansari, Public Works Director/City Engineer, City of Moreno Valley  
Michael Lara, Director, Riverside County  
Garret Tam Sing/Salomon Miranda, State of California, Department of Water Resources,  
Southern District  
Frank Mansell, NFIP Planner, DHS/FEMA Region IX  
Alessandro Amaglio, Environmental Officer, DHS/FEMA Region IX

www.fema.gov

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

## 10.2 Response to Comment Letter A – FEMA

### Response to Comment A-1:

The FIRM maps were reviewed during preparation of the Draft PEIR. Draft PEIR **Figure 5.4-3 – FEMA Mapped Flood Hazard Zones** shows the location of Moreno MDP Facilities proposed to be constructed within FEMA-mapped 100-year flood hazard areas (Draft PEIR, p. 5.4-29). The National Flood Insurance Program is discussed on page 5.4-15 of the Draft PEIR.

No environmental issues have been raised by the comment and no modification of the Draft PEIR is required

### Response to Comment A-2:

The summary of the National Flood Insurance Program (NFIP) building requirements is noted. As previously noted, the NFIP is discussed on page 5.4-15 of the Draft PEIR.

No environmental issues have been raised by the comment and no modification of the Draft PEIR is required.

### Response to Comment A-3:

This comment is noted. However, no environmental issues have been raised by the comment and no modification of the Draft PEIR is required.



**Comment Letter B**

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN, Jr. Governor

**DEPARTMENT OF TRANSPORTATION**

DISTRICT 8  
PLANNING  
464 WEST 4<sup>th</sup> STREET, 6<sup>th</sup> Floor MS 725  
SAN BERNARDINO, CA 92401-1400  
PHONE (909) 383-4557  
FAX (909) 383-5936  
TTY (909) 383-6300



*Flex your power!  
Be energy efficient!*

May 29, 2014

Riverside County Flood Control and Water Conservation  
Kris Flangan  
1995 Market Street  
Riverside, CA 92501

RECEIVED  
JUN 02 2014

RIVERSIDE COUNTY FLOOD CONTROL  
(CWS) WATER CONSERVATION DISTRICT

Moreno Master Drainage Plan SCH# 2012041013

Ms. Flangan,

We have completed our review for the Notice of Preparation (NOP) for the Moreno Master Drainage Plan Revision Draft Environmental Report (EIR). The project is located south of State Route 60 (SR-60) in the city of Moreno Valley crossing Lassalle Street and Theodore Street.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act (CEQA), it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Moreno Valley due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

**B-1**

Please reference the Department of Transportation letter sent April 16, 2012 concerning our comments for this project.

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 383-6908 or myself at (909) 383-4557 for assistance.

Sincerely,

Mark Roberts  
Acting Chief  
Community Planning/IGR-CEQA

*"Caltrans improves mobility across California"*

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

## Attachment to Comment Letter B

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY

EDMUND G. BROWN Jr. Governor

### DEPARTMENT OF TRANSPORTATION

DISTRICT 8

PLANNING

464 WEST 4<sup>th</sup> STREET, 6<sup>th</sup> Floor MS 725

SAN BERNARDINO, CA 92401-1400

PHONE (909) 383-4557

FAX (909) 383-5936

TTY (909) 383-6300



*Flex your power!  
Be energy efficient!*

April 16, 2012

Kris Flangan  
Riverside County Flood Control and Water Conservation  
1995 Market Street  
Riverside, CA 92501

Moreno Master Drainage Plan SCH# 2012041013

Ms. Flangan,

We have completed our review for the Notice of Preparation (NOP) for the Moreno Master Drainage Plan Revision Draft Environmental Report (EIR). The project is located south of State Route 60 (SR-60) in the city of Moreno Valley crossing Lassalle Street and Theodore Street.

As the owner and operator of the State Highway System (SHS), it is our responsibility to coordinate and consult with local jurisdictions when proposed development may impact our facilities. As the responsible agency under the California Environmental Quality Act (CEQA), it is also our responsibility to make recommendations to offset associated impacts with the proposed project. Although the project is under the jurisdiction of the City of Moreno Valley due to the Project's potential impact to State facilities it is also subject to the policies and regulations that govern the SHS.

We recommend the following to be provided:

#### Drainage

- All tributary runoff areas, existing area drainage facilities, and proposed project drainage design should be clearly identified and analyzed in a comprehensive project drainage study. To the extent possible, the drainage study should include impacts associated with drainage facilities to be constructed.

#### Traffic control Plan

- A Traffic Control Plan or construction traffic impact study may be required by the developer for approval by the lead agency and Caltrans prior to construction. The plans shall be prepared in accordance with Caltrans's Manual of Traffic Controls for Construction and Maintenance Work Zones. For more information, contact the District Traffic Manager, Al Afaneh, at (909) 383-4917.

*"Caltrans improves mobility across California"*

## Attachment to Comment Letter B

Ms. Flangan  
 April 16, 2012  
 Page 2

### Permit Requirements

Any proposed alterations to existing improvements within State right-of-way may only be performed upon issuance of a valid encroachment permit and must conform to current Caltrans design standards and construction practices.

Review and approval of street, grading and drainage construction plans will be necessary prior to permit issuance. Information regarding permit application and submittal requirements may be obtained by contacting:

Office of Encroachment Permits  
 Department of Transportation  
 464 West 4th Street, 6th Floor, MS-619  
 San Bernardino, CA 92401-1400  
 (909) 383-4526

We appreciate the opportunity to offer comments concerning this project. If you have any questions regarding this letter, please contact Talvin Dennis at (909) 383-6908 or myself at (909) 383-4557 for assistance.

Sincerely,

*Original signed by Daniel Kopulsky*

DANIEL KOPULSKY  
 Office Chief  
 Community Planning/IGR-CEQA

*"Caltrans improves mobility across California"*





### 10.3 Response to Comment Letter B – Department of Transportation

#### Response to Comment B-1:

The Draft PEIR identifies the Department of Transportation's (Caltrans') role as a responsible agency on page 2-2.

The Caltrans letter sent April 16, 2012 (attached to this comment letter) is included in Appendix A.2 of the Draft PEIR along with all letters received in response to the Notice of Preparation. Draft PEIR **Table 4-E – Comments Received in Response to the Notice of Preparation** discloses written comments were received from Caltrans and directed the reader to Section 5.4 – Hydrology and Water Quality for a discussion of drainage issues. With regard to Caltrans' request for a comprehensive project drainage study, this is not necessary at this time, as the proposed MDP Facilities were sized and conceptually located based on hydrology studies completed by the Riverside County Flood Control and Water Conservation District. Nonetheless, future drainage studies will be prepared if needed at the time District Facilities are proposed and the District will continue to work with Caltrans on Facilities that affect the state highway system (SHS).

The need to obtain encroachment permits and/or traffic control plans from Caltrans is identified in Section 3.6 – Required Permits and Approvals (Draft PEIR, p. 4-25).

No environmental issues have been raised by the comment. However, there is a typographical error in a **Table 4-E - Comments Received in Response to the Notice of Preparation** that references Section 3.4.1, when it should have referenced Section 3.6. Therefore, the table has been revised in the Final PEIR as follows:

Commenter	Location in Draft PEIR where Comment is Addressed
California Department of Transportation (Caltrans)	Drainage is addressed in Section 5.4 – Hydrology and Water Quality. Applicable Encroachment permits and/or traffic control plans required from Caltrans are identified in Section <del>3.4.1</del> <u>3.6</u> – Required Permits and Approvals.

This revision is only correcting a section reference and does not constitute significant new information that would require recirculation of the Draft PEIR. No other modification of the Draft PEIR is required as a result of this comment.



**Comment Letter C**



Edmund G. Brown Jr.  
Governor

STATE OF CALIFORNIA  
Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit



Ken Alex  
Director

July 8, 2014

**RECEIVED**  
JUL 11 2014

**RIVERSIDE COUNTY FLOOD CONTROL  
AND WATER CONSERVATION DISTRICT**

Kris Flanigan  
Riverside County Flood Control and Water Conservation  
1995 Market Street  
Riverside, CA 92501

Subject: Moreno Master Drainage Plan Revision  
SCH#: 2012041013

Dear Kris Flanigan:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on July 7, 2014, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

**C-1**

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan  
Director, State Clearinghouse

Attachment to Comment Letter C

Document Details Report  
State Clearinghouse Data Base

SCH# 2012041013  
Project Title Moreno Master Drainage Plan Revision  
Lead Agency Riverside County Flood Control and Water Conservation

Type EIR Draft EIR  
Description The Moreno MDP Revision is a conceptual long-range planning document that projects the alignment, type, size, and estimated cost for MDP Facilities necessary to attenuate and/or contain storm flows. The Project includes the administration, construction and operation of approximately 30 miles of storm drains and channels, and a total of 82 acres of detention and debris basins. Construction would be occur in discrete phases over a number of decades. New development may be required to construct MDP Facilities or set aside right-of-way for future MDP Facilities, or otherwise provide adequate drainage facilities that would attenuate and/or contain flows projected in the Moreno MDP Revision. Even with BMPs, standard regulatory compliance, and mitigation measures, the Project may result in significant and unavoidable short-term impacts to air quality.

Lead Agency Contact

Name Kris Flanigan  
Agency Riverside County Flood Control and Water Conservation  
Phone 951 955-8581 Fax  
email  
Address 1995 Market Street  
City Riverside State CA Zip 92501

Project Location

County Riverside  
City Moreno Valley  
Region  
Lat / Long 33° 56' 57" N / 117° 11' 58" W  
Cross Streets Moreno Beach Dr. and Alessandro Blvd  
Parcel No.  
Township 2S Range 2W Section 30/31 Base SBB&M

Proximity to:

Highways Hwy 60  
Airports March Air Reserve Base  
Railways  
Waterways San Jacinto River/Canyon Lake/Lake Elsinore  
Schools ES: Moreno, Ridge, Crest;MS: Landmark, Mountain View; Valley...  
Land Use The proposed project will affect properties in portions of Moreno Valley, and portions of unincorporated Riverside County. Portions lie within an area designated by Moreno Valley as Residential (R1, R2, R3, R5, R10, R15, R20, and R5/15), Rural Residential, Hillside Residential Residential/Office, Office, Commercial, Business Park/Light Industrial, Open Space, Floodplain, and Public Facilities land use designations. Portions lie within an area designated by Riverside County as Rural Residential, Rural Mountainous, Rural Community-Very Low Density Residential, Conservation Habitat, Open Space Rural, and Open Space Recreation land use designations.

Project Issues Air Quality; Archaeologic-Historic; Biological Resources; Drainage/Absorption; Flood Plain/Flooding; Noise; Water Quality; Wetland/Riparian; Growth Inducing; Cumulative Effects

Reviewing Agencies Resources Agency; Department of Fish and Wildlife, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Air Resources Board; State Water Resources Control Board, Division of Financial Assistance; Regional Water Quality Control Board, Region 8; Department of Toxic Substances Control; Native American Heritage Commission

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

**Attachment to Comment Letter C**

Document Details Report  
State Clearinghouse Data Base

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*Date Received* 05/22/2014    *Start of Review* 05/22/2014    *End of Review* 07/07/2014

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN



## 10.4 Response to Comment Letter C – Governor’s Office of Planning and Research

### Response to Comment C-1:

The comment acknowledges that the District has complied with the Draft PEIR review requirements pursuant to CEQA for this Project. No modification of the Draft PEIR is required.





**Comment Letter D**

**Flanigan, Kris**

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**From:** Hoang Nguyen <hoangn@moval.org>  
**Sent:** Thursday, July 03, 2014 8:35 AM  
**To:** Flanigan, Kris; Chris Ormsby  
**Subject:** RE: Moreno MDP Draft PEIR  
**Attachments:** DOC107.pdf

Kris,

Land Dev has one correction on the working hrs on p.1-20 (see attachment).

Chris,

I may not be in the office this Monday (jury duty). If I'm not here & you have comments, pls email them directly Kris @ RCFC no later than 5:00 PM this Monday.

D-1

**Hoang Nguyen**  
**Associate Engineer**  
**Public Works**  
**City of Moreno Valley**  
p: 951.413.3216 | e: [hoangn@moval.org](mailto:hoangn@moval.org) W: [www.moval.org](http://www.moval.org)  
14177 Frederick St., Moreno Valley, CA 92553

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

Attachment to Comment Letter D

Table 1-A – Draft PEIR Impact Summary Matrix/Mitigation Monitoring Program

Impact Category	Impact	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
Noise	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; and Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project	<p>MM NOI 1: To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of 8:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.</p> <p>MM NOI 2: To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer's specifications to the satisfaction of the District or Moreno Valley, as appropriate. Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.</p> <p>MM NOI 3: To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors' roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.</p>	Pre-construction	Contractor, and applicable Lead Agency (District or Moreno Valley or Riverside County)	Less than significant
	Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels	MM NOI 1 (see above)	Pre-construction	Contractor and Lead Agency (District or Moreno Valley or Riverside County)	Less than significant

1-20  
Albert A. NYEBB Associates

## 10.5 Response to Comment Letter D – City of Moreno Valley Public Works Department

### Response to Comment D-1:

The City of Moreno Valley identified a slight error in the Draft PEIR regarding construction start time for certain construction and maintenance activities. Therefore, pursuant to Municipal Code Section 11.80.030(D)(7), the start time for weekday construction, operational, and maintenance activities will be changed from 6:00 a.m. to 7:00 a.m. on page 5.5-11, and directly in mitigation measure **MM NOI 1**, which appears in **Table 1-A – Draft PEIR Impact Summary Matrix** on page 1-20 and on page 5.5-13 of the Draft PEIR. The measure has been updated as follows:

**MM NOI 1:** To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of ~~6~~7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.

This minor revision to the Draft PEIR does not constitute significant new information that would require recirculation of the Draft PEIR.



Comment Letter E

Flanigan, Kris

From: Hoang Nguyen <hoangn@moval.org>
Sent: Monday, July 07, 2014 4:55 PM
To: Flanigan, Kris
Cc: Chris Ormsby
Subject: FW: Comments on Draft Program EIR Moreno Master Drainage Plan Revision (May 2014)

Kris,

FYI.

Hoang Nguyen
Associate Engineer
Public Works
City of Moreno Valley
p: 951.413.3216 | e: hoangn@moval.org W: www.moval.org
14177 Frederick St., Moreno Valley, CA 92553



From: Chris Ormsby
Sent: Monday, July 07, 2014 4:51 PM
To: Hoang Nguyen
Subject: Comments on Draft Program EIR Moreno Master Drainage Plan Revision (May 2014)

Hoang,

I just had a couple of comments below on the Draft EIR itself. However, I noted that in Jim Devlin's comment letter (March 2013) in response to the NOP he makes reference to an alternative location east of Merwin. The location that Mr. Devlin is referring to is no longer within the World Logistics site. There is a tentative tract map under review at the location.

E-1

P 1-1. Recommend adding the highlighted text. "If the PEIR is certified and the Project is approved by the Board of Supervisors, as future individual MDP Facilities are proposed, the District or any other jurisdiction having discretionary approval related to the MDP Facility (i.e., City of Moreno Valley or County of Riverside), will be required to examine each Facility on its own merits pursuant to CEQA."

E-2

In most cases, the City's mitigation for this type of measure has been to require reports to be submitted by the contractor to the City Planning Division as a way of better documenting compliance in our files, and due to limited resources to inspect documents in the field.

E-3

**Comment Letter E**

P 1-9 "MM Air 1: For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District)" **E-3**

If there are any questions regarding my comments, the consultant or Flood Control staff could contact me directly at (951) 413-3229 **E-4**

Chris Ormsby, AICP  
Interim Planning Official

**Chris Ormsby**  
**Interim Planning Official**  
**Community & Economic Development**  
**City of Moreno Valley**  
p: 951.413.3229 | e: [chriso@moval.org](mailto:chriso@moval.org) W: [www.moval.org](http://www.moval.org)  
14177 Frederick St., Moreno Valley, CA 92553

## 10.6 Response to Comment Letter E – City of Moreno Valley Planning Department

### Response to Comment E-1:

The information that a tentative tract map has been submitted will be added to the discussion regarding a potential basin location suggested by Mr. Devlin.<sup>3</sup> The second paragraph on page 7-4 of the Draft PEIR will be revised as follows:

Commenter-suggested location *(iii)* an area bounded on the east by Redlands Boulevard, on the west by Wilmot Street, on the south by Cactus Avenue, and on the north by Brodiaea Avenue and *(iv)* an area on the east side of Merwin Street at Brodiaea Avenue are infeasible alternatives because these locations will only attenuate flows from the Line F system and not the Line F-2 system. A basin at either of these locations would need to be sized to over-mitigate for the Line F-2 system, which would result in a larger, more costly basin. Additionally the Moreno Valley Planning Department commented that the property to the east of Merwin (Commenter-suggested location *(iv)*) is no longer within the World Logistics project site and a tentative tract map is currently under review for this location.

The amplification as to why an alternative basin location is infeasible does not constitute significant new information that would require recirculation of the Draft PEIR.

### Response to Comment E-2:

To clarify that the reference to “City” is the City of Moreno Valley, the last paragraph on page 1-1 of the Draft PEIR will be revised as follows:

If the PEIR is certified and the Project is approved by the Board of Supervisors, as future individual MDP Facilities are proposed, the District or any other jurisdiction having discretionary approval related to the MDP Facility (i.e., City of Moreno Valley or County of Riverside), will be required to examine each Facility on its own merits pursuant to CEQA. Potential Facility-specific CEQA documents include an initial study (IS) leading to a negative declaration or mitigated negative declaration (MND); supplemental environmental impact report (EIR); or subsequent EIR. However, pursuant to Section 15168(c)(2) of the CEQA Guidelines, if the District or any other jurisdiction having discretionary approval related to the MDP facility finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the Lead or Responsible Agency can approve the activity as being within the scope of the Project covered by the PEIR, and no new environmental document would be required. In addition, since many of the MDP facilities may be designed and/or constructed as part

<sup>3</sup> The basin location was suggested by Mr. Devlin in a letter dated March 21, 2013, which is included as Appendix A.3 to the Draft PEIR.



of private development projects processed by Moreno Valley, the Facility-specific analysis may be included as part of the environmental documentation and CEQA process for a development project, provided it includes adequate CEQA analysis on any related MDP Facilities.

The last paragraph on page 5.4-19 of the Draft PEIR will be revised as follows:

Chapter 8.10 Stormwater/Urban Runoff Management and Discharge Controls  
MVMC Chapter 8.10 regulates discharges into the City's sewer and storm drain systems, and implements the City's requirements under the MS4 permit. Among other things, this Chapter prohibits discharges to the City's sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. This Chapter gives the City of Moreno Valley enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

The above clarifications do not constitute significant new information that would require recirculation of the Draft PEIR.

**Response to Comment E-3:**

The City's typical mitigation is noted. Therefore, mitigation measure **MM Air 1**, has been clarified as requested by the City, as shown in **Table 1-A – Draft PEIR Impact Summary Matrix** on page 1-9 and again on page 5.1-35 of the Draft PEIR. The measure has been clarified as follows:

**MM Air 1:** For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).

The clarification of how the Lead Agency may satisfy mitigation measure **MM Air 1** does not constitute significant new information that would require recirculation of the Draft PEIR.

**Comment Letter F**



July 7, 2014

Attn: Kris Flanigan, P.E., Senior Engineer  
 Riverside County Flood Control and Water Conservation District  
 1995 Market Street  
 Riverside, CA 92501

**Re: Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision (SCH No. 2012041013)**

The Soboba Band of Luiseño Indians is regarded the project area as highly sensitive to our people. The project area is part of the Soboba Band of Luiseño Indians traditional use area, we are the closest Native American Tribe to the proposed project area, and as mentioned in previous consultation the project location is in close proximity to known village sites and is a shared use area between Native American tribes. The Soboba Band has significant concerns over the proposed mitigation measures for the Moreno Master Drainage Plan Revision.

- The Soboba Band of Luiseño Indians believes the mitigation measures for this project are outdated and does not consider them to be effective because the Soboba Band was not consulted with prior to the development of the "Master Agreement" that was established between RCFC and the Pechanga Band of Luiseño Indians on December 18, 2012.
- The Soboba Band responded to in a letter dated November 7, 2011 stating that this project was located in our traditional use area and that it was in fact culturally sensitive. It was at that time that the Soboba Band requested to be on site during the ground-disturbing activities. We stated that the project area was culturally sensitive, and requested consultation with the project proponents. The only other tribe who also responded to the inquiries was the Pala Band, requesting deferment to the other tribes living closer to the MDP Watershed.
- Soboba's concerns and requests were reiterated in a letter addressed to RCFC the dated April 5, 2012, when the tribe received the Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision. The Soboba Band requests that a Native American monitoring component be included as a mitigation measure in the Environmental Impact Report, a Treatment and Dispositions Agreement project proponent and the Soboba Band, and that meaningful consultation take place between RCFC and the tribe during a face-to-face meeting.
- The Soboba Band is currently requesting a face-to-face meeting between the Soboba Cultural Resources Department and a representative from Riverside County Flood Control Water Conservation District to discuss revising the "Master Agreement" and the proposed Cultural Resources Mitigation Measures for the Moreno Master Drainage Plan Revision. Please contact me at your earliest convenience either by email or phone in order to make arrangements.

F-1

F-2

F-3

F-4

Sincerely,

Joseph Ontiveros  
 Soboba Cultural Resource Department  
 P.O. Box 487  
 San Jacinto, CA 92581  
 Phone (951) 654-5544 ext. 4137  
 Cell (951) 663-5279  
[jontiveros@soboba-nsn.gov](mailto:jontiveros@soboba-nsn.gov)

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR MORENO MASTER DRAINAGE PLAN

## Attachment to Comment Letter F

April 5, 2012

Attn: Kris Flanigan, P.E., Senior Engineer  
 Riverside County Flood Control and Water Conservation District  
 1995 Market Street  
 Riverside, CA 92501



**Re: Notice of Preparation of a Draft Programmatic Environmental Impact Report for the Moreno Master Drainage Plan Revision**

The Soboba Band of Luiseño Indians appreciates your observance of Tribal Cultural Resources and their preservation in your project. The information provided to us on said project has been assessed through our Cultural Resource Department, where it was concluded that although it is outside the existing reservation, the project area does fall within the bounds of our Tribal Traditional Use Areas. This project location is in close proximity to known village sites and is a shared use area that was used in ongoing trade between the Luiseño and Cahuilla tribes. Therefore it is regarded as highly sensitive to the people of Soboba.

Soboba Band of Luiseño Indians is requesting the following:

1. To initiate a consultation with the Project Developer and Land owner.
2. The transfer of information to the Soboba Band of Luiseno Indians regarding the progress of this project should be done as soon as new developments occur.
3. Soboba Band of Luiseño Indians continues to act as a consulting tribal entity for this project.
4. Working in and around traditional use areas intensifies the possibility of encountering cultural resources during the construction/excavation phase. For this reason the Soboba Band of Luiseño Indians requests that a Native American monitoring component be included as a mitigation measure in the Environmental Impact Report. The Tribe requesting that a Treatment and Dispositions Agreement between the developer and The Soboba Band be provided to the Riverside County Flood Control and Water Conservation District prior to the issuance of a grading permit and before conducting any additional archaeological fieldwork.
5. Request that proper procedures be taken and requests of the tribe be honored (Please see the attachment)

The Soboba Band of Luiseno Indians is requesting a face-to-face meeting between the Riverside County Flood Control and Water Conservation District and the Soboba Cultural Resource Department. Please contact me at your earliest convenience either by email or phone in order to make arrangements.

Sincerely,

Joseph Ontiveros  
 Soboba Cultural Resource Department  
 P.O. Box 487  
 San Jacinto, CA 92581  
 Phone (951) 654-5544 ext. 4137  
 Cell (951) 663-5279  
[jontiveros@soboba-nsn.gov](mailto:jontiveros@soboba-nsn.gov)

## Attachment to Comment Letter F

**Cultural Items (Artifacts).** Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer should agree to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. When appropriate and agreed upon in advance, the Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

The Developer should waive any and all claims to ownership of Native American ceremonial and cultural artifacts that may be found on the Project site. Upon completion of authorized and mandatory archeological analysis, the Developer should return said artifacts to the Soboba Band within a reasonable time period agreed to by the Parties and not to exceed (30) days from the initial recovery of the items.

### Treatment and Disposition of Remains.

A. The Soboba Band shall be allowed, under California Public Resources Code § 5097.98 (a), to (1) inspect the site of the discovery and (2) make determinations as to how the human remains and grave goods shall be treated and disposed of with appropriate dignity.

B. The Soboba Band, as MLD, shall complete its inspection within twenty-four (24) hours of receiving notification from either the Developer or the NAHC, as required by California Public Resources Code § 5097.98 (a). The Parties agree to discuss in good faith what constitutes "appropriate dignity" as that term is used in the applicable statutes.

C. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code § 5097.98 (a) and (b). The Soboba Band, as the MLD in consultation with the Developer, shall make the final discretionary determination regarding the appropriate disposition and treatment of human remains.

D. All parties are aware that the Soboba Band may wish to rebury the human remains and associated ceremonial and cultural items (artifacts) on or near, the site of their discovery, in an area that shall not be subject to future subsurface disturbances. The Developer should accommodate on-site reburial in a location mutually agreed upon by the Parties.

E. The term "human remains" encompasses more than human bones because the Soboba Band's traditions periodically necessitated the ceremonial burning of human remains. Grave goods are those artifacts associated with any human remains. These items, and other funerary remnants and their ashes are to be treated in the same manner as human bone fragments or bones that remain intact.

## Attachment to Comment Letter F

**Coordination with County Coroner's Office.** The Lead Agencies and the Developer should immediately contact both the Coroner and the Soboba Band in the event that any human remains are discovered during implementation of the Project. If the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, the Coroner shall ensure that notification is provided to the NAHC within twenty-four (24) hours of the determination, as required by California Health and Safety Code § 7050.5 (c).

**Non-Disclosure of Location Reburials.** It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act. The Coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r). Ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices of the Soboba Band. The Developer agrees to return all Native American ceremonial items and items of cultural patrimony that may be found on the project site to the Soboba Band for appropriate treatment. In addition, the Soboba Band requests the return of all other cultural items (artifacts) that are recovered during the course of archaeological investigations. Where appropriate and agreed upon in advance, Developer's archeologist may conduct analyses of certain artifact classes if required by CEQA, Section 106 of NHPA, the mitigation measures or conditions of approval for the Project. This may include but is not limited or restricted to include shell, bone, ceramic, stone or other artifacts.

## 10.7 Response to Comment Letter F – Soboba Band of Luiseño Indians

### Response to Comment F-1:

The District is keenly sensitive to the importance of Native American cultural resources, and we routinely work closely with Registered Professional Archeologists (RPAs) and local tribes in an effort to preserve and protect these sensitive resources. Therefore, we share your concern regarding the importance of providing adequate mitigation measures.

On August 20, 2014, District staff met with Mr. Joseph Ontiveros, Director of the Soboba Band of Luiseño Indians Cultural Resource Department, to discuss the Moreno MDP and proposed mitigation measures.

On September 10, 2014, Mr. Ontiveros provided the District with a map regarding potential sensitive cultural resources. This map has been incorporated into the Final PEIR as **Figure 5.3-1 – Soboba Band of Luiseño Indians Potentially Sensitive Areas**, and will serve as a resource for the environmental analysis for future proposed projects related to the Moreno MDP Revision.

As discussed in our meeting, it is important to restate that the effectiveness of the mitigation measures proposed in the Draft PEIR is not affected by the Master Agreement between the District and the Pechanga Band of Luiseño Indians because our Master Agreement with the Pechanga Band does not cover east Moreno Valley. Furthermore, on July 23, 2014, Anna Hoover of the Pechanga Band of Luiseño Indians advised the District to notify the Soboba Band if cultural or archeological resources are discovered during construction of MDP facilities. Therefore, applicable mitigation measures have been updated accordingly.

As discussed in Section 5.3 of the Draft PEIR, the Project's impacts related to historic and archaeological resources are expected to be less than significant within or adjacent to proposed MDP Facilities. However, because the MDP is a conceptual planning document that will be implemented over many years, individual Facilities may vary from the MDP due to unforeseen circumstances such as underground utilities, new development patterns, or lack of right-of-way. Therefore, pursuant to **MM CR-1**, each MDP facility will be evaluated for potential impacts to cultural resources at the time construction is proposed. Evaluation may include subsequent CEQA analysis, and consultation with the Soboba Band of Luiseño Indians. Furthermore, **MM CR-2** and **MM CR-3** include provisions for the accidental discovery of archaeological resources and allow for tribal monitors to be present during grading, excavation, and other ground-disturbing activities, under certain circumstances.

Although the District determined that the mitigation measures set forth in the Draft PEIR would effectively reduce potential impacts to cultural resources to a less than significant level, in order to be even more cautious and more specific, the District proposes the following edits to **MM CR 1**, **MM CR 2**, and **MM CR 3**:

**MM CR 1:** ~~Before~~ At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency

(the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources. for which there is a change in the location or size of disturbance area from what was evaluated in the The Lead Agency shall consider applicable data and analyses, such as the Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California (CRM TECH, January 31, 2012), Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources. The District, Riverside County, or Moreno Valley Public Works Department shall require the proponent of such MDP Facility to prepare or cause to be prepared a Facility-specific assessment of the potential for archaeological and cultural resources in order to determine the presence or extent of any such resources and evaluate the significance of such resources (if present). This assessment shall include, at minimum a Native American Heritage Commission Sacred Lands File search, a records search at the Eastern Information Center at the University of California Riverside, a walkover survey, and preparation of a written report containing the results of the assessment. The archaeological evaluations shall be completed prior to the commencement of any ground disturbing activities.

**MM CR 2:** Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State CEQA Guidelines), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.

**MM CR 3:** If the Facility-specific assessment required by **MM CR 1** determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a building grading permit, or Notice to Proceed with ~~or~~ construction of that proposed MDP Facility, the proponent for that Facility shall notify ~~local Native American tribes~~ the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities. With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor, at such tribe's sole cost and expense, grading, excavation, and ground

disturbing activities associated with that MDP Facility, including further surveys. Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.

No new environmental issues have been raised by the comment; however **MM CR 1**, **MM CR 2**, and **MM CR 3** will be amended in the MMRP and on applicable pages of the EIR as shown above.

**Response to Comment F-2:**

The Pechanga Band of Luiseño Indians has deferred to the Soboba Band of Luiseño Indians. Therefore, the Soboba Band of Luiseño Indians is considered the local Tribe and will be notified pursuant to applicable laws and the proposed mitigation measures shown above in *Response to Comment F-1*.

On page 5.3-10 of the Draft PEIR, the District discloses receipt of the Soboba Band letter dated November 7, 2011.

No new environmental issues have been raised by the comment and no modification of the Draft PEIR is required, other than the mitigation measure updates previously identified in *Response to Comment F-1*.

**Response to Comment F-3:**

As stated previously in *Response to Comment F-1*, on August 20, 2014, District staff met with Joseph Ontiveros, Director of the Soboba Band of Luiseño Indians Cultural Resource Department, to discuss the Moreno MDP and proposed mitigation measures.

The District has modified the cultural resources mitigation measures based on discussion during our meeting. Please see *Response to Comment F-1* and *Response to Comment F-2* for more in this regard.

The Soboba letter dated April 5, 2012 that was attached to the Draft PEIR comment letter is included in Appendix A.2 of the Draft PEIR with all letters received in response to the Notice of Preparation. Draft PEIR **Table 4-E – Comments Received in Response to the Notice of Preparation** discloses that written comments were received from the Soboba Band and directed the reader to Section 5.3 – Cultural Resources.

No new environmental issues have been raised by the comment and no modification of the Draft PEIR is required, other than the mitigation measure updates previously identified in *Response to Comment F-1*.

**Response to Comment F-4:**

As stated previously, the Pechanga Band of Luiseño Indians advised the District to notify the Soboba Band if cultural or archeological resources are discovered during construction of MDP facilities.

Furthermore, District staff met with Mr. Joseph Ontiveros, Director of the Soboba Band of Luiseño Indians Cultural Resource Department on August 20, 2014 to discuss the Moreno MDP and proposed mitigation measures.



During that meeting we concurred that the Master Agreement with the Pechanga Band of Luiseño Indians is not applicable to the Moreno MDP and that Soboba Band of Luiseño Indians are considered the “local Tribe” for the project area.

The District has modified the cultural resources mitigation measures based on discussion during our meeting. Please see *Response to Comment F-1* and *Response to Comment F-2* for more in this regard.

No new environmental issues have been raised by the comment and no modification of the Draft PEIR is required, other than the mitigation measure updates previously identified in *Response to Comment F-1*.

## Section 11 – Mitigation Monitoring and Reporting Program

CEQA requires the adoption of feasible mitigation measures to reduce the severity and magnitude of significant environmental impacts associated with project development. The Project’s Draft PEIR includes mitigation measures to reduce the potential environmental effects of the Project. CEQA also requires reporting on, and monitoring of, mitigation measures adopted as part of the environmental review process (Public Resources Code Section 21081.6). This mitigation monitoring and reporting program (MMRP) is designed to aid the District in its implementation and monitoring of measures adopted from the Project.

Pursuant to State *CEQA Guidelines* Section 15097, a written monitoring and reporting program has been compiled to verify implementation of adopted mitigation measures. “Monitoring” refers to the ongoing or periodic process of Project oversight provided by the entity or entities identified in the column titled “Implementation Responsibility” in **Table 11-A** on the following page. “Reporting” refers to written compliance review that will be presented to the decision-making body or authorized staff person identified in the table below. A report can be required at various stages throughout the Project implementation or upon completion of the mitigation measure. The following table provides the required information which includes identification of the potential impact, various mitigation measures, applicable actions, entities responsible for implementation, and implementation timing for each mitigation measure identified.

The following list clarifies the meaning of each column in the following table:

Potential Impact	Identifies a potentially affected resource/environmental condition
Mitigation Measure	Those measures that will be implemented to minimize potential significant environmental impact.
Action	What needs to be done to implement the mitigation measure
Implementation Responsibility	The party or parties responsible for implementing the mitigation measure
Governing Agency	The government entity responsible issuing a permit or otherwise responsible for enforcement associated with a mitigation measure
Implementation Timing	The phase of the Project in which implementation and compliance will be monitored

**Table 11-A – Mitigation Monitoring and Reporting Program**

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>AIR QUALITY/GREENHOUSE GAS EMISSIONS</b>					
IMPACT AIR 1: <i>Violate any air quality standard or contribute substantially to an existing or projected air quality violation.</i>	<b>MM AIR 1:</b> For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers’ specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).	Ensure the construction contractor maintains construction equipment in proper tune per manufacturers’ specifications. Periodically check maintenance records and design specification data.	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	During construction of any MDP Facility
IMPACT AIR 1: <i>(Continued)</i>	<b>MM AIR 2:</b> For channel and basin Facilities, to reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail, safe detours to prevent traffic congestion to the best of the project’s ability, and provide temporary traffic control measures during construction activities that will ensure smooth traffic flows. Pursuant to CCR Title 13 §2449(d)(3), construction equipment and truck idling times shall be prohibited in excess of five minutes on site.  To reduce traffic congestion, and therefore NO <sub>x</sub> , the plan shall include, as necessary, appropriate, and practicable, the following: dedicated turn lanes for movement of construction trucks and equipment on and off site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.  This measure applies to all projects, unless the Lead Agency determines that a traffic control plan is not warranted or feasible due to no impact on local roadways.	Prepare and submit of a traffic control plan unless the applicable Lead Agency determines one is not needed for a specific MDP Facility.	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	Preparation of traffic control plan, if needed, prior to construction. Implementation of traffic control plan during construction.

Attachment: Exhibit A to CEQA EIR MMRP Resolution (1678 : ADOPT RESOLUTION NO. 2015-67 FOR

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT AIR 1: <i>(Continued)</i>	<b>MM AIR 3:</b> For channel and basin Facilities, to minimize impacts related to particulate matter (PM-10 and PM-2.5) generation from construction activities, consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site. The contractor shall be required to comply with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that may include watering, stabilized construction access to reduce tracking of mud or dirt onto public roads covering trucks hauling loose materials off-site, and street sweeping.	Ensure construction contractors comply with South Coast Air Quality Management District Rule 403	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	During construction of each MDP channel and basin.
IMPACT AIR 1: <i>(Continued)</i>	<b>MM AIR 4:</b> For channel and basin Facilities, to reduce construction vehicle emissions contractor specification packages for Facility construction phases shall require construction equipment to meet EPA standards according to the following, unless a Facility (or Facilities)-specific air quality analysis is conducted at the time are actually designed and proposed for construction that determines impacts would be less than significant by adhering to the most current federal, state and local (e.g., SCAQMD) regulations, and the District’s standard regulatory practices: <ul style="list-style-type: none"> <li>The contracting company’s fleet of off-road diesel-powered construction equipment greater than 100 horsepower (HP) shall meet Tier 3 off-road emissions standards or better.</li> <li>Any emissions control device used by the contractor shall achieve Level 3 emissions reductions of no less than 85 percent for particulate matter, as specified by CARB regulations.</li> <li>A copy of the fleet’s tier compliance documentation, and CARB or AQMD operating permit shall be available to the Lead Agency for such Facility (i.e., Moreno Valley, Riverside County, or District) at the time of mobilization of each applicable unit of equipment.</li> </ul>	Verify that all off-road diesel powered equipment greater than 100 HP. used for construction of channel and basin Facilities shall meet or exceed Tier 3 off-road emissions standards, OR  Verify a Facility or Facilities specific air quality analysis has been completed and all impacts would be less than significant through adherence to current regulations and the District’s standard regulatory practices.	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	Prior to construction of each channel and basin Facility
IMPACT AIR 2: <i>Exposure of sensitive receptors to substantial pollutant concentrations.</i>	<b>MM AIR 1</b> through <b>MM AIR 4</b> (see above)	See above	See above	See above	See above

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT AIR 3: <i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment.</i>	<b>MM AIR 1</b> through <b>MM AIR 4</b> (see above)	See above	See above	See above	See above
<b>BIOLOGICAL RESOURCES</b>					
IMPACT BIO 1: <i>Have an adverse effect on sensitive or special-status species.</i>	<p><b>MM BIO 1:</b> Prior to construction of any individual MDP Facility, a Facility-specific general biological resources assessment shall be conducted by a qualified biologist.</p> <p>The general biological resource assessments shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, an identification of: sensitive plant or animal species that occur or may occur on site, other protected natural resources including sensitive vegetation communities, streams, rivers, vernal pools, and wetlands.</p> <p>The assessments shall include recommendations for subsequent surveys and mitigation measures, if needed.</p> <p>Since the Project is located within the Western Riverside County MSHCP Plan Area, the general biological assessments shall also include a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP.</p> <p>For MDP Facilities located within a Criteria Cell, the assessments may be included as part of the Joint Project Review application.</p> <p>If an MDP Facility is being constructed as part of a private development project, the general biological resource assessment prepared for the development project may be utilized, at the discretion of Moreno Valley and the District, in lieu of preparing a separate document specifically for the MDP Facility.</p>	Conduct Facility-specific general biological resources assessments, OR utilize a general biological resource assessment prepared for a development project that includes an MDP Facility	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	Western Riverside County Regional Conservation Authority (RCA) CDFW	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 2:</b> In order to avoid impacts to burrowing owls and to comply with the MSHCP, burrowing owl habitat assessments for individual MDP Facilities will be conducted by a qualified biologist following the MSHCP Burrowing Owl Survey Instructions. The burrowing owl habitat assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If the result of the habitat assessment indicates that suitable habitat is present, including suitable burrows, focused burrowing owl surveys shall be conducted for those areas with suitable habitat pursuant to Step II, Part B of the MSHCP Survey Instructions.</p> <p>If owls are found in the impact area of an MDP Facility, Species Objective 5 from the MSHCP shall be implemented. If avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.</p>	<p>If suitable habitat is present, conduct Facility-specific burrowing owl habitat assessments and focused burrowing owl surveys.</p> <p>Prepare and obtain approval of a DBESP if avoidance of burrowing owl is not feasible.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 3:</b> All future MDP facilities within the mapped survey area for Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities.</p> <p>If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls.</p> <p>Take of active nests shall be avoided.</p> <p>The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS).</p>	<p>Within the mapped survey area for burrowing owls, conduct pre-construction burrowing owl survey for MDP Facilities.</p> <p>If owls are determined to be present, prepare and obtain approval of a DBESP.</p>	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if relocation is required;	Within 30 days prior to construction of each MDP Facility within the survey area; and repeated if ground disturbance is delayed more than 30 days after the original survey.

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 4:</b> Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP.</p> <p>In conjunction with a delineation of jurisdictional waters (see MM BIO 8), MSHCP riparian/riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint.</p> <p>If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.</p>	<p>Map MSHCP riparian/riverine areas and vernal pools for individual MDP Facilities.</p> <p>If 100 percent avoidance is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility.
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 5:</b> Within areas of suitable riparian habitat, a qualified biologist shall conduct protocol presence/absence surveys for the least Bell's vireo following USFWS protocols.</p> <p>If least Bell's vireos are detected, then 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo, if feasible.</p> <p>If conservation is infeasible, then the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>For MDP Facilities with areas of suitable riparian habitat conduct surveys for the least Bell's vireo.</p> <p>If avoidance of 90 percent of the occupied portions of the Facility footprint that is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 6:</b> A qualified biologist will assess individual project sites for habitat with the potential to support listed fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If potentially suitable habitat is identified, a qualified biologist will conduct presence/absence surveys for listed fairy shrimp following accepted protocols.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of vernal pools and listed fairy shrimp habitat.</p> <p>If listed fairy shrimp are detected and avoidance is not feasible, then (1) long-term conservation shall be implemented pursuant to Appendix E of the MSHCP if feasible; or (2) the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>Assess MDP Facilities footprints for listed fairy shrimp habitat.</p> <p>For MDP Facilities containing habitat with the potential to support listed fairy shrimp.</p> <p>If avoidance of 100 percent of such habitat is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 7:</b> A qualified biologist will conduct a habitat assessment for individual projects located within the MSHCP Los Angeles pocket mouse survey area. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If suitable habitat is present, the biologist will conduct a presence/absence trapping study.</p> <p>If a Los Angeles pocket mouse (LAPM) is detected, then 90 percent of those portions of the Facility footprint that provide for long-term conservation value for LAPM shall be avoided until it is demonstrated that the MSHCP conversation goals for LAPM have been met.</p> <p>If avoidance is not feasible, the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options. DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>Assess MDP Facilities' footprints within the Los Angeles pocket mouse (LAPM) survey area.</p> <p>For MDP Facilities with areas of suitable habitat, conduct surveys for the LAPM, if avoidance of 90 percent of the portions of the Facility footprint that provide long term conservation value is not feasible, prepare and obtain approval of a DBESP</p>	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS (If a DBESP is required.)	Prior to construction of any MDP Facility



Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 2: <i>Adversely Affect Sensitive Vegetation Communities Including Riparian Habitat</i>	<p><b>MM BIO 4:</b> Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP.</p> <p>In conjunction with a delineation of jurisdictional waters (see MM BIO 8), MSHCP riparian/riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint.</p> <p>If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.</p>	<p>Map MSHCP riparian/riverine areas and vernal pools for individual MDP Facilities.</p> <p>If 100 percent avoidance is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS (If a DBESP is required.)	Prior to construction of any MDP Facility.
IMPACT BIO 2: <i>(Continued)</i>	<p><b>MM BIO 8:</b> Prior to construction, individual projects shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters.</p> <p>Project-specific delineations may be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction.</p> <p>These delineations may be conducted as part of the general biological resources assessment in MM BIO 1. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency.</p> <p>Authorizations may include, but are not limited to, a Section 404 permit from the ACOE, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW.</p> <p>Project-specific impacts to jurisdictional waters shall be mitigated at the Facility level through the permitting process in a manner approved by the ACOE, CDFW, and the RWQCB, where applicable.</p>	For MDP Facilities that will affect jurisdictional waters, prepare Facility-specific jurisdictional delineations and obtain regulatory permits if necessary	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	ACOE, RWQCB, and CDFW (if permits are required)	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<p>IMPACT BIO 3: <i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites</i></p>	<p><b>MM BIO 9:</b> In order to comply with the MBTA and/or California Fish and Game Code, site-preparation activities (removal of trees and vegetation) shall be avoided, to the greatest extent possible, during the native and migratory bird species nesting season (generally February 1 through August 31).</p> <p>If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to disturbance.</p> <p>Surveys shall be conducted no more than thirty (30) days prior to scheduled removals, and repeated if necessary.</p> <p>If active nests are identified, the biologist will recommend buffers around the vegetation containing the active nests. The vegetation containing the active nest shall not be removed, and no grading shall occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest).</p> <p>If clearing is not conducted within thirty (30) days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.</p>	<p>Pre-construction nesting bird survey</p>	<p>Construction Superintendent and the Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)</p>	<p>CDFW</p>	<p>Prior to any vegetation removal between February 1 and August 31</p>
<p>IMPACT BIO 4: <i>Conflict with Adopted Habitat Conservation plan, Natural Community Plan, or Other Approved Conservation Plan.</i></p>	<p><b>MM BIO 1</b> through <b>MM BIO 8</b> (see above)</p>	<p>See above</p>	<p>See above</p>	<p>See above</p>	<p>See above</p>

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>CULTURAL RESOURCES</b>					
<p>IMPACT CR 1: <i>Create a substantial adverse change in the significance of an historical or archaeological resource as defined in Section 15064.5.</i></p>	<p><b>MM CR 1:</b> At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources.</p> <p>The Lead Agency shall consider applicable data and analysis, such as the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), <i>Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas</i> dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes.</p> <p>If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources.</p>	<p>Ensure that each MDP Facility has been evaluated for potential impacts to cultural resources.</p> <p>Conduct additional CEQA-level cultural resources analysis, if necessary.</p>	<p>Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)</p>	<p>NAHC</p>	<p>Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility</p>

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT CR 1: (Continued)	<p><b>MM CR 2:</b> Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint.</p> <p>A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s).</p> <p>If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State <i>CEQA Guidelines</i>), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented.</p> <p>Any artifacts collected or recovered shall be cleaned, identified, catalogued, analyzed, and prepared for curation at an appropriate repository with permanent retrievable storage to allow for additional research in the future.</p> <p>Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery.</p> <p>Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.</p>	<p>Excavation activities will cease if potential Archaeological resources are encountered.</p> <p>A qualified archaeologist will be retained to evaluate the resources.</p> <p>Ensure consultation with the Soboba Band of Luiseño Indians occurs if any resources are discovered.</p>	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer) and Soboba Band of Luiseño Indians	NAHC	Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT CR 1: <i>(Continued)</i>	<p><b>MM CR 3:</b> If the Facility-specific assessment required by <i>MM CR 1</i> determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a grading permit, or Notice to Proceed with construction of that proposed MDP Facility, the proponent for that Facility shall notify the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities.</p> <p>With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys.</p> <p>Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.</p>	Ensure that notification and coordination with the Soboba Band of Luiseño Indians has occurred	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer) and Soboba Band of Luiseño Indians	NAHC	Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility
IMPACT CR 2: <i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature</i>	<p><b>MM CR 4:</b> Before the issuance of a Notice to Proceed with construction of any proposed MDP Facility, the proponent of the specific MDP Facility shall either:</p> <ul style="list-style-type: none"> <li>a) Establish to the satisfaction of the Lead Agency for the specific MDP Facility (i.e., the District, City of Moreno Valley, or Riverside County), that no excavation or earth-moving activities shall take place within soils that are identified as Pleistocene-age or older alluvium; OR</li> <li>b) Retain the services of a qualified paleontologist to review construction and grading plans and develop a paleontological monitoring plan, if necessary. Any monitoring shall be restricted to undisturbed older alluvium, which might be present below the surface. To avoid construction delays, the monitor shall be prepared to quickly salvage fossils, as they are unearthed. The monitor shall remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have the authority to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens. If the paleontologist determines that monitoring is not necessary, the paleontologist shall prepare a memo documenting such to the satisfaction of the Lead Agency.</li> </ul>	<p>Ensure that a qualified paleontologist has reviewed plans and developed a paleontological monitoring plan if excavation or earth moving activities will take place within Pleistocene-age or older alluvium.</p> <p>Ensure monitoring, if needed, occurs.</p> <p>Excavation activities will cease if needed to allow for the removal of abundant or large specimens.</p>	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer)	Lead Agency	Prior to construction

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT CR 2: <i>(Continued)</i>	<b>MM CR 5:</b> A qualified paleontologist shall be retained to evaluate any recovered paleontological specimens.  If the qualified paleontologist deems recovered resources as rare, substantial, or otherwise unique, the resources shall be prepared and stabilized for formal identification and permanent preservation.	Ensure a qualified paleontologist is retained to evaluate any recovered specimens.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
IMPACT CR 2: <i>(Continued)</i>	<b>MM CR 6:</b> Identification and curation of recovered paleontological specimens into an established accredited museum repository with permanent retrievable paleontological storage shall be required for recovered resources identified by the by the qualified paleontologist (retained via MM CR 5) as rare, substantial, or otherwise unique.	Ensure any recovered rare, substantial, or otherwise unique paleontological specimens are identified and curated.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
IMPACT CR 2: <i>(Continued)</i>	<b>MM CR 7:</b> Preparation of a report of findings with an appended itemized inventory of paleontological specimens shall be required. The submittal of the report to the applicable Lead Agency (i.e., District, Moreno Valley, Riverside County) and the curation of the specimens identified by the qualified paleontologist (retained via MM CR 5) as rare, substantial, or otherwise unique into an established, accredited museum repository would signify the completion of the mitigation program.	Ensure preparation and submittal of a report of any recovered rare, substantial, or otherwise unique paleontological specimens.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
<b>HYDROLOGY AND WATER QUALITY</b>					
IMPACT HYD 1: <i>Violate any water quality standards or waste discharge requirements</i>	<b>MM HYD 1:</b> Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion.  The erosion control plan may be prepared by the Construction Contractor or designee.  The erosion control plan shall be retained at the construction site and available for inspection upon request.	Ensure preparation and implementation of an erosion control plan with appropriate BMPs to protect against wind and water erosion for any MDP Facility for which a SWPPP is not prepared.	The Construction Superintendent and the applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	State Water Resources Control Board	Prior to construction of each MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT HYD 2: <i>Result in substantial discharges of typical storm water pollutants or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity.</i>	<p><b>MM HYD 1:</b> Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion.</p> <p>The erosion control plan may be prepared by the Construction Contractor or designee.</p> <p>The erosion control plan shall be retained at the construction site and available for inspection upon request.</p>	Ensure preparation and implementation of an erosion control plan with appropriate BMPs to protect against wind and water erosion for any MDP Facility for which a SWPPP is not prepared.	The Construction Superintendent and the applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	State Water Resources Control Board	Prior to construction of each MDP Facility
IMPACT HYD 3: <i>Substantially alter the existing drainage pattern of the site or area, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.</i>	<p><b>MM HYD 2:</b> Prior to approval of any Moreno MDP Facility, the design and plans shall demonstrate storm flows and runoff from that specific Facility will be conveyed to an adequate outlet system to the satisfaction of the Riverside County Flood Control and Water Conservation District.</p> <p>As feasible, development of the MDP Facilities shall occur in appropriate phases as to ensure conveyance of storm flows and runoff will have adequate outlets.</p>	Ensure storm flows and runoff associated with each MDP Facility will be conveyed to an adequate outlet system	Project proponent and Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	District (Design and Construction Division)	Prior to approval of each MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>NOISE</b>					
IMPACT NOI 1: <i>Noise associated with construction equipment may exceed the maximum noise levels for residential and commercial land uses.</i>	<b>MM NOI 1:</b> To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of 7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays.  These time limits do not apply to emergency maintenance.	Ensure construction does not occur outside of the described construction hours	Construction Superintendent and the Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	City of Moreno Valley	During grading and construction of all MDP Facilities
IMPACT NOI 1 <i>(Continued)</i>	<b>MM NOI 2:</b> To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer’s specifications to the satisfaction of the District or Moreno Valley, as appropriate.  Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.	Ensure the construction contractor maintains construction equipment in proper tune per manufacturers’ specifications.  Periodically check maintenance records and design specification data.	Construction Superintendent and the Applicable Lead Agency (, City of Moreno Valley, or Riverside County)	Lead Agency	During construction of any MDP Facility
IMPACT NOI 1 <i>(Continued)</i>	<b>MM NOI 3:</b> To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors’ roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction.  The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.	Ensure that the described notices are provided to all property addresses within 200 feet of the construction footprint of any MDP Facility that is not constructed as part of a private development project	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	No less than seven days prior to construction of any MDP Facility



Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT NOI 2: <i>Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels</i>	<b>MM NOI 1</b> (see above) <b>MM NOI 2</b> (see above) <b>MM NOI 3</b> (see above)	See above	See above	See above	See above

**Mitigation Monitoring and Reporting Program**

Moreno MDP Revision No. 2

(Resolution No. F2015-11)

**1. AIR QUALITY AND GREENHOUSE GAS EMISSIONS**

For construction of MDP storm drain facilities (or any activity of similar magnitude), no mitigation over and above adherence to SCAQMD regulations and the District’s standard regulatory procedures is required.

Construction and operation of the Moreno MDP Facilities will not generate greenhouse gas (GHG), either directly or indirectly, that will cause a significant impact on the environment nor will it conflict with or obstruct implementation of any future plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Therefore, GHG emissions are considered less than significant and no mitigation is required.

In order to reduce VOC, NO<sub>x</sub>, and PM<sub>10</sub> emissions from construction of MDP channels and excavation of MDP basins:

**MM AIR 1:** For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers’ specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction. Compliance with this measure shall be subject to periodic inspections by the Lead Agency, or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).

**MM AIR 2:** For channel and basin Facilities, to reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail, safe detours to prevent traffic congestion to the best of the project’s ability, and provide temporary traffic control measures during construction activities that will ensure smooth traffic flows. Pursuant to CCR Title 13 §2449(d)(3), construction equipment and truck idling times shall be prohibited in excess of five minutes on site. To reduce traffic congestion, and therefore NO<sub>x</sub>, the plan shall include, as necessary, appropriate, and practicable, the following: dedicated turn lanes for movement of construction trucks and equipment on and off site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow. This measure applies to all projects, unless the Lead Agency determines that a traffic control plan is not warranted or feasible due to no impact on local roadways.

**MM AIR 3:** For channel and basin Facilities, to minimize impacts related to particulate matter (PM-10 and PM-2.5) generation from construction activities, consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site. The contractor shall be required to comply

with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that may include watering, stabilized construction access to reduce tracking of mud or dirt onto public roads, covering trucks hauling loose materials off-site<sup>1</sup>, and street sweeping.

**MM AIR 4:** For channel and basin Facilities, to reduce construction vehicle emissions contractor specification packages for Facility construction phases shall require construction equipment to meet EPA standards according to the following, unless a Facility (or Facilities)-specific air quality analysis is conducted at the time are actually designed and proposed for construction that determines impacts would be less than significant by adhering to the most current federal, state and local (e.g., (SCAQMD) regulations, and the District’s standard regulatory practices:

- The contracting company’s fleet of off-road diesel-powered construction equipment greater than 100 horsepower shall meet Tier 3 off-road emissions standards or better.
- Any emissions control device used by the contractor shall achieve Level 3 emissions reductions of no less than 85 percent for particulate matter, as specified by CARB regulations.
- A copy of the fleet’s tier compliance documentation, and CARB or AQMD operating permit shall be available to the Lead Agency for such Facility (i.e., Moreno Valley, Riverside County, or District) at the time of mobilization of each applicable unit of equipment.

With implementation of the above mitigation measures, PM<sub>10</sub> emissions will be reduced to less than significant. Because more than one construction activity can occur at the same time, even with implementation of the above mitigation measures construction impacts will remain significant and unavoidable due to NO<sub>x</sub> emissions. Cumulative impacts to VOC and NO<sub>x</sub>, which are non-attainment in the region under both state and federal standards, will be significant and unavoidable after mitigation.

## 2. BIOLOGICAL RESOURCES

The following mitigation measures shall be implemented to reduce impacts related to biological resources to less than significant levels:

**MM BIO 1:** Prior to construction of any individual MDP Facility, a Facility-specific general biological resources assessment shall be conducted by a qualified biologist. The general biological resource assessments shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, an identification of: sensitive plant or animal species that occur or may occur on site, other protected natural resources including sensitive vegetation communities, streams, rivers, vernal pools, and wetlands. The assessments shall include recommendations for subsequent surveys and mitigation measures, if needed. Since the Project is located within the Western Riverside County MSHCP Plan Area, the general biological assessments shall also include a MSHCP

<sup>1</sup> Covering trucks hauling loose materials achieves a 91 percent reduction in PM-10 per SCAQMD Mitigation Measures and Control Efficiencies for Fugitive Dust – Table XI-A: Construction & Demolition, available at [http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM\\_fugitive.html](http://www.aqmd.gov/ceqa/handbook/mitigation/fugitive/MM_fugitive.html).

Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP. For MDP Facilities located within a Criteria Cell, the assessments may be included as part of the Joint Project Review application. If an MDP Facility is being constructed as part of a private development project, the general biological resource assessment prepared for the development project may be utilized, at the discretion of Moreno Valley and the District, in lieu of preparing a separate document specifically for the MDP Facility.

**MM BIO 2:** In order to avoid impacts to burrowing owls and to comply with the MSHCP, burrowing owl habitat assessments for individual MDP Facilities will be conducted by a qualified biologist following the MSHCP Burrowing Owl Survey Instructions. The burrowing owl habitat assessment may be conducted as part of the general biological resources assessment in *MM BIO 1*. If the result of the habitat assessment indicates that suitable habitat is present, including suitable burrows, focused burrowing owl surveys shall be conducted for those areas with suitable habitat pursuant to Step II, Part B of the MSHCP Survey Instructions. If owls are found in the impact area of an MDP Facility, Species Objective 5 from the MSHCP shall be implemented. If avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.

**MM BIO 3:** All future MDP facilities within the mapped survey area for Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities. If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. Take of active nests shall be avoided. The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service.

**MM BIO 4:** Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP. In conjunction with a delineation of jurisdictional waters (see MM BIO 8), MSHCP riparian/ riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in MM BIO 1. For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint. If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.

**MM BIO 5:** Within areas of suitable riparian habitat, a qualified biologist shall conduct protocol presence/absence surveys for the least Bell's vireo following USFWS protocols. If least Bell's vireos are detected, then 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo, if feasible. If conservation is infeasible, then the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 6:** A qualified biologist will assess individual project sites for habitat with the potential to support listed fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1. If potentially suitable habitat is identified, a qualified biologist will conduct presence/absence surveys for listed fairy shrimp following accepted protocols. For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of vernal pools and listed fairy shrimp habitat. If listed fairy shrimp are detected and avoidance is not feasible, then (1) long-term conservation shall be implemented pursuant to Appendix E of the MSHCP if feasible; or (2) the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 7:** A qualified biologist will conduct a habitat assessment for individual projects located within the MSHCP Los Angeles pocket mouse survey area. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1. If suitable habitat is present, the biologist will conduct a presence/absence trapping study. If a Los Angeles pocket mouse (LAPM) is detected, then 90 percent of those portions of the Facility footprint that provide for long-term conservation value for LAPM shall be avoided until it is demonstrated that the MSHCP conservation goals for LAPM have been met. If avoidance is not feasible the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options. DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period.

**MM BIO 8:** Prior to construction, individual projects shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters. Project-specific delineations may be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction. These delineations may be conducted as part of the general biological resources assessment in MM BIO 1. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency. Authorizations may include, but are not limited to, a Section 404 permit from the ACOE, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW. Project-specific impacts to jurisdictional waters shall be mitigated at the Facility level through the permitting process in a manner approved by the ACOE, CDFW, and the RWQCB, where applicable.

**MM BIO 9:** In order to comply with the MBTA and/or California Fish and Game Code, site-preparation activities (removal of trees and vegetation) shall be avoided, to the greatest extent possible, during the native and migratory bird species nesting season (generally February 1 through August 31). If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to disturbance. Surveys shall be conducted no more than thirty (30) days prior to scheduled removals, and repeated if necessary. If active nests are identified, the biologist will recommend buffers around the vegetation containing the active nests. The vegetation containing the active nest shall not be removed, and no grading shall occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest). If clearing is not conducted within thirty (30) days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.

### 3. CULTURAL RESOURCES

The following mitigation measures would reduce potential impacts to cultural resources below the level of significance.

**MM CR 1:** At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources. The Lead Agency shall consider applicable data and analyses, such as the *Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California* (CRM TECH, January 31, 2012), *Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas* dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes. If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources.

**MM CR 2:** Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint. A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s). If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State *CEQA Guidelines*), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented. Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery. Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.

**MM CR 3:** If the Facility-specific assessment required by MM CR 1 determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a grading permit, or Notice to Proceed with construction of that proposed MDP Facility, the proponent for that Facility shall

notify the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities. With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys. Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.

**MM CR 4:** Before the issuance of a Notice to Proceed with construction of any proposed MDP Facility, the proponent of the specific MDP Facility shall either:

- Establish to the satisfaction of the Lead Agency for the specific MDP Facility (i.e., the District, Moreno Valley, or Riverside County), that no excavation or earth-moving activities shall take place within soils that are identified as Pleistocene-age or older alluvium; or
- Retain the services of a qualified paleontologist to review construction and grading plans and develop a paleontological monitoring plan, if necessary. Any monitoring shall be restricted to undisturbed older alluvium, which might be present below the surface. To avoid construction delays, the monitor shall be prepared to quickly salvage fossils, as they are unearthed. The monitor shall remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have the authority to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens. If the paleontologist determines that monitoring is not necessary, the paleontologist shall prepare a memo documenting such to the satisfaction of the Lead Agency.

**MM CR 5:** A qualified paleontologist shall be retained to evaluate any recovered paleontological specimens. If the qualified paleontologist deems recovered resources as rare, substantial, or otherwise, unique, the resources shall be prepared and stabilized for formal identification and permanent preservation.

**MM CR 6:** Identification and curation of recovered paleontological specimens into an established accredited museum repository with permanent retrievable paleontological storage shall be required for recovered resources identified by the qualified paleontologist (retained via *MM CR 5*) as rare, substantial, or otherwise, unique.

**MM CR 7:** Preparation of a report of findings with an appended itemized inventory of paleontological specimens shall be required. The submittal of the report to the applicable Lead Agency (i.e., District, Moreno Valley, Riverside County) and the curation of specimens identified by the qualified paleontologist (retained via *MM CR 5*) as rare, substantial, or otherwise, unique into an established, accredited museum repository would signify the completion of the mitigation program.

#### 4. HYDROLOGY AND WATER QUALITY

The following mitigation measures would reduce potential impacts to hydrology and water quality to less than significant.

**MM HYD 1:** Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion. The erosion control plan may be prepared by the Construction Contractor or designee. The erosion control plan shall be retained at the construction site and available for inspection upon request.

**MM HYD 2:** Prior to approval of any Moreno MDP Facility, the design and plans shall demonstrate storm flows and runoff from that specific Facility will be conveyed to an adequate outlet system to the satisfaction of the Riverside County Flood Control and Water Conservation District. As feasible, development of the MDP Facilities shall occur in appropriate phases as to ensure conveyance of storm flows and runoff will have adequate outlets.

#### 5. NOISE

Noise generated from operation of the MDP Facilities will be less than significant and no mitigation is required. However, the following mitigation measures would reduce potential construction noise impacts to less than significant.

**MM NOI 1:** To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of 7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.

**MM NOI 2:** To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer's specifications to the satisfaction of the District or Moreno Valley, as appropriate. Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.

**MM NOI 3:** To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors' roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.



## MITIGATION MONITORING AND REPORTING PROGRAM

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>AIR QUALITY/GREENHOUSE GAS EMISSIONS</b>					
<p>IMPACT AIR 1: <i>Violate any air quality standard or contribute substantially to an existing or projected air quality violation.</i></p>	<p><b>MM AIR 1:</b> For channel and basin Facilities, during construction, ozone precursor emissions from all vehicles and construction equipment shall be controlled by maintaining equipment engines in good condition, in proper tune per manufacturers' specifications. Equipment maintenance records and equipment design specification data sheets shall be kept on site during construction.</p> <p>Compliance with this measure shall be subject to periodic inspections by the Lead Agency or by means of another form of documentation as approved by the Lead Agency (i.e., Moreno Valley, Riverside County, or District).</p>	<p>Ensure the construction contractor maintains construction equipment in proper tune per manufacturers' specifications.</p> <p>Periodically check maintenance records and design specification data.</p>	<p>Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)</p>	<p>South Coast Air Quality Management District</p>	<p>During construction of any MDP Facility</p>
<p>IMPACT AIR 1: <i>(Continued)</i></p>	<p><b>MM AIR 2:</b> For channel and basin Facilities, to reduce construction vehicle (truck) idling while waiting to enter/exit the site, prior to issuance of grading permits, the contractor shall submit a traffic control plan that will describe in detail, safe detours to prevent traffic congestion to the best of the project's ability, and provide temporary traffic control measures during construction activities that will ensure smooth traffic flows. Pursuant to CCR Title 13 §2449(d)(3), construction equipment and truck idling times shall be prohibited in excess of five minutes on site.</p> <p>To reduce traffic congestion, and therefore NO<sub>x</sub>, the plan shall include, as necessary, appropriate, and practicable, the following: dedicated turn lanes for movement of construction trucks and equipment on and off site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hours, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.</p> <p>This measure applies to all projects, unless the Lead Agency determines that a traffic control plan is not warranted or feasible due to no impact on local roadways.</p>	<p>Prepare and submit of a traffic control plan unless the applicable Lead Agency determines one is not needed for a specific MDP Facility.</p>	<p>Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)</p>	<p>South Coast Air Quality Management District</p>	<p>Preparation of traffic control plan, if needed, prior to construction.</p> <p>Implementation of traffic control plan during construction.</p>

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT AIR 1: <i>(Continued)</i>	<b>MM AIR 3:</b> For channel and basin Facilities, to minimize impacts related to particulate matter (PM-10 and PM-2.5) generation from construction activities, consistent with SCAQMD Rule 403, it is required that fugitive dust generated by grading and construction activities be kept to a minimum with a goal of retaining dust on the site. The contractor shall be required to comply with the applicable provisions of SCAQMD Rule 403 and implement appropriate fugitive dust control measures that may include watering, stabilized construction access to reduce tracking of mud or dirt onto public roads covering trucks hauling loose materials off-site, and street sweeping.	Ensure construction contractors comply with South Coast Air Quality Management District Rule 403	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	During construction of each MDP channel and basin.
IMPACT AIR 1: <i>(Continued)</i>	<b>MM AIR 4:</b> For channel and basin Facilities, to reduce construction vehicle emissions contractor specification packages for Facility construction phases shall require construction equipment to meet EPA standards according to the following, unless a Facility (or Facilities)-specific air quality analysis is conducted at the time are actually designed and proposed for construction that determines impacts would be less than significant by adhering to the most current federal, state and local (e.g., SCAQMD) regulations, and the District’s standard regulatory practices: <ul style="list-style-type: none"> <li>The contracting company’s fleet of off-road diesel-powered construction equipment greater than 100 horsepower (HP) shall meet Tier 3 off-road emissions standards or better.</li> <li>Any emissions control device used by the contractor shall achieve Level 3 emissions of no less than 85 percent for particulate matter, as specified by CARB regulations.</li> <li>A copy of the fleet’s tier compliance documentation, and CARB or AQMD operating permit shall be available to the Lead Agency for such Facility (i.e., Moreno Valley, Riverside County, or District) at the time of mobilization of each applicable unit of equipment.</li> </ul>	Verify that all off-road diesel powered equipment greater than 100 HP. used for construction of channel and basin Facilities shall meet or exceed Tier 3 off-road emissions standards, OR Verify a Facility or Facilities specific air quality analysis has been completed and all impacts would be less than significant through adherence to current regulations and the District’s standard regulatory practices.	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	South Coast Air Quality Management District	Prior to construction of each channel and basin Facility
IMPACT AIR 2: <i>Exposure of sensitive receptors to substantial pollutant concentrations.</i>	<b>MM AIR 1</b> through <b>MM AIR 4</b> (see above)	See above	See above	See above	See above

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT AIR 3: <i>Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment.</i>	MM AIR 1 through MM AIR 4 (see above)	See above	See above	See above	See above
<b>BIOLOGICAL RESOURCES</b>					
IMPACT BIO 1: <i>Have an adverse effect on sensitive or special-status species.</i>	<p><b>MM BIO 1:</b> Prior to construction of any individual MDP Facility, a Facility-specific general biological resources assessment shall be conducted by a qualified biologist.</p> <p>The general biological resource assessments shall include project location, project description, regulatory context, methods for field surveys including weather, dates, and time of surveys, an identification of: sensitive plant or animal species that occur or may occur on site, other protected natural resources including sensitive vegetation communities, streams, rivers, vernal pools, and wetlands.</p> <p>The assessments shall include recommendations for subsequent surveys and mitigation measures, if needed.</p> <p>Since the Project is located within the Western Riverside County MSHCP Plan Area, the general biological assessments shall also include a MSHCP Consistency Analysis and Findings pursuant to Sections 6.1.2, 6.1.3, 6.1.4, and 6.3.2 of the MSHCP.</p> <p>For MDP Facilities located within a Criteria Cell, the assessments may be included as part of the Joint Project Review application.</p> <p>If an MDP Facility is being constructed as part of a private development project, the general biological resource assessment prepared for the development project may be utilized, at the discretion of Moreno Valley and the District, in lieu of preparing a separate document specifically for the MDP Facility.</p>	Conduct Facility-specific general biological resources assessments, OR utilize a general biological resource assessment prepared for a development project that includes an MDP Facility	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	Western Riverside County Regional Conservation Authority (RCA) CDFW	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: (Continued)	<p><b>MM BIO 2:</b> In order to avoid impacts to burrowing owls and to comply with the MSHCP, burrowing owl habitat assessments for individual MDP Facilities will be conducted by a qualified biologist following the MSHCP Burrowing Owl Survey Instructions. The burrowing owl habitat assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If the result of the habitat assessment indicates that suitable habitat is present, including suitable burrows, focused burrowing owl surveys shall be conducted for those areas with suitable habitat pursuant to Step II, Part B of the MSHCP Survey Instructions.</p> <p>If owls are found in the impact area of an MDP Facility, Species Objective 5 from the MSHCP shall be implemented. If avoidance is not feasible, then individual projects will require the approval of a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options.</p>	<p>If suitable habitat is present, conduct Facility-specific burrowing owl habitat assessments and focused burrowing owl surveys.</p> <p>Prepare and obtain approval of a DBESP if avoidance of burrowing owl is not feasible.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility
IMPACT BIO 1: (Continued)	<p><b>MM BIO 3:</b> All future MDP facilities within the mapped survey area for Burrowing owls shall have a qualified biologist conduct a pre-construction survey for resident burrowing owls within 30 days prior to commencement of grading and construction activities.</p> <p>If ground-disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls.</p> <p>Take of active nests shall be avoided.</p> <p>The pre-construction survey and any relocation activity will be conducted following accepted protocols and in coordination with the Regional Conservation Authority (RCA), California Department of Fish and Wildlife (CDFW), and U.S. Fish and Wildlife Service (USFWS).</p>	<p>Within the mapped survey area for burrowing owls, conduct pre-construction burrowing owl survey for MDP Facilities.</p> <p>If owls are determined to be present, prepare and obtain approval of a DBESP.</p>	Construction Superintendent and the Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if relocation is required;	Within 30 days prior to construction of each MDP Facility within the survey area; and repeated if ground disturbance is delayed more than 30 days after the original survey.

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 4:</b> Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP.</p> <p>In conjunction with a delineation of jurisdictional waters (see MM BIO 8), MSHCP riparian/riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint.</p> <p>If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.</p>	<p>Map MSHCP riparian/riverine areas and vernal pools for individual MDP Facilities.</p> <p>If 100 percent avoidance is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility.
IMPACT BIO 1: <i>(Continued)</i>	<p><b>MM BIO 5:</b> Within areas of suitable riparian habitat, a qualified biologist shall conduct protocol presence/absence surveys for the least Bell's vireo following USFWS protocols.</p> <p>If least Bell's vireos are detected, then 90 percent of the occupied portions of the property that provide for long-term conservation value for the vireo shall be conserved in a manner consistent with conservation of the vireo, if feasible.</p> <p>If conservation is infeasible, then the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>For MDP Facilities with areas of suitable riparian habitat conduct surveys for the least Bell's vireo.</p> <p>If avoidance of 90 percent of the occupied portions of the Facility footprint that is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 1: (Continued)	<p><b>MM BIO 6:</b> A qualified biologist will assess individual project sites for habitat with the potential to support listed fairy shrimp, defined as vernal pools, stock ponds, ephemeral ponds, or other human-modified depressions. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If potentially suitable habitat is identified, a qualified biologist will conduct presence/absence surveys for listed fairy shrimp following accepted protocols.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of vernal pools and listed fairy shrimp habitat.</p> <p>If listed fairy shrimp are detected and avoidance is not feasible, then (1) long-term conservation shall be implemented pursuant to Appendix E of the MSHCP if feasible; or (2) the loss of habitat must be mitigated for and approved through DBESP analyses, which must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>Assess MDP Facilities footprints for listed fairy shrimp habitat.</p> <p>For MDP Facilities containing habitat with the potential to support listed fairy shrimp.</p> <p>If avoidance of 100 percent of such habitat is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS, if a DBESP is required.	Prior to construction of any MDP Facility
IMPACT BIO 1: (Continued)	<p><b>MM BIO 7:</b> A qualified biologist will conduct a habitat assessment for individual projects located within the MSHCP Los Angeles pocket mouse survey area. This assessment may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>If suitable habitat is present, the biologist will conduct a presence/absence trapping study.</p> <p>If a Los Angeles pocket mouse (LAPM) is detected, then 90 percent of those portions of the Facility footprint that provide for long-term conservation value for LAPM shall be avoided until it is demonstrated that the MSHCP conservation goals for LAPM have been met.</p> <p>If avoidance is not feasible, the loss of habitat must be mitigated for and approved through a Determination of Biologically Equivalent or Superior Preservation (DBESP) pursuant to the requirements of Section 6.3.2 of the MSHCP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, relocation and/or payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options. DBESP analyses must be submitted to the USFWS and CDFW for a 60-day review period.</p>	<p>Assess MDP Facilities' footprints within the Los Angeles pocket mouse (LAPM) survey area.</p> <p>For MDP Facilities with areas of suitable habitat, conduct surveys for the LAPM, if avoidance of 90 percent of the portions of the Facility footprint that provide long term conservation value is not feasible, prepare and obtain approval of a DBESP</p>	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS (If a DBESP is required.)	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT BIO 2: <i>Adversely Affect Sensitive Vegetation Communities Including Riparian Habitat</i>	<p><b>MM BIO 4:</b> Construction of each future MDP Facility shall be compliant with Section 6.1.2 of the MSHCP.</p> <p>In conjunction with a delineation of jurisdictional waters (see MM BIO 8), MSHCP riparian/riverine areas and vernal pools will be mapped for individual projects. This mapping may be conducted as part of the general biological resources assessment in MM BIO 1.</p> <p>For areas not excluded as artificially created, the MSHCP requires 100 percent avoidance of riparian/riverine areas. If feasible, individual Facilities will avoid all MSHCP riparian/riverine areas and vernal pools mapped within such Facilities' footprint.</p> <p>If avoidance is not feasible, then individual MDP Facilities will require the approval of a DBESP including appropriate mitigation, i.e., on-site or off-site enhancement, restoration, establishment (creation), preservation, payment into habitat mitigation banks or in lieu fee programs, or a combination of one or more of these options, to offset the loss of functions and values as they pertain to the MSHCP.</p>	<p>Map MSHCP riparian/riverine areas and vernal pools for individual MDP Facilities.</p> <p>If 100 percent avoidance is not feasible, prepare and obtain approval of a DBESP.</p>	Applicable Lead Agency (e.g., District, City of Moreno Valley, or Riverside County)	RCA, CDFW, and USFWS (If a DBESP is required.)	Prior to construction of any MDP Facility.
IMPACT BIO 2: <i>(Continued)</i>	<p><b>MM BIO 8:</b> Prior to construction, individual projects shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters.</p> <p>Project-specific delineations may be required to determine the limits of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) jurisdiction.</p> <p>These delineations may be conducted as part of the general biological resources assessment in MM BIO 1. Impacts to jurisdictional waters will require authorization by the corresponding regulatory agency.</p> <p>Authorizations may include, but are not limited to, a Section 404 permit from the ACOE, a Section 401 Water Quality Certification from the RWQCB, and a Section 1602 Streambed Alteration Agreement from CDFW.</p> <p>Project-specific impacts to jurisdictional waters shall be mitigated at the Facility level through the permitting process in a manner approved by the ACOE, CDFW, and the RWQCB, where applicable.</p>	For MDP Facilities that will affect jurisdictional waters, prepare Facility-specific jurisdictional delineations and obtain regulatory permits if necessary	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	ACOE, RWQCB, and CDFW (if permits are required)	Prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<p>IMPACT BIO 3: <i>Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites</i></p>	<p><b>MM BIO 9:</b> In order to comply with the MBTA and/or California Fish and Game Code, site-preparation activities (removal of trees and vegetation) shall be avoided, to the greatest extent possible, during the native and migratory bird species nesting season (generally February 1 through August 31).</p> <p>If vegetation must be removed during the nesting season, a qualified biologist shall conduct a nesting bird survey of potentially suitable nesting vegetation prior to disturbance.</p> <p>Surveys shall be conducted no more than thirty (30) days prior to scheduled removals, and repeated if necessary.</p> <p>If active nests are identified, the biologist will recommend buffers around the vegetation containing the active nests. The vegetation containing the active nest shall not be removed, and no grading shall occur within the established buffer, until a qualified biologist has determined that the nest is no longer active (i.e., the juveniles are surviving independent from the nest).</p> <p>If clearing is not conducted within thirty (30) days of a negative survey, the nesting survey must be repeated to confirm the absence of nesting birds.</p>	<p>Pre-construction nesting bird survey</p>	<p>Construction Superintendent and the Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)</p>	<p>CDFW</p>	<p>Prior to any vegetation removal between February 1 and August 31</p>
<p>IMPACT BIO 4: <i>Conflict with Adopted Habitat Conservation plan, Natural Community Plan, or Other Approved Conservation Plan.</i></p>	<p><b>MM BIO 1 through MM BIO 8</b> (see above)</p>	<p>See above</p>	<p>See above</p>	<p>See above</p>	<p>See above</p>



Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>CULTURAL RESOURCES</b>					
IMPACT CR 1: <i>Create a substantial adverse change in the significance of an historical or archaeological resource as defined in Section 15064.5.</i>	<p><b>MM CR 1:</b> At the project level, prior to the issuance of a grading permit or Notice to Proceed with construction of any MDP Facility, the applicable Lead Agency (the District, Riverside County, or City of Moreno Valley) shall evaluate each proposed MDP Facility for potential impacts to cultural resources.</p> <p>The Lead Agency shall consider applicable data and analysis, such as the <i>Phase I Archaeological Assessment, Moreno Master Drainage Plan Revision, City of Moreno Valley, Riverside County, California</i> (CRM TECH, January 31, 2012), <i>Map of Soboba Band of Luiseño Indians Potentially Sensitive Areas</i> dated September 10, 2014, the City of Moreno Valley General Plan, and other relevant record searches, technical studies, and evidence provided by local Tribes.</p> <p>If needed, the Lead Agency shall require additional CEQA analysis to evaluate potential impacts to cultural resources.</p>	<p>Ensure that each MDP Facility has been evaluated for potential impacts to cultural resources.</p> <p>Conduct additional CEQA-level cultural resources analysis, if necessary.</p>	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	NAHC	Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility
IMPACT CR 1: <i>(Continued)</i>	<p><b>MM CR 2:</b> Should any cultural and/or archaeological resources be discovered during construction of any proposed MDP Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject MDP Facility footprint.</p> <p>A qualified archaeologist shall be retained by the proponent (or designee) of such MDP Facility to determine the significance of the resource(s).</p> <p>If the find is determined to be a historical or unique archaeological resource, as defined in Section 15064.5 of the California Code of Regulations (State <i>CEQA Guidelines</i>), avoidance or other appropriate measures as recommended by the archaeologist shall be implemented.</p> <p>Any artifacts collected or recovered shall be cleaned, identified, catalogued, analyzed, and prepared for curation at an appropriate repository with permanent retrievable storage to allow for additional research in the future.</p> <p>Site records or site record updates (as appropriate) shall be prepared and submitted to the Eastern Information Center as a permanent record of the discovery.</p> <p>Treatment and disposition of any discoveries will be determined on a case-by-case basis, in consultation with the Soboba Band of Luiseño Indians.</p>	<p>Excavation activities will cease if potential Archaeological resources are encountered.</p> <p>A qualified archaeologist will be retained to evaluate the resources.</p> <p>Ensure consultation with the Soboba Band of Luiseño Indians occurs if any resources are discovered.</p>	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer) and Soboba Band of Luiseño Indians	NAHC	Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT CR 1: <i>(Continued)</i>	<p><b>MM CR 3:</b> If the Facility-specific assessment required by <i>MM CR 1</i> determines there is a moderate to high potential for archaeological and/or cultural resources to occur along the alignment or area of disturbance, then prior to the issuance of a grading permit, or Notice to Proceed with construction of that proposed MDP Facility, the proponent for that Facility shall notify the Soboba Band of Luiseño Indians to discuss if a monitor is needed to oversee excavation and/or ground disturbing construction activities.</p> <p>With written permission from the Lead Agency (i.e., District, City of Moreno Valley, or Riverside County), tribal monitors may be allowed to monitor grading, excavation, and ground disturbing activities associated with that MDP Facility, including further surveys.</p> <p>Any costs associated with the tribal monitoring shall be the responsibility of the monitoring Tribe, unless an executed agreement between the Tribe and project proponent provides other payment arrangements.</p>	Ensure that notification and coordination with the Soboba Band of Luiseño Indians has occurred	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer) and Soboba Band of Luiseño Indians	NAHC	Prior to issuance of a grading permit or Notice to Proceed with construction for each MDP Facility
IMPACT CR 2: <i>Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature</i>	<p><b>MM CR 4:</b> Before the issuance of a Notice to Proceed with construction of any proposed MDP Facility, the proponent of the specific MDP Facility shall either:</p> <ol style="list-style-type: none"> <li>Establish to the satisfaction of the Lead Agency for the specific MDP Facility (i.e., the District, City of Moreno Valley, or Riverside County), that no excavation or earth-moving activities shall take place within soils that are identified as Pleistocene-age or older alluvium; OR</li> <li>Retain the services of a qualified paleontologist to review construction and grading plans and develop a paleontological monitoring plan, if necessary. Any monitoring shall be restricted to undisturbed older alluvium, which might be present below the surface. To avoid construction delays, the monitor shall be prepared to quickly salvage fossils, as they are unearthed. The monitor shall remove samples of sediments that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor shall have the authority to temporarily halt or divert grading equipment to allow for the removal of abundant or large specimens. If the paleontologist determines that monitoring is not necessary, the paleontologist shall prepare a memo documenting such to the satisfaction of the Lead Agency.</li> </ol>	Ensure that a qualified paleontologist has reviewed plans and developed a paleontological monitoring plan if excavation or earth moving activities will take place within Pleistocene-age or older alluvium.  Ensure monitoring, if needed, occurs.  Excavation activities will cease if needed to allow for the removal of abundant or large specimens.	Proponent of each MDP Facility (District, City of Moreno Valley, Riverside County, or private developer)	Lead Agency	Prior to construction

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
IMPACT CR 2: (Continued)	<b>MM CR 5:</b> A qualified paleontologist shall be retained to evaluate any recovered paleontological specimens. If the qualified paleontologist deems recovered resources as rare, substantial, or otherwise unique, the resources shall be prepared and stabilized for formal identification and permanent preservation.	Ensure a qualified paleontologist is retained to evaluate any recovered specimens.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
IMPACT CR 2: (Continued)	<b>MM CR 6:</b> Identification and curation of recovered paleontological specimens into an established accredited museum repository with permanent retrievable paleontological storage shall be required for recovered resources identified by the by the qualified paleontologist (retained via MM CR 5) as rare, substantial, or otherwise unique.	Ensure any recovered rare, substantial, or otherwise unique paleontological specimens are identified and curated.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
IMPACT CR 2: (Continued)	<b>MM CR 7:</b> Preparation of a report of findings with an appended itemized inventory of paleontological specimens shall be required. The submittal of the report to the applicable Lead Agency (i.e., District, Moreno Valley, Riverside County) and the curation of the specimens identified by the qualified paleontologist (retained via MM CR 5) as rare, substantial, or otherwise unique into an established, accredited museum repository would signify the completion of the mitigation program.	Ensure preparation and submittal of a report of any recovered rare, substantial, or otherwise unique paleontological specimens.	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	During excavation activities
<b>HYDROLOGY AND WATER QUALITY</b>					
IMPACT HYD 1: <i>Violate any water quality standards or waste discharge requirements</i>	<b>MM HYD 1:</b> Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion. The erosion control plan may be prepared by the Construction Contractor or designee. The erosion control plan shall be retained at the construction site and available for inspection upon request.	Ensure preparation and implementation of an erosion control plan with appropriate BMPs to protect against wind and water erosion for any MDP Facility for which a SWPPP is not prepared.	The Construction Superintendent and the applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	State Water Resources Control Board	Prior to construction of each MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<p>IMPACT HYD 2: <i>Result in substantial discharges of typical storm water pollutants or substantial changes to surface water quality including, but not limited to, temperature, dissolved oxygen, pH, or turbidity.</i></p>	<p><b>MM HYD 1:</b> Prior to the construction of any Moreno MDP Facility that does not require preparation of a site-specific SWPPP, an erosion control plan shall be prepared that identifies erosion control BMPs, such as soils binders, mulching, permanent seeding, sodding, or other BMPs which will provide adequate protection against wind and water erosion.</p> <p>The erosion control plan may be prepared by the Construction Contractor or designee.</p> <p>The erosion control plan shall be retained at the construction site and available for inspection upon request.</p>	<p>Ensure preparation and implementation of an erosion control plan with appropriate BMPs to protect against wind and water erosion for any MDP Facility for which a SWPPP is not prepared.</p>	<p>The Construction Superintendent and the applicable Lead Agency (District, City of Moreno Valley, or Riverside County)</p>	<p>State Water Resources Control Board</p>	<p>Prior to construction of each MDP Facility</p>
<p>IMPACT HYD 3: <i>Substantially alter the existing drainage pattern of the site or area, or substantially increasing the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.</i></p>	<p><b>MM HYD 2:</b> Prior to approval of any Moreno MDP Facility, the design and plans shall demonstrate storm flows and runoff from that specific Facility will be conveyed to an adequate outlet system to the satisfaction of the Riverside County Flood Control and Water Conservation District.</p> <p>As feasible, development of the MDP Facilities shall occur in appropriate phases as to ensure conveyance of storm flows and runoff will have adequate outlets.</p>	<p>Ensure storm flows and runoff associated with each MDP Facility will be conveyed to an adequate outlet system</p>	<p>Project proponent and Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)</p>	<p>District (Design and Construction Division)</p>	<p>Prior to approval of each MDP Facility</p>

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<b>NOISE</b>					
IMPACT NOI 1: <i>Noise associated with construction equipment may exceed the maximum noise levels for residential and commercial land uses.</i>	<b>MM NOI 1:</b> To minimize the construction noise exposure and prevent construction-related noise from disturbing sensitive receivers within proximity to the Project, construction of the MDP Facilities shall be in compliance with (a) Moreno Valley Municipal Code Section 8.21.050(O), which limits grading activities to the hours of 7:00 a.m. to 6:00 p.m. Monday through Friday, and from 8:00 a.m. to 4:00 p.m. on weekends and holidays and Moreno Valley Municipal Code Section 11.80.030(D)(7), which limits other construction activities, as well as operational and maintenance activities, to the hours of 7:00 a.m. to 8:00 p.m. on weekdays and 7:00 a.m. to 8:00 p.m. on weekends and holidays. These time limits do not apply to emergency maintenance.	Ensure construction does not occur outside of the described construction hours	Construction Superintendent and the Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	City of Moreno Valley	During grading and construction of all MDP Facilities
IMPACT NOI 1 <i>(Continued)</i>	<b>MM NOI 2:</b> To minimize noise impacts resulting from poorly tuned or improperly modified vehicles and construction equipment, all vehicles and construction equipment shall maintain equipment engines in good condition and in proper tune per manufacturer's specifications to the satisfaction of the District or Moreno Valley, as appropriate. Equipment maintenance records and equipment design specification data sheets shall be available for review upon request.	Ensure the construction contractor maintains construction equipment in proper tune per manufacturers' specifications. Periodically check maintenance records and design specification data.	Construction Superintendent and the Applicable Lead Agency (, City of Moreno Valley, or Riverside County)	Lead Agency	During construction of any MDP Facility
IMPACT NOI 1 <i>(Continued)</i>	<b>MM NOI 3:</b> To inform potential sensitive receivers of the pending construction of an MDP Facility or Facilities, the proponent of any MDP Facility that is not constructed as part of a private development project, shall give written notification to all property addresses, as shown on the latest Riverside County Assessors' roll within 200 feet of the construction footprint no less than 7 days prior to the start of construction. The written notification shall include a tentative construction schedule and contact information for use by the public if specific noise issues arise.	Ensure that the described notices are provided to all property addresses within 200 feet of the construction footprint of any MDP Facility that is not constructed as part of a private development project	Applicable Lead Agency (District, City of Moreno Valley, or Riverside County)	Lead Agency	No less than seven days prior to construction of any MDP Facility

Potential Impact	Mitigation Measure	Action(s)	Implementation Responsibility	Governing Agency	Timing
<p>IMPACT NOI 2:  <i>Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels</i></p>	<p><b>MM NOI 1</b> (see above)  <b>MM NOI 2</b> (see above)  <b>MM NOI 3</b> (see above)</p>	See above	See above	See above	See above



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Jane Halstead, City Clerk

**AGENDA DATE:** October 13, 2015

**TITLE:** APPOINTMENTS TO THE LIBRARY COMMISSION AND THE RECREATIONAL TRAILS BOARD

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### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Appoint one applicant to the Library Commission with a term expiring June 30, 2017.
2. Appoint one applicant to the Recreational Trails Board with a term expiring June 30, 2018 and two applicants with terms expiring June 30, 2016.
3. If vacancies are not filled by a majority vote of the City Council, authorize the City Clerk to re-advertise the positions as vacant and carry over the current applications for reconsideration of appointment at a future date.

### **SUMMARY**

Applications were accepted by the City Clerk's Office to fill vacancies for the Library Commission and the Recreational Trails Board. Appropriate time frames with respect to posting notices of vacancies were followed.

As provided in the City's Municipal Code, the appointees will serve without compensation for designated terms.

### **DISCUSSION**

The Library Commission has one vacant position with a term expiring June 30, 2017. The City Clerk's Office received two applications from Mona Lisa Stallworth and Toya Vick.

The Recreational Trails Board has three vacant positions: one with a term expiring June 30, 2018 and two with terms expiring June 30, 2016. The City Clerk's office received two applications for these positions from Sarah Martinez and John Menke.

The Library Commission considers matters pertaining to the administration, operation, development, improvement and maintenance of library services within the City.

The Recreational Trails Board considers matters pertaining to single-use and multi-use recreational trails, including bicycle, jogging and equestrian trails within or affecting the City.

### **ALTERNATIVES**

Members of the Council appointed boards and commissions serve in an advisory capacity to the City Council. Choosing to appoint members to the above-mentioned board and commission would result in increased participation from residents. This option is consistent with the City Council goal of creating a positive environment for the development of Moreno Valley's future. Therefore, staff recommends that the City Council make the recommended appointments.

### **FISCAL IMPACT**

N/A

### **NOTIFICATION**

1. Posting of Notices of Openings
2. Publication of the agenda
3. Report and agenda emailed to applicants

### **PREPARATION OF STAFF REPORT**

Prepared By:  
Ewa Lopez  
Deputy City Clerk, CMC

Department Head Approval:  
Jane Halstead  
City Clerk, CMC

### **CITY COUNCIL GOALS**

**Positive Environment.** Create a positive environment for the development of Moreno Valley's future.

### **ATTACHMENTS**

None

### **APPROVALS**

Budget Officer Approval            ✓ Approved                            9/28/15 8:02 AM



City Attorney Approval  
City Manager Approval

✓ Approved  
✓ Approved

9/28/15 11:42 AM  
10/05/15 11:00 AM



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Richard Teichert, Chief Financial Officer

**AGENDA DATE:** October 13, 2015

**TITLE:** SELECT A FUNDING AND FINANCING ALTERNATIVE FOR THE \$25.1 MILLION IN IDENTIFIED INFRASTRUCTURE PROJECTS FOR THE MORENO VALLEY UTILITY AND DIRECT STAFF TO IMPLEMENT THE SELECTED ALTERNATIVE

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### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Select a funding and financing alternative for the \$25.1 million in identified infrastructure projects for the Moreno Valley Utility (MVU).
2. Direct staff to implement the selected alternative.

### **SUMMARY**

This report recommends that the City Council select an alternative to fund up to a total of \$25.1 million in infrastructure projects (see Table 1 below) identified for the Moreno Valley Utility to be completed over the next three years. The directed alternative will be returned for Council action on October 27, 2015 for approval and implementation to keep the project on track. Four alternatives are presented that include variations of cash (“pay as you go”) funding and debt financing. Each alternative is presented as a framework for funding and the City Council may choose to consider variations of each framework for a final solution to fund and move forward with the projects. Staff and the Moreno Valley Utilities Commission have recommended Alternative 1; the Finance Subcommittee expressed interest in presenting four alternatives to City Council for consideration. The Council Study Session on September 1, 2015 concluded with Council direction to conduct a Town Hall meeting regarding the MVU projects and funding and to bring back the alternatives considered at the Study Session to the October 13, 2015 Council meeting for Council determination.

## DISCUSSION

As MVU continues to expand its service, additional capital improvement projects were identified by MVU staff that would be needed over the next several years. To fulfill MVU's 10-Year CIP plan as approved by the Utilities Commission and City Council on May 15, 2015 and May 26, 2015, respectively, MVU will need to fund \$25 million of capital projects.

The expansion of MVU infrastructure is necessary to meet the strong economic development occurring in the South Industrial area of the City. The following projects are needed to be constructed in a timely manner to meet growing demand, which will consume MVU's full capacity by late 2016, and to improve the load balancing and reliability of service delivery to the ever growing customer base.

Table 1

<b>Project Title</b>	<b>Project Description</b>	<b>Estimated Cost</b>
Kitching Substation	Install 115kV/12kV substation	\$13,489,000
Kitching Substation to Edwin Rd.	Install conduit and cable from Kitching to Edwin Rd.	\$480,000
Kitching Backbone to Indian	Circuit going north towards Heacock for reliability	\$787,000
Kitching Substation to Perris Blvd.	Allow part of Iris circuit to transfer to Kitching substation	\$414,000
Kitching Substation to Lasselle Sports Park	Create a tie to Lasselle 12kV	\$477,000
Load transfer to Iris Interconnect	Install cable from Iris to Indian	\$378,000
Kitching Substation to Globe	Connect new circuit to Globe interconnect	\$459,000
Kitching Backbone to Perris Blvd.	Install conduit and cable along Modular Way to Perris Blvd.	\$465,000
Kitching – Nason 12kV tie	Ties Kitching substation to MoVal substation providing additional reliability	\$816,000
<b>Kitching Substation Subtotal</b>		<b>\$17,765,000</b>

Alessandro Blvd.	Ties Centerpointe Interconnects to MoVal substation	\$2,025,000
Heacock St.	Ties Centerpointe Interconnects to South Industrial area	\$1,396,350
Electrical system automation	Build automation, communication, and protection in circuits that serve critical customers	\$2,000,000
MoVal Substation - 3 <sup>rd</sup> transformer bank	Addition of a 3 <sup>rd</sup> transformer bank at MoVal substation. 50% of cost funded by bonds.	\$1,925,000

**Reliability Projects and Moreno Beach Expansion Subtotal**

**\$7,346,350**

**Grand Total**

**\$25,111,350**

Staff identified the need for these projects during the capital infrastructure planning process in 2013. The need was presented as part of the MVU Distribution System Plan presented to City Council in February 2014 for the planning years 2014-2018. The projects have been approved by City Council in the Five Year Capital Improvement Program on May 25, 2015, subject to financing/funding. Property for the substation identified in the plan was approved for purchase by the City in November 2014 with the final acquisition completed in March 2015.

## **Public Presentations and Discussion Regarding the Projects and Funding Alternatives**

Staff has made presentations at the following meetings regarding the project planning/need and funding/financing alternatives:

**August 21, 2015 - Moreno Valley Utilities Commission** – The Commission received the three presentations referenced below. The Commission recommended Alternative 1 (Lease Revenue Bond financing to fund the entire \$25.1 million in projects) at its meeting on June 19, 2015 on a 4-1 vote. The Commission was presented with additional information regarding other financing and funding options. The presentation also included information on Public Private Partnerships or P3s. The Commission confirmed its previous recommendation to finance and fund the full \$25.1 million for proposed projects on a 3-1 vote, with one member absent.

**August 31, 2015 - Finance Subcommittee** – The Subcommittee received the three presentation listed below. The Subcommittee directed staff to present the four Alternatives included in this report to the Council at a Study Session on September 1, 2015.

**September 1, 2015 - City Council Study Session** – Council received the three presentations referenced below. City Council directed staff to conduct a Town Hall Meeting and to bring back the four alternatives reviewed to City Council on October 13, 2015 for determination.

**September 16, 2015 - Town Hall Meeting** – Staff conducted a Town Hall Meeting which included the three presentations listed below and public discussion regarding the projects and funding. Approximately 12 members of the public attended this session. There was no consensus of the public derived at the meeting. A summary of the discussion is included as Attachment 5 to the report.

The presentations included Powerpoint review and discussion of the need and timing of the projects through review of the “Moreno Valley Utility Distribution System Planning” for years 2014-2018 and the funding and financing options document prepared by Fieldman Rolapp & Associates titled “Financing Options in General.” In addition, staff presented MVU history/background, the planned approach to ensure a financially strong balance sheet by 2021, and several options to fund the projects ranging from all debt financing to all cash financing. The three presentation documents from the September 1, 2015 Study Session are attached for Council reference.

The concept of committing a General Fund revenue stream, such as the Utility User’s Tax, as a repayment source or commitment to securing the bond payments was recently discussed. Bond Counsel advises that committing any general tax revenue of the City creates a revenue bond structure that would require approval through a general election of City voters. This option, if successful, could help to protect the Utility User’s

Tax from a repeal action in the future, but does not offer a viable option to meet the required project construction schedule.

## **ALTERNATIVES**

Staff has presented four alternatives for consideration in funding the MVU projects. Council may opt to select one of the four options or variations of the four options. A summary of each option follows, with the alternatives detailed in Attachments 2-5.

### **Alternative 1:**

#### **Staff and MV Utilities Commission recommend Alternative 1:**

- Complete a financing to fund the identified projects for the Kitching Substation, Reliability Projects and Moreno Beach Substation Expansion (\$25.1 million)
  - One issue of \$25.1 million in FY 2015 (fund the issuance ASAP)
  - Achieves equity for ratepayers by ensuring that all customers pay the cost of capacity created by financing over 30 years
  - If using current cash, only current customers pay for the capacity, new customers do not pay for capacity created by the capital projects funded by the existing customers
- Reserve the \$5.0 million in surplus operating cash available June 30, 2015
- Reserve future surplus operating cash to fund balance sheet needs (equipment replacement, working capital, emergency reserves and rate stabilization reserves)
- Direct staff to return to the October 27, 2015 City Council meeting with an action to authorize a Lease Revenue Bond Issue to generate proceeds of \$25.1 million with placement of the item on the consent calendar
- Direct staff to complete a 10 year financial model reflecting the financial impact of the projects and funding on the planned financial development of the utility

### **Alternative A:**

#### **The Finance Subcommittee requested that Alternatives A, B and C be considered by Council, in addition to Alternative 1:**

- Reduce the Lease Revenue Bond to fund only the Kitching Substation and related feeder line projects
- One issue of \$17.3 million in FY 2015 (fund the issuance expediently)
- Reserve the \$5.0 million in cash available at June 30, 2015
- Create a repayment schedule for the property purchase from MVU to the General Fund (\$492,194 over 1-5 years)

- Direct staff to return to the October 27, 2015 City Council meeting with an action to authorize a Lease Revenue Bond Issue to generate proceeds of \$17.3 million with placement of the item on the consent calendar
- Direct staff to complete a 10 year financial plan reflecting the financial impact of the projects and funding on the financial development of the utility prior to returning with the second bond financing
- Review the funding and financing plan for the remaining \$7.3 million for Reliability Projects and Moreno Beach Substation expansion to determine the mix of cash and bond financing and present options to Finance Subcommittee and City Council by March 2016

**Alternative B:**

**The Finance Subcommittee requested that Alternatives A, B and C be considered by Council, in addition to Alternative 1:**

- Utilize a portion of MVU cash to lower the amount borrowed in total
- Split the Lease Revenue Bond into two separate issues, staged in two lower borrowings
- First, fund Kitching Substation Project and Feeder lines (\$17.7 million)
  - \$4.5 million in cash (pay as you go)
  - \$13.3 million in debt financing (fund the issuance expediently)
- Maintain the current \$2.5 million line of credit with the General Fund to utilize for unplanned capital needs, such as equipment replacement
- Secondly, fund Reliability Projects and Moreno Beach capacity expansion (\$7.3 million) – possible scenario, for instance:
  - \$2.0 million in cash (pay as you go)
  - \$5.3 million in debt financing (fund the issuance by March 2016)
- Direct staff to return to the October 27, 2015 City Council meeting with an action to appropriate and fund design of the project and critical equipment with MVU cash in the amount of \$4.5 million
- Direct staff to return to the October 27, 2015 City Council meeting with an action to authorize a Lease Revenue Bond Issue to generate proceeds of \$13.3 million with placement of the item on the consent calendar
- Direct staff to complete a 10 year financial plan reflecting the financial impact of the projects and funding on the financial development of the utility prior to returning with the second bond financing
- Evaluate the pay as you go vs debt financing options for the remaining \$7.5 million in Reliability Projects and Moreno Beach Substation expansion.

**Alternative C:**

**The Finance Subcommittee requested that Alternatives A, B and C be considered by Council, in addition to Alternative 1:**

***Staff does not recommend this alternative because it does not deliver the substation in time for new large commercial customers to connect to MVU, risking loss of these customers to Southern California Edison.***

- Utilize all available MVU cash to fund the MVU Capital Projects using “pay as you go” approach
  - MVU would not have sufficient cash to award a construction contract for the Kitching Substation until about January 2017 with the Kitching Substation project being completed in late summer 2018
  - System reliability projects would begin in 2018 and be completed in 2019
  - MV Utility would not begin to establish reserves until 2019 or 2020
- Direct staff to return to the October 27, 2015 City Council meeting with an action to appropriate and fund design of the project and critical equipment with MVU cash in the amount of \$4.5 million
- Direct staff to reserve any remaining cash to begin to fund the construction phase of the project
- Maintain the current \$2.5 million line of credit with the General Fund to utilize for unplanned capital needs, such as equipment replacement

### **FISCAL IMPACT**

Alternative 1 presents little financial risk to the City General Fund or to MVU. The estimated debt service of \$1.8 million would be paid directly by the MVU, which is covered by the current annual surplus cash of over \$5 million at June 30, 2015 and growing. City-owned property would be committed to the financing to create the lease-back structure for the duration of the financing. The debt is secured by the significant surplus revenue of MVU dedicated to make debt service payments, by MVU reserves, by bond insurance, the established bond reserves equal to one year’s debt service, the MVU line of credit with the General Fund, General Fund annual cash surplus, General Fund reserves, and ultimately as a last resort, by the property itself. The risk of the property being exposed to loss by foreclosure or non-payment of debt is summarized in Attachment 1. The protections detailed in the attachment reflect that the risk of loss of any General Fund property would be extremely remote. The risk that the General Fund would accept is having property dedicated to this proposed debt, making it unavailable for a possible debt issuance for a General Fund purpose. At this time, there is no identified financing being considered by the General Fund within the next several years.

Alternative 1 allows the issuance of long term debt for 30 years at the lowest municipal debt rates in recent history. The proposed debt is taxable due to the current structure of the Enco contract, which is the City’s public private partnership for operating and



maintaining the municipal utility. Staff proposes to maximize the building of cash reserves by the end of the Enco contract in December 2020. This will allow MVU to consider refinancing all outstanding debt as direct debt of MVU using MVU Revenue Bonds at tax exempt rates. *This action would unencumber all City-owned property securing MVU debt.*

An additional benefit of long term debt ensures that all rate payers are paying the cost of the capacity created by the infrastructure improvements. If cash from current rate payers is used today, new rate payers will not have to pay for any of the cost of the capital improvements to create the capacity that they will be using.

Alternative A achieves most of the same goals and benefits of Alternative 1. Utilization of cash to fund the second phase of projects may impact the ability of MVU to receive a strong rating in 2021 to consider issuing its own directly issued debt for refinancing.

Alternative A does result in lower total debt issuance for the initial debt issuance of \$17.2 million.

If debt is issued for the remaining \$7.3 million in projects, additional issuance costs will be incurred for a second bond issue. The cost impact is estimated to be in the range of \$250,000 - \$300,000. The delay in issuance would subject MVU to interest rate risk, with rates possibly higher in six months when a second issue would be completed, adding additional total cost to the financing of the project.

Alternative B results in significantly reduced total debt issuance. It also increases the risk that MVU will not have a strong balance sheet with significant cash reserves by 2021. Savings that could result from directly issued MVU debt to refinance outstanding MVU bonds would be delayed. This will also result in committing General Fund assets to total MVU debt for a longer period.

Alternative C relies completely on surplus cash accumulation to fund the infrastructure projects. This will result in not meeting project completion timelines and loss of major customers to Edison. In addition, MVU will just start building cash reserves by 2020 and will not have a strong enough balance sheet to directly issue debt for many years. **Staff does not consider Alternative C to be a feasible approach because it will not allow timely completion of projects required to meet MVU's forecasted service requirements.**

## **PREPARATION OF STAFF REPORT**

Prepared By:  
Richard Teichert  
Chief Financial Officer

Department Head Approval:  
Richard Teichert  
Chief Financial Officer

## **CITY COUNCIL GOALS**

**Revenue Diversification and Preservation.** Develop a variety of City revenue sources and policies to create a stable revenue base and fiscal policies to support essential City services, regardless of economic climate.

**Public Facilities and Capital Projects.** Ensure that needed public facilities, roadway improvements, and other infrastructure improvements are constructed and maintained.

**ATTACHMENTS**

1. City General Fund Property Risk
2. MVU Distribution System Planning - 9-1-15 Study Session
3. MVU Financing Presentation (Fieldman) - 9-1-15 Study Session
4. MVU Financing Presentation - 9-1-15 Study Session
5. Town Hall Meeting Public Comments - 9-16-15

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	10/06/15 12:43 PM
City Attorney Approval	<u>✓ Approved</u>	10/06/15 5:09 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 5:32 PM

## Moreno Valley Utility (MVU) Proposed Financing

### Risk Mitigation Protecting General Fund Property Securing Proposed Lease Revenue Bond Financing

- ✓ MVU surplus cash flow of over \$5 million annually (and growing) exceeds the proposed \$1.8 million annual debt service
- ✓ MVU Reserves will exceed \$5 million at June 30, 2015 and would cover any revenue shortfall to meet annual debt service
- ✓ A bond reserve equal to one year of debt service (\$1.8 million) will be funded from the bond proceeds and controlled by the trustee
- ✓ Bond Insurance will be issued by Assured Guarantee Corporation, a nationally recognized bond insurance company
- ✓ MVU retains a \$2.5 million line of credit that would be available to meet annual debt service, if required
- ✓ City General Fund has delivered a cash surplus in recent years, available to cover this debt service if needed
- ✓ The City General Fund Reserves of about \$30 million would be available to meet annual debt service in a catastrophic situation, and structured as a loan to be repaid
- ✓ Foreclosure by the trustee on behalf of the bondholders would be a last resort if all of the above mechanisms became unavailable, this is a VERY remote chance of occurrence

# MORENO VALLEY UTILITY DISTRIBUTION SYSTEM PLANNING

FOR YEARS

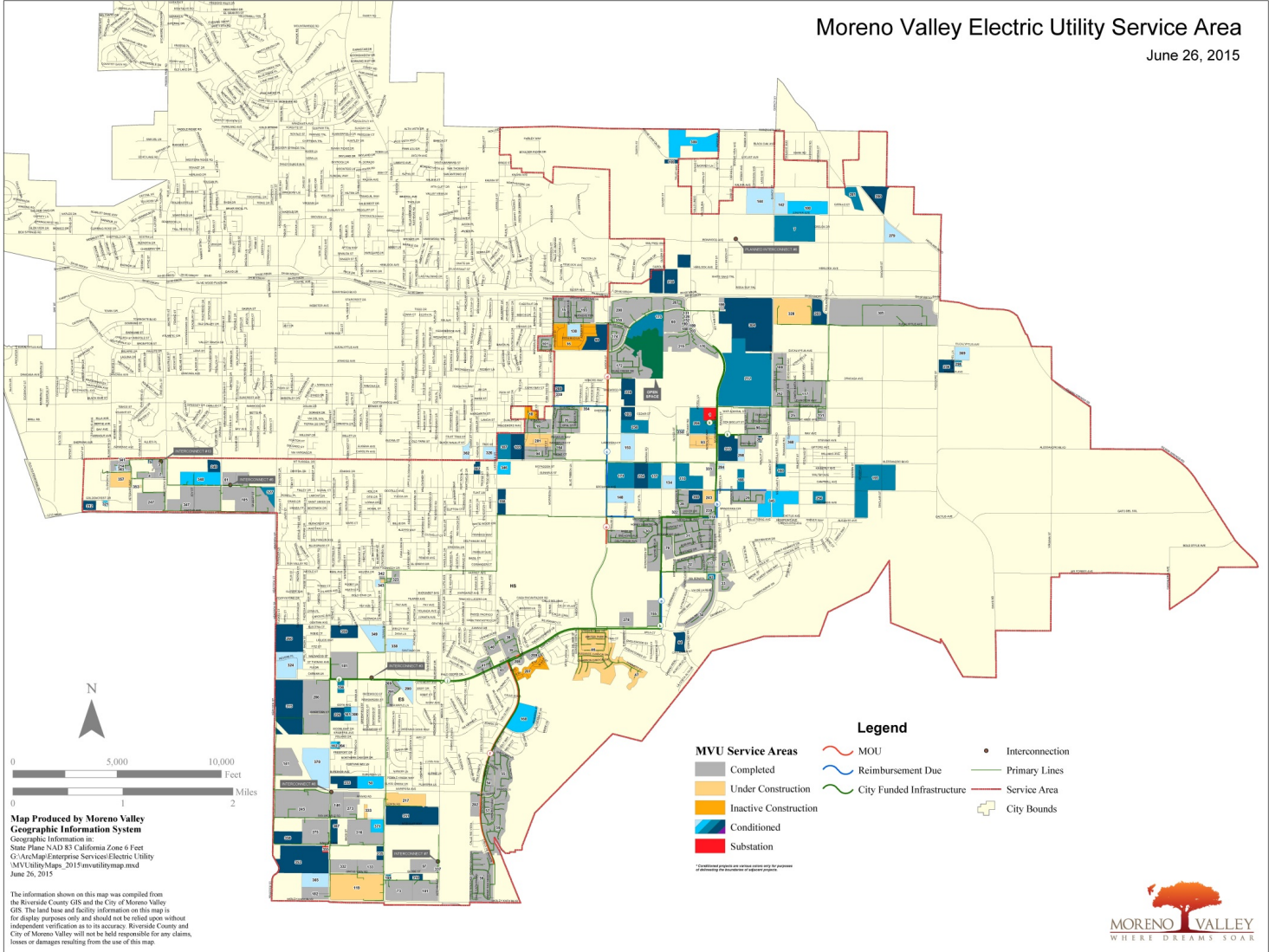
# 2014 - 2018



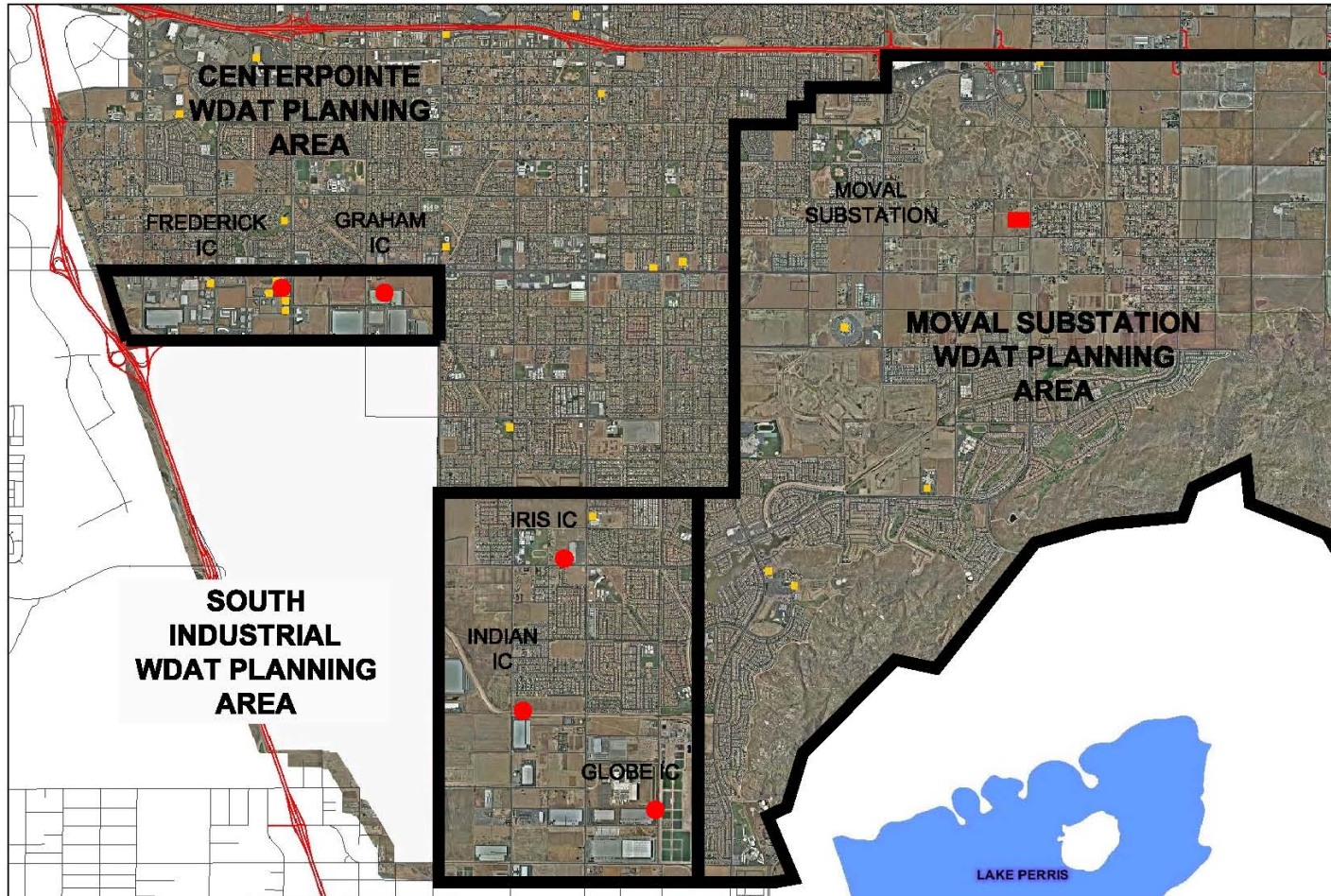
# Distribution System Plan (DSP)

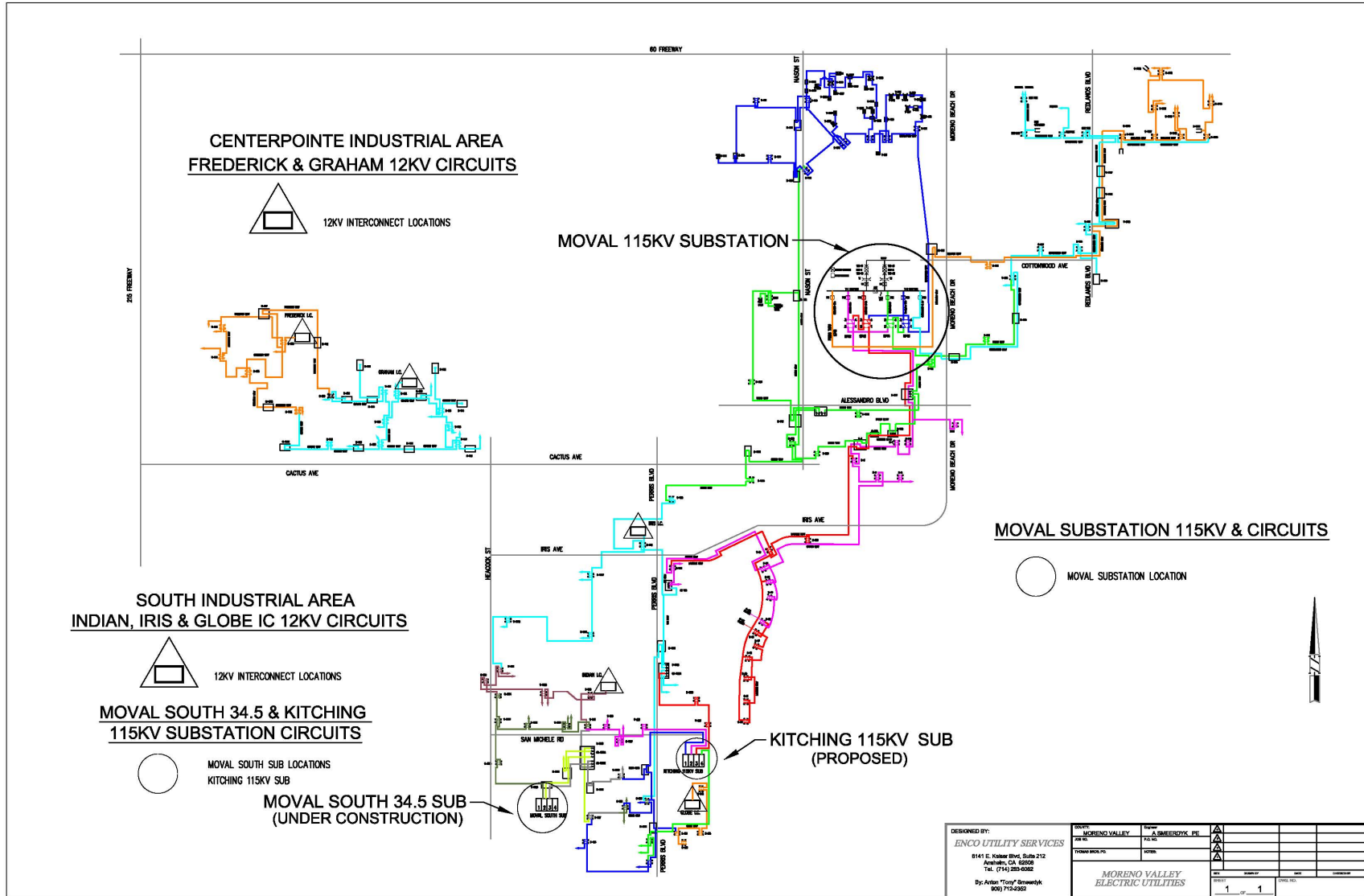
- Purpose and goals
- Annual review begins in the fall, after summer peak
- Analysis of impact of projects in various phases of planning or construction on electric system
- Data also used for load forecasting, resource planning





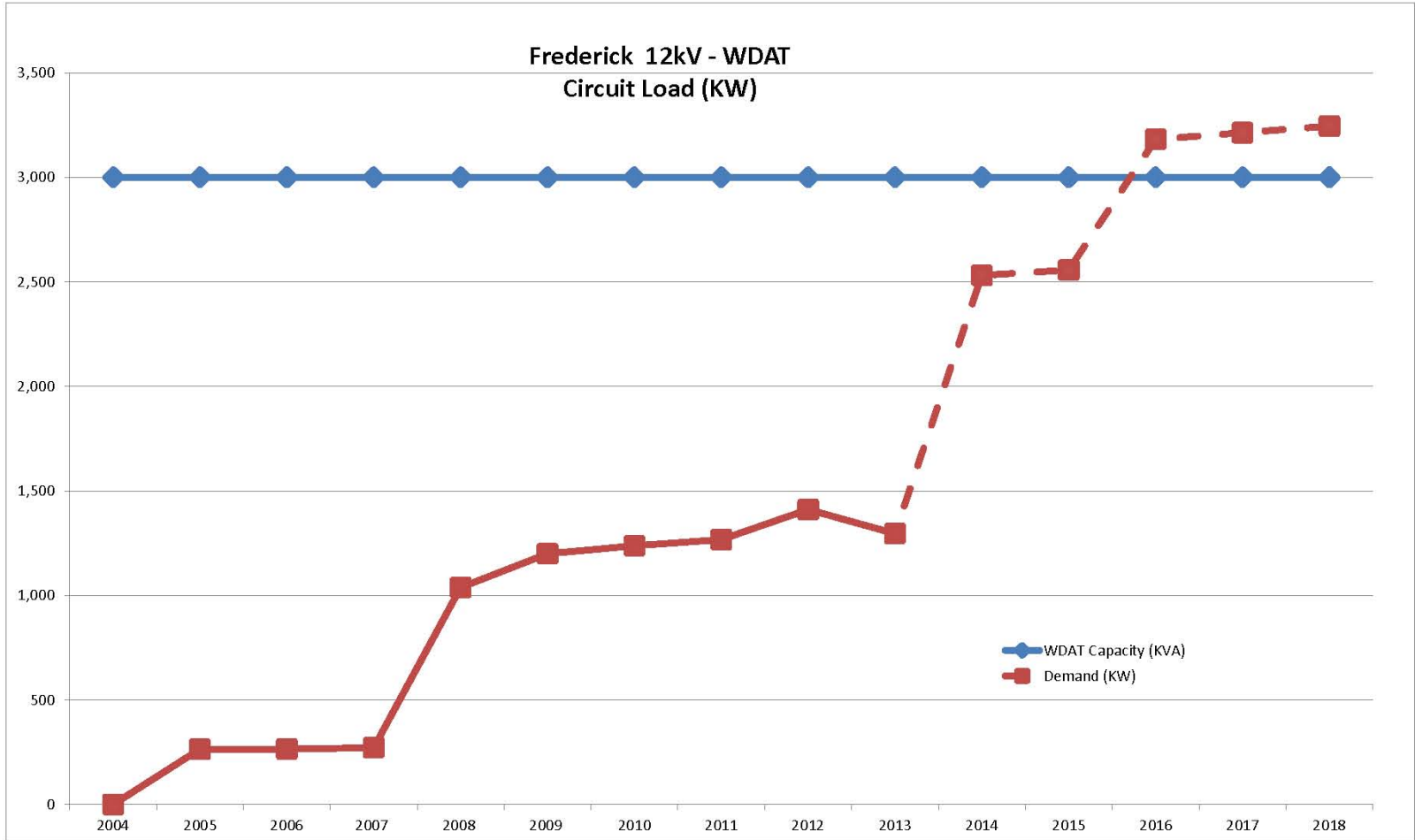
### MORENO VALLEY UTILITY WDAT PLANNING AREAS



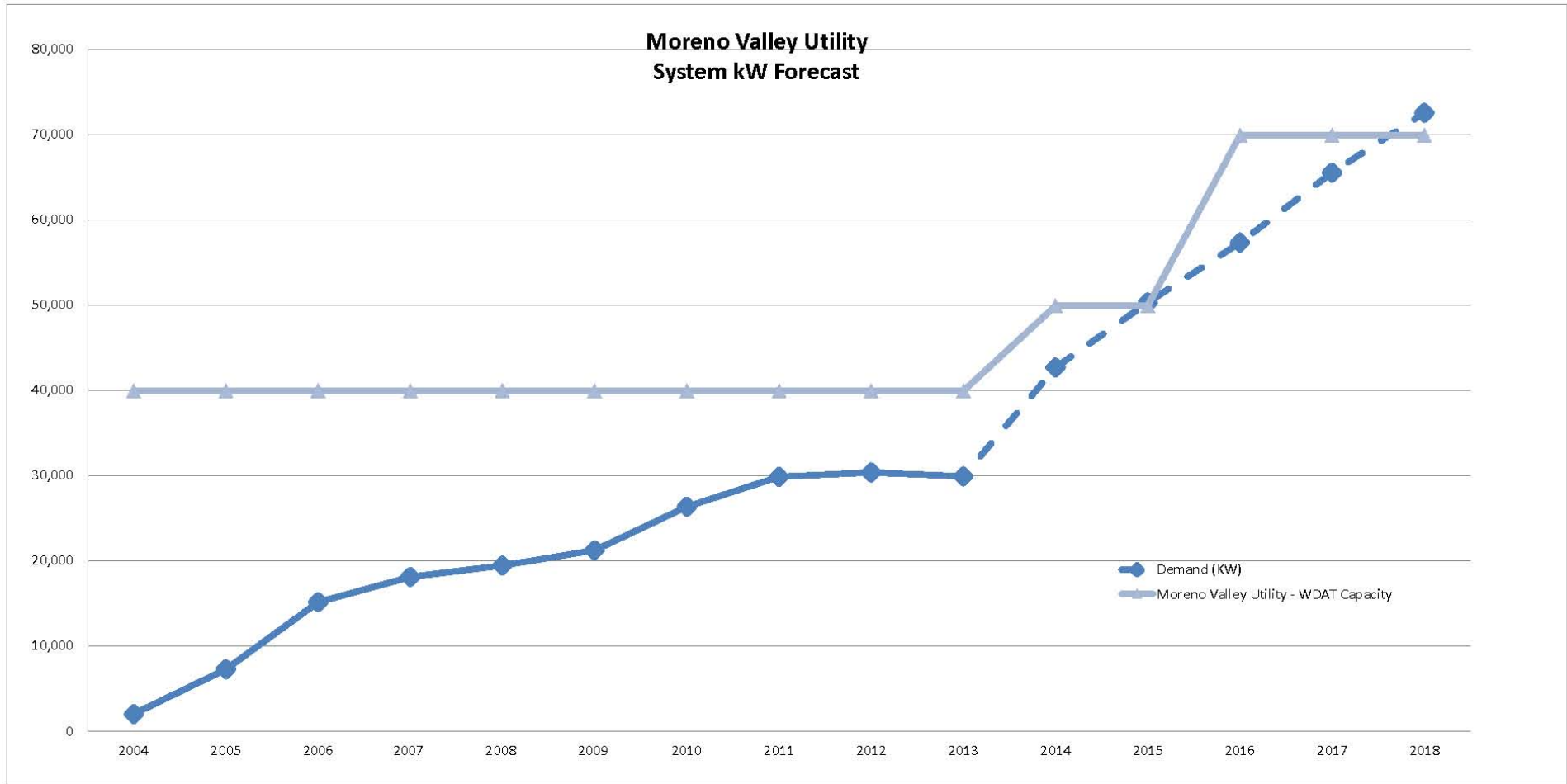




FREDERICK 12 KV - WDAT - IC								
Max Contract Demand = 3,000 KW*			Units/Sq Ft	METERS		LOADS		
				NEW	TOTAL	KW	TOTAL KW	AMPS
2010		Peak Recorded			10		1,238	60
2011		Peak Recorded			11		1,267	61
2012		Peak Recorded			13		1,411	68
2013		Peak Recorded			13		1,296	62
5 YEAR FORECAST- CUSTOMERS (Mtrs) & LOAD (KW)								
Yr	Projects		Qty	Mtrs		KW		
14	247	Overton Moore #247	520 KSF	2	15	520	1,931	93
14	237	Harbor Freight Expansion Phase 1	508 KSF	1	16	600	2,531	122
15		No known Projects Known add 1 % growth		0	16	25	2,557	123
16	312	Hawthorne Hotel	50 KSF	1	17	225	2,782	134
16		Blackridge (Vet way & Bus Cnt Dr)	400 KSF	1	18	400	3,182	153
17		No known Projects Known add 1 % growth		0	18	32	3,213	155
18		No known Projects Known add 1 % growth		0	18	32	3,245	156



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>WDAT Capacity (KVA)</b>	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
<b>Demand (KW)</b>	0	265	265	272	1038	1200	1238	1267	1411	1296	2531	2557	3182	3213	3245
<b>Frederick Circuit % KW Gain</b>			0%	3%	282%	16%	3%	2%	11%	-8%	95%	1%	24%	1%	1%



Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Moreno Valley Utility - WDAT Capacity</b>	39,900	39,900	39,900	39,900	39,900	39,900	39,900	39,900	39,900	39,900	49,900	49,900	69,900	69,900	69,900
<b>Demand (KW)</b>	1,995	7,238	15,119	18,078	19,412	21,204	26,317	29,828	30,335	29,884	42,661	50,285	57,301	65,519	72,532
<b>Moval Circuits % KW Gain</b>		263%	109%	20%	7%	9%	24%	13%	2%	-1%	43%	18%	14%	14%	11%

Moreno Valley Utility  
SUMMARY of LOAD FORECAST

5 YEAR LOAD FORECAST - MOVAL SUBSTATION (kW)															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CACTUS 12KV	1,475	4,440	7,357	5,147	5,355	4,875	4,877	5,362	5,485	5,602	5,658	6,026	6,401	7,033	8,358
LASSELLE 12KV	355	2,581	3,349	2,943	3,976	4,650	5,909	6,686	6,116	6,315	6,541	6,625	6,993	7,443	8,743
REDLAND 12KV	NA	NA	NA	NA	NA	NA	0	1,379	2,703	2,743	2,770	7,361	7,434	8,694	9,794
COTTONWOOD 12KV	NA	NA	842	2,311	2,485	895	1,828	2,293	1,554	1,464	1,569	1,585	3,585	5,811	8,253
EUCALYPTUS 12KV	NA	NA	1,296	4,683	4,715	5,635	6,228	6,492	6,007	6,117	6,217	6,319	6,382	6,976	7,406
NASON 12KV	NA	NA	NA	NA	NA	3,400	3,574	4,316	3,998	3,918	4,978	5,028	5,636	5,870	6,248
Total Substation(Non-Coincident)	1,830	7,021	12,844	15,084	16,531	19,455	22,416	26,527	25,862	26,159	27,733	32,943	36,431	41,827	48,802
Peak Coincident Demand					16,128	20,160	21,312	23,616	23,616	23,040	26,346	31,296	34,609	39,735	46,362
Demand Factor (Coinc/Non-Coinc)					98%	104%	95%	89%	91%	88%	95%	95%	95%	95%	95%

5 YEAR LOAD FORECAST - INTERCONNECTS (kW)															
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
CENTERPOINT INTERCONNECT LOADS (kW)															
FREDERICK 12 KV (Max Cd 3,000 kW)	0	265	265	272	1,038	1,200	1,238	1,267	1,411	1,296	2,531	2,557	3,182	3,213	3,245
GRAHAM 12 KV (Max CD 3,500 kW)	387	383	310	815	1,837	1,552	1,584	2,240	2,688	2,848	2,876	3,476	3,904	4,592	4,638
Total IC's (Frederick & Graham Non-Coinc)	387	648	575	1,087	2,875	2,752	2,822	3,507	4,099	4,144	5,408	6,033	7,086	7,806	7,884
IC AREA Capacity	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500	6,500
% WDAT AREA Loading	6%	10%	9%	17%	44%	42%	43%	54%	63%	64%	83%	93%	109%	120%	121%
SOUTH INDUSTRIAL INTERCONNECT LOADS (kW)															
GLOBE 12 KV (Max CD 3,000 kW)	0	373	1,118	1,012	1,012	1,911	3,686	3,744	3,571	3,370	3,609	3,645	3,681	3,718	3,755
INDIAN 12 KV (Max CD 3,000 kW)	0	0	307	363	263	658	630	806	872	1,082	2,800	2,828	2,856	2,885	2,914
IRIS 12 KV (Max CD 3,000 kW)	0	0	1,955	2,541	2,541	729	791	1,469	1,547	1,568	2,850	3,900	3,900	3,968	4,184
MOVAL Sub South (Max CD 10,000 kW)											6,388	8,171	11,535	14,687	15,493
Total IC's (Globe, Indian, Iris, & MOVAL S Non-Coinc)	0	373	3,390	3,916	3,816	3,298	5,107	6,019	5,990	6,020	15,647	18,544	21,972	25,258	26,346
IC AREA Capacity	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	9,000	19,000	19,000	19,000	19,000	19,000
% WDAT AREA Loading	0%	4%	38%	44%	42%	37%	57%	67%	67%	67%	82%	98%	116%	133%	139%

Total Interconnects (Non-Coinc)	387	1,021	3,955	5,003	6,691	6,050	7,929	9,526	10,089	10,164	21,054	24,577	29,058	33,064	34,230
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Total MVU	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
(Non-Coincident KW Demand)	2,217	8,042	16,799	20,087	21,569	23,560	29,241	33,142	33,705	33,204	47,401	55,873	63,668	72,799	80,591
(Coincident KW Demand)	1,995	7,238	15,119	18,078	19,412	21,204	26,317	29,828	30,335	29,884	42,661	50,285	57,301	65,519	72,532
Exceeds Max Contract Demand (CD)															

Attachment: MVU Distribution System Planning - 9-1-15 Study Session (1661) : SELECT A FUNDING AND

# QUESTIONS?



# Financing Options in General

City of Moreno Valley and  
Moreno Valley Utility (MVU)

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Moreno Valley City Council Study Session  
September 1, 2015

Presented by: Fieldman, Rolapp & Associates

# Project Funding Considerations

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- Useful life of assets or facilities being constructed
- Timeline for completion
- Project completion, operational, and timing risks
- Availability of existing funds to cash-fund project(s)
  - Must consider alternative uses for the available cash
- Availability of revenues to repay potential borrowing
  - Consider strength and continuity of revenue stream available to repay debt
- Existing capital funding policies or preferences

# Types of Financing / Funding Overview

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- Pay-As-You Go or Cash Funding
- Short Term Debt
  - Bonds/Notes/Loans/Lines of credit
- Long Term Debt
  - Publicly Sold Bonds (Municipal Bond Market)
  - Private Placements or Direct Bond Purchases
- Alternative / Private Financing
  - Including Public Private Partnerships (P3)



# Selecting Most Cost-Effective Financing

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- Pay-As-You Go or Cash Funding
    - Smaller projects
    - Shorter useful life projects
    - Longer project spending timelines (e.g. more than 3 years)
    - Recurring project types or major maintenance items
    - Existing funding available or available in the near future
    - Consistent with policies identifying Pay-Go project types
  - Moreno Valley Experience: Pay-As-You Go Funding
    - Heacock Street widening, sidewalks, ADA compliance, storm drains, Police Camera Project, Transportation Mgt Project
    - Grant funded projects and those with a dedicated revenue source (Measure A, Gas Tax, SCAQMD funded, DIF funded)
-

# Selecting Most Cost-Effective Financing

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- Short-Term Debt: Loans / Lines of Credit
  - Smaller to medium-sized projects
  - Projects with shorter expenditure timeframes
  - Interim or short-to-medium term financing typical (1-5 years)
  - Cash flow borrowings of one year or less
  - Existing full funding not available but expected in near term
  - Sufficient revenues to cover short to medium term repayment
- Moreno Valley Experience: Short Term Loans/Lines of Credit
  - Typically short term internal borrowing
  - Nason Street South Extension (borrowed from DIF funds)
  - Funds to start MV Utility and Funds to buy land for the Substation Project borrowed against General Fund line of credit

# Selecting Most Cost-Effective Financing

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- Long-term Debt: Publicly Sold Bonds
  - Medium to large projects
  - Useful life of project of 20+ years
  - Finite near-term expenditure period (e.g. 1-3 years)
  - Long-term, fixed-rate repayment period (e.g. 15 – 30 years)
  - Sufficient revenues / annual funding to repay borrowing
  - Strong repayment source credit quality and transparency
  - May meet policies guidelines to match useful life to payments
  - Project is well-understood with minimal operational or construction risks

# Selecting Most Cost-Effective Financing

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- Moreno Valley Experience - Long-term Debt: Municipal Bond Issuance
  - Certificates of Participation issued in 1994 for City Hall Building purchase and tenant improvement (scheduled to be paid off in 2017)
  - Lease Revenue Bonds issued in 1997 for the Public Safety Building project (scheduled to be paid off in 2019)
  - Lease Revenue Bonds issued in 2007 for MVU system expansion (allowed the utility to expand and become financially strong)

# Selecting Most Cost-Effective Financing

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- Long-term Debt: Private Placements or Direct Bond Purchase
    - Repayment source with weaker credit quality or inability in providing public market initial and continuing disclosures
    - Revenues for bond repayment may face some uncertainty
    - Project may have some potential operational or construction risks
    - Medium to large projects
    - Useful life of project of 10+ years
    - Finite near-term expenditure period (e.g. 1-3 years)
    - Long-term, fixed-rate repayment period (e.g. 10 – 30 years)
-

# Selecting Most Cost-Effective Financing

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- Moreno Valley Experience - Private Financing
  - Refinanced City Hall and Public Safety Building debt directly with Bank of America
  - Less than 10 years remaining on both debt issues made the financings attractive for BofA's investment portfolio
  - Recession and a bond rating "watch" rating made refinancing in Muni market less feasible
  - BofA took the time to review the City's financial situation and provided a very favorable proposal to refinance the remaining debt with significant savings

# Selecting Most Cost-Effective Financing

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- Alternative / Private Financing (Public Private Partnership)
    - Repayment source with weaker credit quality or possibly contingent upon revenues generated from project
    - Revenues for bond repayment face significant uncertainty and may not be available for initial repayment period
    - Projects with identified operational or construction risks
    - Medium to large projects
    - Useful life of project of 10+ years
    - Finite near-term expenditure period (e.g. 1-3 years)
    - Long-term, fixed-rate repayment period (e.g. 15 – 30 years)
-

# Selecting Most Cost-Effective Financing

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- Moreno Valley experience with P3s
  - Moreno Valley Utility contracts the operation and customer service and billing with Enco through 2020
  - Moreno Valley began contracting with LSSI to operate Library services in 2013
  - Capital Projects have typically been contracted with private firms for design or construction in partnership with private firms
  - Moreno Valley has not pursued a “Design-Build” approach or a more complex “Finance/Design/Build/Operate” project



# Discussion - Public Private Partnerships

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- Most simply put:
  - Public private partnerships (P3s) allow a public entity to leverage its revenues and a private entity's equity to fund major projects in some cases when the facts/criteria of the project make sense
  - A P3 is a legally binding contract between a public sector entity and a private company (often referred to as concessionaire)
  - The partners agree to share some portion of the risks and rewards inherent in an infrastructure project.

# Public Private Partnerships

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- Many Forms of Public Private Partnerships
  - Operate/Maintain
  - Bid/Build
  - Design/Bid/Build
  - Design/Build
  - Design/Build/Finance
  - Design/Build/Finance/Operate/Maintain

# Public Private Partnerships

Different Levels of Private Sector Engagement in PPP Contracts

	Identify Service/ Infrastructure Need	Propose Solution	Project Design	Project Financing	Construction	Operation/ Maintenance	Ownership
Operate/Maintain	Public Sector		N/A	Public Sector	N/A	Private Sector	Public Sector
Bid/Build	Public Sector				Private Sector	Public Sector	
Design/Build	Public Sector	Private Sector	Public Sector	Private Sector	Public Sector		
Design/Build/Finance	Public Sector	Private Sector				Public Sector	
Design/Build/Finance/Operate/Maintain	Public Sector	Private Sector					Public Sector

# Why Pursue a P3?

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- To ensure the implementation of high priority projects which require resources not available to the public entity
- To supplement public agency's resources and personnel
- To utilize the private sector's expertise for large complex projects
- To deliver the private sector's technology to the public
- To encourage private sector entrepreneurial development, partnership, and operation of public facilities
- To shift project risks to the private sector
- To access private financing techniques, including equity investment , which may reduce public agency's debt load
- To reduce overall costs of the project through private sector efficiencies

# Why do public agencies not pursue P3s?

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- P3s for infrastructure are complicated. They require robust economic analysis, complex negotiations, long-term commitments, political leadership, and new skill sets from public sector employees and policymakers to implement
- When Project facts do not support that P3s will be most cost effective solution
- Municipal bond market and risk averse nature of public procurement officers make them not the first choice.
- Long lead time to procure (up to 24 months for a typical P3)
  - Success of the P3 project lies in the planning, detailed RFP and extremely detailed contract specifying the exact performance of the private entity
- Public agency still has the cost to administer the contract and private entity performance

# P3 Benefits

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- **Benefits of a P3 approach**
  - Provides access to financial capital if an agency does not have the capacity to borrow (an alternative source of debt)
  - If project includes a substantial operating component – private firm pays lower operating costs, primarily lower pensions and benefits
  - If the project is structured where the public agency will never own the asset, prevailing wage may be avoided, resulting in lower capital cost of the project
  - Project is a design/build/finance/operate/maintain turnkey project, the private firm has many opportunities to make a profit and can subsidize overall costs project-wide

# P3 Weaknesses

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- **Weaknesses of a P3 approach**
  - Cost of capital and financing is typically higher
    - If the public agency has access to municipal bond markets with a strong credit rating, the public cost of capital is significantly lower
    - A turnkey project may allow a private entity to bid lower financing cost in exchange for a long-term operating profit component
  - If the public agency will own the project/asset when completed, the private firm must pay prevailing wage
  - Procurement process is complex, requires much more time to construct a very detailed RFP and detailed contract, making all deliverables and performance by the private firm explicit.
    - The private firm will only perform to the contract, since going beyond the contract will add additional cost to the firm

# Financing Considerations Going Forward

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- Generally, the City has considered financing projects using traditional dedicated funding available (Pay as you Go) or municipal financing
- P3s have not been a stated priority for the City Council
- Direct staff to bring the debt financing policy to a City Council Study Session to discuss the overall interest and priority of P3s in the future
  - The intent would be to consider directing staff to identify a reasonable P3 opportunity for the City to try in the future
    - One opportunity may be to manage and operate the City's storm drain system





PROPOSED FINANCING - MVU PROJECTS - \$25.1 MILLION

PRESENTATION BY: Richard Teichert, Chief Financial Officer  
Jeannette Olko, Moreno Valley Utility Division Manager

September 1, 2015



Attachment: MVU Financing Presentation - 9-1-15 Study Session (1661 : SELECT A FUNDING AND

## Why did the City of Moreno Valley form a Municipally-Owned Utility? What are the benefits?

- The City was facing the threat of losing large tax based business to the City of Riverside lured by reduced electric rates offered by Riverside Public Utility (RPU)
  - This was possible due to the City's 100 year old, financially stable Municipal Electric Utility
  - The mature RPU generates surplus cash to the General Fund based on the City Charter and provides a source for economic development rate incentives to bring jobs and tax base to the City (\$40 million annually)
- Moreno Valley City Council began the process of building a successful municipally-owned electric utility in 2004 to bring these same benefits to Moreno Valley
- The originating documents included statements that surplus revenue would be used to support additional police and fire services
- Economic development rates would attract critically needed businesses and jobs to the City
- The recession delayed the financial maturing of the Moreno Valley Utility (MVU)
  - MVU is now generating significant surplus cash and is financially strong



## What is the Financial Vision for MVU?

- **MVU will generate a revenue surplus exceeding \$3 million for FY 2014/15**
- Staff will work with City Council to establish direction to fund long needed reserves for the utility
- These include Equipment Replacement Reserves, Working Capital Reserves, Emergency Reserves and Rate Stabilization Reserves (estimated total need is a minimum of \$14 million today)
- Establishing these reserves over the next 5 years will allow MVU to issue tax exempt debt as a municipally owned utility in 2021
- With a strong balance sheet, the MVU debt will garner lower rates than general fund debt with tax exempt investors
- MVU may refinance the General Fund backed Taxable Lease Revenue Bonds as tax exempt debt of the utility - allowing the utility to stand alone as a financially stable entity
  - Frees-up General Fund borrowing capacity for new projects



## Why does the City want a financially strong Municipally Owned Utility?

- Financially strong MVU established with a properly funded balance sheet (est. FY 2021), the City can consider additional options to support City Services:
  - The City may consider a charter - including a General Fund transfer from MVU to support services (police/fire) or reduce the Utility Users Tax (UUT)
  - The City could consider breaking from SCE rate parity, providing an extra economic incentive to draw more businesses and jobs to the community
  - Continue to be able to offer economic incentives for job creation and tax base development
  - Tax base growth may allow weaning off of the UUT



## How do we grow MVU and ensure the vitality of the Utility for years to come?

- Borrow money at low cost interest rates to build and expand MVU capacity timely to serve more customers, particularly large electric use customers:
  - This approach allows the utility to have the capacity to grow and take advantage of the current rapid pace of development of large electricity consuming businesses
  - Manage MVU like a business - A growing business either takes on equity investors or borrows money to invest in the business infrastructure
  - As a public agency, the City (S&P rating of A+) and the Utility have access to the lowest borrowing rates available



# MVU Projects proposed to be funded (included in CIP)

Project Title	Project Description	Estimated Cost
<b>Kitching Substation</b>	Install 115kV/12kV substation	\$13,489,000
<b>Kitching Substation to Edwin Rd.</b>	Install conduit and cable from Kitching to Edwin Rd.	\$480,000
<b>Kitching Backbone to Indian</b>	Circuit going north towards Heacock for reliability	\$787,000
<b>Kitching Substation to Perris Blvd.</b>	Allow part of Iris circuit to transfer to Kitching substation	\$414,000
<b>Kitching Substation to Lasselle Sports Park</b>	Create a tie to Lasselle 12kV	\$477,000
<b>Load transfer to Iris Interconnect</b>	Install cable from Iris to Indian	\$378,000
<b>Kitching Substation to Globe</b>	Connect new circuit to Globe interconnect	\$459,000



# MVU Projects proposed to be funded (included in CIP)

Project Title	Project Description	Estimated Cost
<b>Kitching Backbone to Perris Blvd.</b>	Install conduit and cable along Modular Way to Perris Blvd.	\$465,000
<b>Kitching – Nason 12kV tie</b>	Ties Kitching substation to MoVal substation providing additional reliability	\$816,000
<b>Alessandro Blvd.</b>	Ties Centerpointe Interconnects to MoVal substation	\$2,025,000
<b>Heacock St.</b>	Ties Centerpointe Interconnects to South Industrial area	\$1,396,350
<b>Electrical system automation</b>	Build automation, communication, and protection in circuits that serve critical customers	\$2,000,000
<b>MoVal Substation - 3<sup>rd</sup> transformer bank</b>	Addition of a 3 <sup>rd</sup> transformer bank at MoVal substation. 50% of cost funded by bonds.	\$1,925,000
<b>Total</b>		<b>\$25,111,350</b>



## History of MVU Project Need and Financing Strategy

**The substation and reliability projects have been planned since early 2014**

- February 26, 2014: Need for the South Substation and Reliability projects identified in the Distribution System Plan (DSP) for years 2014 – 2018
- June 2014: Identified property for Substation Project – completed appraisal
- August 26, 2014: Closed session to discuss negotiation of property purchase
- October 21, 2014: Study Session regarding DSP and cost of service study
- November 18, 2014: City Council approved property purchase, use of General Fund line of credit to fund purchase and reimbursement agreement for GF to be reimbursed from future bond proceeds





## History of MVU Financing Strategy and Need

- March 10, 2015: Request for Proposals completed – Finance Subcommittee and City Council approve Financing Team to support future financings for the City
  - Financing referenced is MVU projects totaling about \$25 million
- April/May review and May 26, 2015 Approval: City Council approved the Fiscal Year 2015/16 Five Year Capital Improvement Program; CIP includes MVU projects, stating they are contingent upon a June 2015 bond issue to fund the projects
- June 26, 2015: MVU Utility Commission reviewed and discussed the proposed financing structure and projects. Approved by Commission on a 4-1 vote.
- June 25, 2015: Materials distributed for a June 29, 2015 Finance Subcommittee meeting – meeting rescheduled to July 8, 2015



## Time sensitivity of the project

- Recent large customers that have connected in the past 24 months:
  - Proctor and Gamble
  - Deckers Outdoor
  - Amazon 1
  - Amazon 2
  - Fisker





## Time sensitivity of the project

- Capacity Issues –
  - MVU South Substation – with recent rapid building of distribution centers and manufacturing, known large customers put the **current system infrastructure at capacity in 2016**
  - To serve additional large usage customers (**SEE MAP**) substation **completion is needed as early in 2017 as possible (project goal May 2017)**
  - System capacity expansion directly ties to continued Economic Development (ED) and Job Growth
  - With Loss of Redevelopment Agency, MVU is most significant ED tool
- Reliability Improvements –
  - The balance of projects funded creates reliability by guaranteeing service through multiple source points
  - Reliability is a key business attraction point for MVU
  - The reliability projects will be completed by 2018



## What occurs if capacity is not available for large projects?

- If capacity is not available by May 2017:
  - If substation project is not available when a developer is ready to connect, staff will need to advise the developer in 2016 to prepare to connect to SCE system to ensure service availability upon project completion
  - Result – loss of revenue stream for years ....
  - Negatively impacting the financial strength of MVU
- Staff is ready to proceed to prevent delays to the project



## How do we grow MVU and ensure the vitality of the Utility for years to come?

- Borrow money at low cost interest rates to build and expand MVU capacity timely to serve more customers, particularly large electric use customers:
  - This approach allows the utility to have the capacity to grow and take advantage of the current rapid development of large electricity consuming businesses
  - Growing slower, MVU may lose some critical customers to SCE due to inadequate capacity to serve them when they need to connect
  - MVU was caught slightly behind the curve in anticipating the pace of growth in the South Industrial Area
  - This creates a current crisis to ensure the businesses entering the planning queue in the next few months will have the capacity in 2017 that they will need - TIME IS OF THE ESSENCE



## Meeting the Goals of the MVU Vision

- Following this plan for growing the MVU business keeps the utility on course to achieve the following by about 2021:
  - The City will have sufficient revenue to consider a charter that could include a General Fund transfer from MVU to support services priorities or reduce the Utility Users Tax
  - The City could consider breaking from SCE rate parity, providing an extra economic incentive to draw more businesses and jobs to the community
  - Continue to be able to offer economic incentives for job creation and tax base development
  - Tax base growth provides support of Council priorities, which may include weaning off of the UUT



## Proposed Alternative 1 Financing Structure

- Taxable Lease Revenue Bonds of the General Fund – not to exceed \$29 million
  - Taxable due to the nature of the ENCO contract
  - Lease Revenue Bonds allow the Council to determine the timing and business purpose of the issuance (does not require a vote of the electorate)
  - Secured by property owned by the General Fund (Conference and Recreation Center, parks and fire stations)
  - Callable in 6 years to prepare for the developing financial strength of MVU to be able to refinance debt in 2021; this will free up the GF assets for future GF financing projects





## Other Financing Options Considered

- General Obligation Bonds
  - Not a feasible option since it requires a vote – earliest election date would be November 2016; need the project online by early 2017
  - Economists anticipate an increase in Fed Reserve rates by late 2015
  - No guarantee the vote would pass, essentially shutting down the economic development capacity of MVU
  - Would require all citywide property owners to increase taxes to support the MVU rate payers
- Alternative 2 - Pay as You Go
  - Current business strategy is to use the operating surplus to build a strong MVU balance sheet for the long term
  - MVU to begin to issue its own debt by 2021
  - Pay as you GO would cannibalize the balance sheet to pay for infrastructure projects with operating revenue, while deferring building the MVU financial strength needed for the long term
  - Funding to complete with Pay as you GO would push project completion out many years



## Other Financing Options Considered

- Alternative 3 - Public Private Partnership (P3)
  - MVU would need to start an RFP process that will take many months to complete – delaying project completion
  - Cost of capital is higher than the City's (A+ bond rating)
  - Additional parties involved, adding a cost layer that is not necessary
  - Any cost savings is typically from avoiding paying Prevailing Wages – MVU will own the asset at completion, therefore prevailing wages is required
  - The bulk of the \$15 million substation is equipment; so avoiding prevailing wages will not have a great savings impact
  - No opportunity to include an operating/maintenance element, since Enco has the private operating/maintenance contract through December 2020



## Alternatives

- Alternative 1 - Proceed with the Proposed Taxable Lease Revenue Bond Financing Not to Exceed \$29 million
  - Allows the projects to move forward timely
  - Currently a very favorable municipal bond market due to impacts of China and Greece economies struggling
- Alternative 2 - Proceed on a Pay as You Go basis
  - Complete portions of the projects as funding allows
  - Return to Council with a project timeline under this methodology
- Alternative 3 - Proceed to Prepare a Request for Proposals for a Public Private Partnership option
  - Direct staff to return with a timeline for this approach (staff estimates an additional 6-9 months for this process)



## Next Steps

- Moreno Valley Utilities Commission recommended Alternative 1 to Finance SubCommittee and City Council by a vote of 3-1 on August 21, 2015
- Finance Subcommittee will give Council their recommendation from meeting on August 31, 2015
- Staff recommends that the City Council direct staff to bring the documents required to proceed with Alternative 1, Lease Revenue Bond Financing in an amount not to exceed \$29 million, to the September 8, 2015 City Council meeting for Council consideration
- Other options that City Council deem appropriate
- Direct staff to bring the City's Debt Management Policy for review and discussion at a future Study Session



**Town Hall Meeting – Moreno Valley Utility (MVU) Proposed Financing  
September 16, 2015**

**Public Comments:**

**1. Chris Baca**

**Don't need to do a bond**

Staff response – need has been clearly established, completely funding the project with MVU cash flow does not complete the projects timely to meet the new development demands.

**Don't hock City assets**

Lease revenue bonds, using City property as the assets to create the lease-leaseback structure, is the most cost effective financing option available. Staff presented the multiple layers of protection to protect the City assets from any risk.

**Should pay as you go**

This would be Alternative C presented to City Council, see the above answer.

**Aqua Bella paid \$19m which was used to start the utility**

The Aquabella Development agreement required a \$1 million cash payment to the City per the negotiated agreement. The payment was not tied to the MV Utility per the agreement. No \$19 million payment existed.

**Property purchased on Kitching was worth \$50k and the City paid \$500k**

Staff has provided the comparative information documenting that the property was purchased at fair market value. There is no basis for a \$50,000 value.

**The City should look at alternative methods for the financing**

Staff has reviewed alternative financing options and is presenting four alternatives to City Council on October 13<sup>th</sup>, as discussed at the Town Hall meeting.

**2. Roy Bleckert**

**Have we explored lease purchase with Edison?**

Staff is able to construct the facility quicker without Edison's involvement. It is not recommended that Edison own and leaseback part of the MVU electric infrastructure. In addition, a lease-purchase structure is not part of SCE's business model for wholesale customers.

**Why not get private placement quotes?**

Private placement debt is more costly than a highly rated and negotiated municipal bond sale.

**3. Tom Jerelle**

**What is the value of MVU today?**

Total assets as of June 30, 2014 are \$46,736,731

**What is the debt of MVU today?**

Total outstanding debt issued by MVU is \$26,958,255

**Is it feasible to float bond on MVU assets?**

Due to the current lack of reserves on the balance sheet, MVU is not able to issue debt directly.

**Can underwriter do a controlled disbursement structure?**

Currently, municipal bond underwriters do not do controlled disbursements. When the bonds are funded, the proceeds are delivered to the trustee. Controlled disbursements occur through the bond trustee.

**People don't like all their assets pledged.**

Assets will be available as debt is paid off or refinanced. The debt for the City Hall will be paid off November 2016. The debt for the Public Safety Building will be paid off November, 2022. The General Fund assets securing the private placement debt for these two issues will be unencumbered upon defeasance of the debt. The assets committed to MVU Lease Revenue Bonds will be eligible to be refinanced directly by the utility in 2021, which would unencumber a majority of City property at that time.

**If borrowing, borrow one lump sum.**

This is consistent with the staff proposal.

**4. Rafael Bruegueras**

**Are there prepay penalties?**

Yes, for the first five years. The bonds are proposed to be structured with refinancing option scheduled in 2021 with no prepayment penalty.

**Will future projects contribute to the Utility?**

Yes, through the rate structure, future projects will pay their fair share for the added capacity and contribute to the utility.

**Need to own – not owe**

This is not practical when building large infrastructure for a relatively new utility.

**Like to be able to prepay**

Prepayment ability is scheduled for 2021. MVU will not have the capacity to prepay prior to this time.

**If borrowing, need to borrow all you need at one time**

This is consistent with the staff proposal.

**5. Guy Zazzaro**

**What is your + - factor in your estimated costs?**

The estimated costs are based on typical completed costs of similar projects, so there is no contingency factor built-in.

**Can we get estimated costs down from 10% to 3%?**

Once engineering design is complete, we may be able to reduce any contingency factor in the estimates.

**6. Scott Heveran**

**Have you considered power generation plans in these 3 zones?**

The construction of utility-scale generating facilities has been considered in the long-term plans for MVU; however, the current priority is building sufficient reserves for operations, repair and replacement of infrastructure, emergencies and rate stabilization.

### **How did Utilities Commission members vote and why?**

The Commission voted 3-1 with one member absent, in favor of financing the full scope of the project totaling \$25.1 million in proceeds through Lease Revenue Bonds. The members did not state the specific reason for their vote. As noted below, Commissioner Bleckert was the dissenting vote not in favor of the motion.

### **7. Roy Bleckert (2nd time)**

#### **Development Impact Fees should pay for the substation.**

The MVU has not utilized Development Impact Fees since the inception of the utility. The rate payers pay for infrastructure expansion by funding the debt service in the utility rates.

#### **What is breakdown of existing vs new customers?**

This is not an identifiable classification of MVU customers. The Kitching Substation is proposed to carry 28 MW of load. Of that 28 MW, approximately 40% of the projected load will come from new customers.

### **8. Pete Bleckert**

#### **Voted no because he doesn't want to tie up City assets for 20% of market**

There is no cost to using city assets for the lease-leaseback structure. The opportunity cost consists of that the property is not available for a general fund financing need. There are no identified financing needs for the GF currently.

#### **Developers should pay**

Developers do pay by paying the debt service through the electric rate structure.

#### **His goal is to get Iddo out of MVU and into Edison**



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Betsy Adams, Parks & Community Services Director

**AGENDA DATE:** October 13, 2015

**TITLE:** INTRODUCE ORDINANCE NO. 907, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, REPEALING ORDINANCE NO. 860 AND DELETING CHAPTER 2.4 OF TITLE 2 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO THE JULY 4TH ADVISORY BOARD.

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### **RECOMMENDED ACTION**

#### **Recommendation: That the City Council:**

1. Introduce Ordinance No. 907. An Ordinance of the City Council of the City of Moreno Valley, California, Repealing Ordinance No. 860 and Deleting Chapter 2.64 of Title 2 of the City of Moreno Valley Municipal Code Relating to the July 4<sup>th</sup> Advisory Board.

### **SUMMARY**

This report recommends introduction of Ordinance No.907 repealing Ordinance No. 860 and deleting Chapter 2.64 of Title 2 of the Moreno Valley Municipal Code relating to the July 4<sup>th</sup> Advisory Board.

### **DISCUSSION**

At the City Council Meeting on September 8, 2015, the City Council voted to disband the July 4<sup>th</sup> Advisory Board ("Board") and directed staff to prepare an ordinance for Council approval repealing Ordinance 860, which had established the Board. The Council's decision to disband the Board was made after considering how to address that the Board was unable to meet eight (8) times during Fiscal Year 2014-2015 due to a lack of a quorum.

Subsequent to this decision by the Council, the five (5) members of the Board were



advised of the current openings on the City's other boards and commissions and of the opportunity to volunteer to work on the July 4<sup>th</sup> events as volunteers in the Parks and Community Services Department. At the time that this staff report was prepared, one (1) member of the Board had applied for appointment to the Recreation Trails Board and three (3) members of the Board had sent emails to Parks and Community Services staff indicating their intent to volunteer through the Department to work on the July 4<sup>th</sup> events.

The Parks and Recreation Commission was also advised of the Council's decision to disband the Board and is ready to reassume oversight of the July 4<sup>th</sup> events.

**ALTERNATIVES**

1. Introduce Ordinance No.907. This alternative will enact the Council's decision to disband the July 4<sup>th</sup> Advisory Board, with oversight for the July 4<sup>th</sup> events returning to the Parks and Recreation Commission.
2. Do not introduce Ordinance No.907. This alternative will maintain the July 4<sup>th</sup> Advisory Board.

**FISCAL IMPACT**

No significant fiscal impact is anticipated.

**NOTIFICATION**

Posting of the agenda.

**PREPARATION OF STAFF REPORT**

Prepared By:  
Betsy Adams  
Parks & Community Services Director

Department Head Approval:  
Betsy Adams  
Parks & Community Services Director

**CITY COUNCIL GOALS**

**Positive Environment.** Create a positive environment for the development of Moreno Valley's future.

**ATTACHMENTS**

1. Ordinance No. 907

**APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/23/15 5:17 PM
City Attorney Approval	<u>✓ Approved</u>	10/07/15 12:03 PM
City Manager Approval	<u>✓ Approved</u>	10/07/15 1:48 PM



## ORDINANCE NO. 907

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, REPEALING ORDINANCE NO. 860 AND DELETING CHAPTER 2.64 OF TITLE 2 OF THE CITY OF MORENO VALLEY MUNICIPAL CODE RELATING TO THE JULY 4<sup>TH</sup> ADVISORY BOARD

The City Council of the City of Moreno Valley does ordain as follows:

SECTION 1. FINDINGS:

1.1 The City Council adopted Ordinance No. 860 of the City of Moreno Valley establishing a July 4<sup>th</sup> Advisory Board on February 26, 2013. As a result of the July 4th Advisory Board's inability to meet eight times in Fiscal Year 2014-2015 due to a lack of quorum, it is the intent of the City Council to dissolve the July 4th Advisory Board and to remove all references to the July 4th Advisory Board from the City of Moreno Valley Municipal Code.

SECTION 2. REPEAL OF PRIOR ENACTMENTS:

2.1 Ordinance No. 860 of the City of Moreno Valley is hereby repealed and Chapter 2.64 of Title 2 of the City of Moreno Valley Municipal Code is hereby deleted in its entirety.

SECTION 3. SEVERABILITY

3.1 That the City Council declares that, should any provision, section, paragraph, sentence or word of this ordinance be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this ordinance as hereby adopted shall remain in full force and effect.

SECTION 4. REPEAL OF CONFLICTING PROVISIONS

4.1 That all the provisions of the Municipal Code as heretofore adopted by the City of Moreno Valley that are in conflict with the provisions of this ordinance are hereby repealed.

SECTION 5. EFFECT OF ENACTMENT:

5.1 Except as specifically provided herein, nothing contained in this ordinance shall be deemed to modify or supersede any prior enactment of the City Council which addresses the same subject addressed herein.

SECTION 6. NOTICE OF ADOPTION:

6.1 Within fifteen days after the date of adoption hereof, the City Clerk shall certify to the adoption of this ordinance and cause it to be posted in three public places within the city.

SECTION 7. EFFECTIVE DATE:

7.1 This ordinance shall take effect thirty days after the date of its adoption.

APPROVED AND ADOPTED this 27<sup>th</sup> day of October, 2015.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

Attachment: Ordinance No. 907 [Revision 1] (1676 : INTRODUCE ORDINANCE NO. 907, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY

**ORDINANCE JURAT**

STATE OF CALIFORNIA    )  
COUNTY OF RIVERSIDE    ) ss.  
CITY OF MORENO VALLEY )

I, JANE HALSTEAD, City Clerk of the City of Moreno Valley, California, do hereby certify that Ordinance No. 907 had its first reading on October 13, 2015 and had its second reading on October 27, 2015, and was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 27<sup>th</sup> day of October, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Steve Quintanilla, Interim City Attorney

**AGENDA DATE:** October 13, 2015

**TITLE:** ADOPT ORDINANCE EMERGENCY FLOODING – SINGLE SOURCE AND SOLE SOURCE (RECEIVED INTRODUCTION AND FIRST READING ON SEPTEMBER 22, 2015 ON A 4-0-1 VOTE, GUTIERREZ ABSENT)

---

### **RECOMMENDED ACTION**

#### **Recommendations: That the City Council:**

1. Adopt Ordinance No. 903. An Ordinance of the City Council of the City of Moreno Valley, California, which allows the City to purchase goods, materials, and services through single and/or sole sourcing in response to and in preparation of the impending threat of flooding which is anticipated to be caused by El Niño.

### **CITY COUNCIL GOALS**

None

### **ATTACHMENTS**

1. 5001 - Companion Ordinance Emergency Flooding (09 15 15)

### **APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/16/15 7:56 AM
City Attorney Approval	<u>✓ Approved</u>	9/16/15 8:35 AM
City Manager Approval	<u>✓ Approved</u>	9/16/15 2:03 PM

**HISTORY:**

09/22/15

Next: 10/13/15

City Council

FIRST READING OF ORDINANCE

## ORDINANCE NO. 903

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, ADDING SECTION 3.12.340 TO CHAPTER 3.12 PURCHASING OF TITLE 3 REVENUE AND FINANCE OF THE MORENO VALLEY MUNICIPAL CODE ADOPTING PROCEDURES FOR SINGLE AND SOLE SOURCING IN PREPARATION OF AND IN RESPONSE TO FLOODING

**WHEREAS**, Chapter 3.12, “PURCHASING,” of the Moreno Valley Municipal Code sets forth general requirements applicable to the City of Moreno Valley’s purchasing procedures for goods and services; and

**WHEREAS**, Section 3.12.080, “General – Single and Sole Source,” generally provides when single or sole sourcing may be permitted, along with certain requirements the City of Moreno Valley (“City”) must abide by when single or sole sourcing, while expressly providing that the section is not applicable to public works projects except as permitted by state law; and

**WHEREAS**, Section 3.12.250, “Materials, supplies and equipment – Waiver of formal bid procedures,” generally allows the City to dispense of formal bid procedures under times of emergency; and

**WHEREAS**, Section 3.12.010, “Definitions,” defines “Emergency” as the existence or threatened existence of conditions of extreme peril to the safety of persons and property within the City that may vitally affect the life, health or convenience of citizens; and

**WHEREAS**, Section 3.12.010, “Definitions,” defines “Single Source” as “a contract for the purchase of goods or services entered into after soliciting and negotiating only with one source, usually because of the technology required or uniqueness of the product or service provided”; and

**WHEREAS**, Section 3.12.010, “Definitions,” defines “Sole source” as a circumstance where “only one vendor possesses the unique and singularly available capability to meet the requirement of the solicitation, such as technical qualifications, matching to currently owned equipment or supplies, the ability to deliver at a particular time, or services from a public utility”; and

**WHEREAS**, the City desires to amend the Municipal Code in light of the impending threat of El Niño in order to allow the City to single and sole source for certain goods, materials, and services, in accordance with State law, and in order to allow the City to more effectively and efficiently respond to and prepare for flooding which is expected to be caused by El Niño; and



**WHEREAS**, experts predict that there is a ninety (90) percent chance El Niño conditions will continue through the winter of 2015 and an eighty (80) percent chance that it will continue into the Spring of 2016; and

**WHEREAS**, the National Weather Service's Climate Prediction Center said that this El Niño is shaping up to be as strong as the 1997-98 El Niño, which resulted in storms that killed seventeen (17) people and caused more than half a billion dollars in damage in California; and

**WHEREAS**, Public Contract Code Section 22050 allows cities to dispense with the requirement that cities provide notice for bids to let public works contracts.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MORENO VALLEY DOES ORDAIN AS FOLLOWS:

**SECTION 1. RECITALS**

That the above recitals are true and correct and are incorporated as though fully set forth herein.

**SECTION 2. AMENDMENT OF TITLE 3 REVENUE AND FINANCE OF THE MUNICIPAL CODE ADDING SECTION 3.12.340 EMERGENCY FLOODING – SINGLE SOURCE AND SOLE SOURCE TO CHAPTER 3.12 PURCHASING**

That Section 3.12.340 Emergency flooding – Single source and sole source, is hereby added to Chapter 3.12 PURCHASING, as follows:

**Section 3.12.340 Emergency flooding – Single source and sole source.**

**(a) Non-Public Works Contracts. In the event of an emergency caused or to be caused by flood, storm, or similar disaster that poses or is about to pose a serious threat to the public safety, as determined by the City Manager, the Mayor or City Manager may order the suspension of normal bidding or purchasing requirements otherwise required in this Chapter 3.12, and allow for single and sole sourcing procurements.**

**(b) Public Works Contracts. In case of an emergency, the City Council may repair or replace a public facility, take any directly related and immediate action required by that emergency, and procure the necessary equipment, services, and supplies for those purposes, without giving notice for bids to let contracts, upon the passing of a resolution by a four-fifths vote of the City Council declaring that the public interest and necessity demand the immediate expenditure of public money to safeguard life, health or property. Upon adoption of the resolution, it may expend any sum required by the emergency, pursuant to and in compliance with Public Contract Code Section 22050. The City Council**

**may pass a resolution by four-fifths vote to delegate to the City Manager, the authority to order any action pursuant to this section.**

**SECTION 3. SEVERABILITY**

That the City Council declares that, should any provision, section, paragraph, sentence or word of this ordinance be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this ordinance as hereby adopted shall remain in full force and effect.

**SECTION 4. REPEAL OF CONFLICTING PROVISIONS**

That all the provisions of the Municipal Code as heretofore adopted by the City of Moreno Valley that are in conflict with the provisions of this ordinance are hereby repealed.

**SECTION 5. EFFECTIVE DATE**

That this ordinance shall take effect thirty (30) days after its second reading.

**SECTION 6. CERTIFICATION**

That the City Clerk shall certify to the adoption of this ordinance and cause the same to be published according to law.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

APPROVED AND ADOPTED this 22<sup>nd</sup> day of September, 2015.

Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

N:\MOVA\01-01 General Matters\DOC\5001 - Companion Ordinance Emergency Flooding (09 14 15).docx

Attachment: 5001 - Companion Ordinance Emergency Flooding (09 15 15) [Revision 1] (1670 : ORDINANCE EMERGENCY FLOODING ? SINGLE

**ORDINANCE JURAT**

STATE OF CALIFORNIA    )  
COUNTY OF RIVERSIDE   ) ss.  
CITY OF MORENO VALLEY)

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Ordinance No. 903 had its first reading on September 22, 2015 and had its second reading on September 8, 2015, and was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 22<sup>nd</sup> day of September, 2015, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)



## Report to City Council

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**TO:** Mayor and City Council

**FROM:** Ahmad R. Ansari, P.E., Public Works Director/City Engineer

**AGENDA DATE:** October 13, 2015

**TITLE:** ADOPT ORDINANCE NO. 904. AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, AMENDING SECTION 6.04.040 OF CHAPTER 6.04 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO PUBLIC NUISANCES (RECEIVED INTRODUCTION AND FIRST READING ON SEPTEMBER 22, 2015 ON A 4-0-1 VOTE, GUTIERREZ ABSENT)

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### **RECOMMENDED ACTION**

#### **Recommendation: That the City Council:**

1. Adopt Ordinance No. 904. An Ordinance of the City Council of the City of Moreno Valley, California, amending section 6.04.040 of Chapter 6.04 of the Moreno Valley Municipal Code relating to Public Nuisances.

### **CITY COUNCIL GOALS**

None

### **ATTACHMENTS**

1. Ordinance No. 904 - Stormwater Nuisance

### **APPROVALS**

Budget Officer Approval	<u>✓ Approved</u>	9/11/15 9:54 AM
City Attorney Approval	<u>✓ Approved</u>	9/15/15 2:19 PM
City Manager Approval	<u>✓ Approved</u>	9/15/15 2:23 PM

**HISTORY:**

09/22/15

Next: 10/13/15

City Council

FIRST READING OF ORDINANCE

ORDINANCE NO. 904

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MORENO VALLEY, CALIFORNIA, AMENDING SECTION 6.04.040 OF CHAPTER 6.04 OF THE MORENO VALLEY MUNICIPAL CODE RELATING TO PUBLIC NUISANCES

The City Council of the City of Moreno Valley does ordain as follows:

SECTION 1. AMENDMENT OF MUNICIPAL CODE:

Section 6.04.040 of Chapter 6.04 of the Moreno Valley Municipal Code is hereby amended to read as follows:

“6.04.040 Declaration of nuisances.

It is unlawful and is declared a nuisance for any responsible person in the city to maintain or allow another to maintain, or fail to maintain any of the following conditions:

A. Buildings, structures, facilities, equipment, devices or improvements:

1. Maintained in violation of any provision of any comprehensive or uniform building, plumbing, electrical, housing, mechanical or fire code as adopted by the city or enacted by the state of California and codified in the California State Codes or within the California Code of Regulations;

2. Maintained in violation of any provision of Title 9 of this code, including, but not limited to, prohibited uses, setback violations, development standards and sign regulations;

3. Which have been abandoned, vacated, boarded up, partially destroyed, or left in a state of partial construction or repair for a period exceeding ninety (90) days, or and have become accessible to unauthorized persons including, but not limited to, juveniles, vagrants or persons engaged in illegal, hazardous, drug or gang activity;

4. Which have become defective, unsightly, or in such a condition of deterioration or disrepair as the same may cause depreciation of the property values to surrounding properties;

5. Upon which the condition of the exterior coating has become so deteriorated as to permit decay, excessive checking, cracking, dry rot, termite infestation, broken windows or warping;

6. With graffiti or other words, lettering or drawings not otherwise permitted by the provisions of this code, state or federal law on visible or exterior surfaces;

7. Without a connection to a sewer disposal system or sanitary sewer if occupied or with any leaking seeping sewage;

8. Without a connection to a permanent electrical service if occupied and such service is available within three hundred (300) feet of the occupied building or structure.

9. Without hot water, running water, adequate heating, and electricity if occupied;

10. Constructed in violation of any state or local law or regulation relating to the condition, use or maintenance of buildings.

B. Outdoor storage or maintenance of the following:

1. Abandoned, damaged or broken equipment, machinery, household items or appliances;

2. Refuse, rubbish, scrap metal, appliances, shopping carts, wood, plant cuttings, broken or discarded furniture or household equipment, junk, trash or debris, parts, cans, boxes or containers;

3. Garbage or trash containers stored in a manner so as to be visible from public rights-of-way, except when in places of collections and at times for collection as permitted in this code;

4. Any hazardous substance or waste product, including, but not limited to biological material, oil, gasoline, automotive fluids, and household chemicals not lawfully stored or which has been discharged, released, placed or deposited upon any premises or onto any public property;

5. Construction materials, equipment or machinery in any front yard, front setback or driveway in a residential zone;

6. Any materials that are stored or stacked in a manner in which the materials could be discharged into a storm drain system.

C. Landscaping, vegetation, or improved or unimproved property in any of the following conditions:

1. Property, including any sidewalks and parkways adjacent thereto, containing weeds, dry grasses, dead trees, dead shrubs, or any other material which bears seeds of a wingy or downy nature or which by reason of their size, manner of growth or location, constitute a fire hazard or a threat to public health, or containing weeds, vegetation, grasses, trees or shrubs, including, but not limited to sagebrush, chaparral, and Russian Thistle (tumbleweed) which, when dry, will in reasonable probability constitute a fire hazard or be blown onto adjoining property by prevailing winds;

2. Containing stagnant or standing water, refuse, rubbish, offal, excrement or other waste materials which emit an odor;

3. Unimproved surfaces of front and visible side yards not completely landscaped and covered with any combination of ground cover consisting of live plant



materials, decorative rock, redwood bark, and/or mulch as long as such covering is consistent with any existing land use approvals, permits, entitlements, contracts or environmental document relating to the property;

4. Trees and shrubs containing dead or fallen limbs or branches that may present a safety hazard;

5. Trees or shrubs which are overgrown or contain limbs or branches that restrict, impede or obstruct the use of or obscure the visibility of pedestrians or drivers using the public right-of-ways, easements, sidewalks or roadways;

6. Overgrown vegetation likely to harbor vermin, insects or rodents of any kind;

7. Not conforming to any requirement set forth in any zoning or land use approval, permit, entitlement, contract or environmental document relating to the property.

D. Vehicles stored, parked, used or maintained in any of the following manners:

1. To allow or perform the maintenance, repair, restoration, painting, body work or dismantling of any vehicle, equipment or parts thereof on the exterior portion of any residential property. This prohibition shall not apply to work specifically authorized by state or local law or regulation, and shall not apply to minor repair or maintenance of vehicles which are registered to the person residing on the property and such repairs or maintenance are not conducted outside for longer than seventy-two (72) consecutive hours;

2. Parked or stored on unimproved surfaces;

3. Encroaching onto or over any pedestrian pathway or sidewalk or which restrict, impede or obstruct the use of or obscure the visibility of pedestrians or drivers using the public right-of-ways, easements, sidewalks or roadways;

4. With accumulations of debris, leaves, weeds or other materials in the areas around and under the vehicle;

5. As residential living space or occupancy, including, but not limited to, sleeping, cooking, dining, or bathing;

6. Inoperable, abandoned, wrecked, or dismantled vehicles or parts thereof not stored entirely within an enclosed building.

E. Property containing any of the following:

1. Wells, swimming pools, spas, ponds or excavations containing water or any other liquid in excess of twenty-four (24) inches in depth at any point and exceeding five thousand (5,000) gallons in capacity which are unfenced or otherwise unprotected with a barrier at least five (5) feet in height;

2. Any device, equipment, instrument, vehicle, machinery or animal which creates a loud or unusual noise in violation of Chapter 11.80 of this code;
3. Any hazard to the public obstructing the use of or obscuring the visibility of pedestrians or drivers using the public right-of-ways, easements, sidewalks or roadways, including, but not limited to, walls, fences, shrubs, trees, vehicles or structures;
4. Walkways, driveways, parking lots and other improved surfaces in a deteriorated or unsafe condition or with fading required striping or markings;
5. An infestation of termites, insects, vermin, rodents or other pests;
6. The display or placement upon any fence, wall, tree, bush or any other structure, or portion thereof, of any linens, rugs, fabrics, nylon, or any other item of clothing or similar items except upon a recognized clothes line facility not located in the front yard;
7. Any alteration to the alignment of a natural or developed drainage course, culvert, device, facility, improvement or system designed to convey stormwater runoff ("drainage system") or any drainage system which contains:
  - a. any blockage or damming which prevents the continuous and unimpeded flow of stormwater;
  - b. any vegetation not approved as part of the original design of the drainage system;
  - c. an accumulation of sediment which alters the elevation of the natural, designated or approved flow of stormwater;
  - d. any junk, trash, debris, items or materials not approved as part of the original design of the drainage system; or
  - e. any modification to the original approved design of a drainage system that restricts, impedes or reduces the natural or designed flow of the drainage system.
8. Any attractive nuisance;
9. Any condition which creates a detriment or hazard to the public health, safety or general welfare as to constitute a public nuisance as defined by California Civil Code Section 3480, California Health & Safety Code Section 11570, California Penal Code Section 11225, or California Government Code Section 39561."

## SECTION 2. EFFECT OF ENACTMENT:

Except as specifically provided herein, nothing contained in this ordinance shall be deemed to modify or supersede any prior enactment of the City Council which addresses the same subject addressed herein.

SECTION 3. SEVERABILITY

The City Council declares that, should any provision, section, paragraph, sentence or word of this ordinance be rendered or declared invalid by any final court action in a court of competent jurisdiction or by reason of any preemptive legislation, the remaining provisions, sections, paragraphs, sentences or words of this ordinance as hereby adopted shall remain in full force and effect.

SECTION 4. REPEAL OF CONFLICTING PROVISIONS

All the provisions of the Municipal Code as heretofore adopted by the City of Rancho Mirage that are in conflict with the provisions of this ordinance are hereby repealed.

SECTION 5. NOTICE OF ADOPTION:

Within fifteen days after the date of adoption hereof, the City Clerk shall certify to the adoption of this ordinance and cause it to be posted in three public places within the city.

SECTION 6. EFFECTIVE DATE:

This ordinance shall take effect thirty days after the date of its adoption.

SECTION 7. CERTIFICATION

The City Clerk shall certify to the passage of this ordinance and shall cause the same to be published according to law.

APPROVED AND ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2015.

\_\_\_\_\_  
Mayor

ATTEST:

\_\_\_\_\_  
City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
City Attorney

**ORDINANCE JURAT**

STATE OF CALIFORNIA     )  
COUNTY OF RIVERSIDE    ) ss.  
CITY OF MORENO VALLEY    )

I, Jane Halstead, City Clerk of the City of Moreno Valley, California, do hereby certify that Ordinance No. 904 had its first reading on September 22, 2015 and had its second reading on October 13, 2015, and was duly and regularly adopted by the City Council of the City of Moreno Valley at a regular meeting thereof held on the 13<sup>th</sup> day of October, 2015 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

(Council Members, Mayor Pro Tem and Mayor)

\_\_\_\_\_  
CITY CLERK

(SEAL)