



RECIRCULATED DRAFT PROGRAM ENVIRONMENTAL IMPACT REPORT FOR THE EASTERN COACHELLA VALLEY STORMWATER MASTER PLAN PROJECT

SCH No. 2015071047

Prepared for the Lead Agency:
Coachella Valley Water District



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- C.2 *Paleontological Resource Assessment for the Master Drainage Plan and Programmatic Environmental Impact Report for the Coachella Valley Water District for the Region I-Oasis Area and Region II – Mecca/North Shore*, Applied Earthworks, Inc., November 2014
- D.1 *Executive Report on the Eastern Coachella Valley Stormwater Master Plan*, prepared for Coachella Valley Water District, Albert A. Webb Associates, March 2017.
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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

A-2	Heavy Agriculture
AAQS	Ambient air quality standards
AB	Assembly Bill
ACOE	U.S. Army Corps of Engineers
ADOE	Archaeological Determinations of Eligibility (ADOE)
ADP	Area Drainage Plan
AG	Agriculture
AQMP	Air Quality Management Plan
BMPs	Best Management Practices
C-1/C-P	General Commercial
CAA	Clean Air Act
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
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
CG	General Commercial
CGP	Coachella General Plan
CGV	Compass Growth Visioning
CH	Conservation Habitat
C-N	Neighborhood Commercial
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon
C-P-S	Scenic Highway Commercial
CRHR	California Register of Historic Resources
CVAG	Coachella Valley Association of Governments



Acronyms

CVCC	Coachella Valley Conservation Commission
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSC	Coachella Valley Stormwater Channel
CVSIP	Coachella Valley State Implementation Plan
CVWD	Coachella Valley Water District
CWA	Clean Water Act
CYPF	Cubic Yards Per One-Foot-Wide
DEIR	Draft Environmental Impact Report
DNL	Day-night level
DTSC	Department of Toxic Substance Control
ECV SMP	Eastern Coachella Valley Stormwater Master Plan
ECVAP	Eastern Coachella Valley Area Plan
EIA	Energy Information Administration
EIC	Eastern Information Center
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FESA	Federal Endangered Species Act
FMMP	Farmland Mapping and Monitoring Program
GHG	Greenhouse gas
GPA No. 960	General Plan Amendment No. 960
GWP	global warming potential
HANS	Habitat Assessment and Negotiation Strategy
HCP	Habitat Conservation Plan
HPD	Historic Property Data File
IA	Implementing agreement
ICGP	Imperial County General Plan
IID	Imperial Irrigation District
I-P	Industrial Park
IPCC	Intergovernmental Panel on Climate Change
IS	Initial Study
JPR	Joint Project Review
LDMF	Local Development Mitigation Fee
LQGP	La Quinta General Plan
LST	Localized significance thresholds



Acronyms

LU	Land Use Element
MBAS	Methylene Blue Activated Substances
MBTA	Migratory Bird Treaty Act
M-H	Heavy Manufacturing
MMTCO ₂ e e	Million metric tonnes of carbon dioxide equivalent
MNSA	Mecca North Shore Area
mph	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer Systems
M-SC	Service Commercial Manufacturing
MSHCP	Multiple Species Habitat Conservation Plan
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCCP	Natural Communities Conservation Plan
NDDB	Natural Diversity Database
NEPA	National Environmental Policy Act
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OPR	Governor's Office of Planning and Research
O-S	Open Space
OSHA	Occupational Safety and Health Administration
OTMG	Oak Tree Management Guidelines
OVFA	Oasis Valley Floor Area
PEIR	Program Environmental Impact Report
POC	Pollutants of concerns
PPM	Parts per million
PPT	Parts per thousand
PPV	Peak particle velocity
PRC	Public Resources Code
PRIMP	Paleontological resource impact mitigation program
Qa	Quaternary alluvial
Qc	Lancustrine



Acronyms

Qcb	gravel bar
Qf	Alluvial fan
R-1	Single-Family Residential
R-2	Multifamily Residential Development
R-3	General Residential
R-4	Planned Residential
R-6	Residential Incentive
R-A	Residential Agriculture
RCB	Reinforced concrete box
RCNM	Roadway Construction Noise Model
RCP	Reinforced concrete pipe
RD	Rural Desert
REC	Open Space Recreation
R-M	Residential Multiple Family
RMS	Root mean square
ROW	Right-of-way or rights-of-way
RPS	Renewable Portfolio Standard
R-PUD	Residential Planned Unit Development
RR	Rural Residential
R-S	Residential Single Family
RST	Regional significance threshold
R-T	Mobile Home Subdivision/Mobile Home Park
RTP	Regional Transportation Plan
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RUR	Open Space Rural
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
SCS	Soil Conservation Service
SCS	Sustainable Community Strategy
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SP Zone	Specific Plan Zone



Acronyms

SPF	Standard project flood
SPS	Standard project storm
SRA	Source receptor area
SSAB	Salton Sea Air Basin
SWPPP	Storm Water Pollution Prevention Plan
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TMLA	Transportation and Land Management Agency
TPEIR	Travertine Point Specific Plan EIR
W	Watershed
W-1	Watercourse, Watershed & Conservation Areas
W-2	Controlled Development
UPRR	Union Pacific Railroad
UCMP	University of California Museum of Paleontology
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UST	Underground storage tank
VMT	Vehicle miles traveled
WQMP	Water Quality Management Plan
WSPT	Western Stemmed Point Tradition
WDID	Waste Discharge Identification Number
WRSC	Whitewood River Stormwater Channel
WQMP	Water Quality Management Plan

Units of Measurement and Chemical Symbols

>	Greater than
C ₂ F ₆	Perfluoroethane
CFC	Chloroflourocarbons
CH ₄	Methane
CO	Carbon monoxide
CO ₂	Carbon dioxide
dB	decibels
HC	Hydrocarbons



Units of Measurement and Chemical Symbols

HFC	Hydro-flourocarbons
LST	Localized Significance Threshold
Mt	Metric tonne
N ₂ O	Nitrous oxide
NO	Nitric oxide
NO ₂	Nitrogen dioxide
NO _x	Oxides of nitrogen
O ₃	Ozone
Pb	Lead
PFC	Perfluorocarbons
PM	Atmospheric Particulate Matter
PM-10	Particulate matter 2.5 to 10 microns in diameter
PM-2.5 ₅	Particulate matter 2.5 microns or less in diameter
ROG	Reactive organic gases
SF ₆	Sulfur hexaflouride
SO ₂	Sulfur dioxide
SO _x	Oxides of sulfur
SRA	Source Receptor Area
TCA	1,1,1-trichloroethane or methyl chloroform
VOC	Volatile organic compounds

Section 1 – Executive Summary

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example text.)

The Coachella Valley Water District (CVWD) has prepared this Recirculated Draft Program Environmental Impact Report (PEIR) to evaluate and disclose potential environmental impacts resulting from the implementation of the proposed *Eastern Coachella Valley Stormwater Master Plan Project* (hereinafter the Master Plan). The Master Plan is comprised of two regional plans: the Oasis/Valley Floor Stormwater Master Plan (Oasis/Valley Floor SMP) and the Mecca/North Shore Area Stormwater Master Plan (Mecca/North Shore SMP). The Master Plan is provided in Appendix D to this PEIR.

CEQA Guidelines Section 15088.5 requires that a lead agency recirculate an EIR, or portions of an EIR, when significant new information is added to the EIR after public notice for public review of the Draft EIR, but prior to certification. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project, or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponent has declined to implement.

Under CEQA, if the revision is limited to a few chapters or portions of the DEIR, the lead agency need only recirculate the chapters or portions that have been modified (CEQA Guidelines Section 15088.5, subdivisions (c)).

The Eastern Coachella Valley Stormwater Master Plan Recirculated Draft PEIR is being recirculated to inform the public regarding the following changes:

1. Revisions to the boundaries of the Master Plan as shown on **Figure 2.1 – Proposed Boundary Changes** and described below:
 - a. removal of territory within the city of La Quinta, in which no Facilities are proposed;
 - b. removal of territory within the city of Coachella west of the Coachella Valley Stormwater Channel, in which no facilities are proposed;
 - c. addition of the unincorporated territory between the cities of Coachella and La Quinta north of Avenue 52;
 - d. revision of the western boundary of the Master Plan to conform to the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan Santa Rosa and San Jacinto Mountains Conservation Area, except in the locations in which the conceptual alignment of proposed Facilities extend into the conservation area.



2. Deletion of all discussion regarding the La Quinta General Plan and municipal code, except in the context of cumulative impacts in Section 5.5 Hydrology and Water Quality.
3. Revisions to sections to update the amount of acreage in the Master Plan.
4. Revisions to Section 5.1 Agricultural and Forestry Resources to:
 - a. incorporate the most recent (2016) agricultural statistics from the Riverside County Agricultural Commissioners' Office;
 - b. incorporate the most recent (2016) Farmland Mapping California and Monitoring Program (FMMP) data from the California Department of Conservation;
 - c. incorporate current Williamson Act contract information.
5. In response to comments received from the South Coast Air Quality Management District on the Draft PEIR, mitigation measure **MM AQ 1** was revised and mitigation measure and **MM AQ 2** was added to Section 5.2 Air Quality and Greenhouse Gas Emissions.
6. Travertine Point Specific Plan EIR mitigation measures 6.4-47 and 6.4-49 have been added to Section 5.2 Biological Resources.
7. Incorporation of the most recent (2016) Farmland Mapping California and Monitoring Program (FMMP) data from the California Department of Conservation in Section 7 Alternatives to the Proposed Project.

There are no changes to the proposed Master Plan Facilities from what was described and evaluated in the original Draft PEIR.

As reflected in the analyses presented in this Recirculated Draft PEIR, the changes in the Project and updated information do not represent significant new information or identify any new significant impacts from what was disclosed in the Draft PEIR. Rather, given this is a document from which future analysis may be tiered, CVWD determined that a Recirculated Draft PEIR is desirable in light of the changes to the Master Plan boundary

This Recirculated Draft PEIR has been prepared in accordance with the California Environmental Quality Act of 1970 as amended (CEQA) Public Resources Code, Section 21000 et seq. and the State CEQA Guidelines published by the Public Resources Agency of the State of California (California Code of Regulations, Title 14, Chapter 3. Section 15000 et seq). CVWD is the Lead Agency under CEQA (State CEQA Guidelines Section 15367) and is the public agency with the responsibility for carrying out or approving the Master Plan.

Pursuant to State CEQA Guideline §15123, the Executive Summary shall provide a brief summary of the proposed action and the potential consequences. Also identified within this chapter are the potentially significant impacts and required mitigation measures; alternatives



to the Project including those that would avoid the potentially significant effect; areas of controversy known to the Lead Agency; and issues to be resolved including the choice among alternatives and how best to mitigate the potentially significant effects.

The reader should review, but not rely exclusively on the Executive Summary as the sole basis for judgment of the Proposed Project and Alternatives. The complete Recirculated Draft PEIR should be consulted for specific information about the potential environmental effects and implementation of the mitigation monitoring and reporting program.

The purpose of this Recirculated Draft PEIR is to provide a programmatic-level analysis of the Master Plan as described in Section 3.0 of this Recirculated Draft PEIR. Pursuant to Section 15168 of the State *CEQA Guidelines*, a programmatic-level environmental analysis is appropriate for conceptual planning documents. The Recirculated PEIR is a disclosure document that examines the overall environmental impacts of the proposed Master Plan and provides an opportunity for the public and any Responsible Agencies to review and comment on the validity of the environmental analyses. Ultimately, the Recirculated PEIR would be used by the decision-makers, which in this case is the CVWD's Board of Directors, to determine whether to certify the PEIR and approve the Master Plan.

If the PEIR is certified and the Master Plan is approved by the Board of Directors, CVWD or any other jurisdiction (such as the city of Coachella, Riverside County, or Imperial County as a CEQA Responsible Agency) having discretionary approval related to a stormwater facility envisioned by the Master Plan (Facility) would be required to examine each Facility on its own merits pursuant to CEQA. Potential Facility-specific CEQA documents may include an Initial Study (IS) leading to a Negative Declaration (ND) or Mitigated Negative Declaration (MND); supplemental Environmental Impact Report (EIR); or subsequent EIR. However, as directed under Section 15168(c)(2) of the State *CEQA Guidelines*, if CVWD or any other jurisdiction having discretionary approval related to a stormwater facility finds that pursuant to Section 15162, no new impacts could occur or no new mitigation measures would be required, the Lead or Responsible Agencies can approve the activity as being within the scope of the Master Plan covered by this PEIR, and no new environmental document would be required.



1.1 Project Location

The Master Plan Area is generally located in the eastern portion of the Coachella Valley in unincorporated Riverside County¹ and includes the communities of Mecca, North Shore, Thermal, Oasis, and Vista Santa Rosa in addition to ~~a portions of the cities of La Quinta and of the city of~~ Coachella (Master Plan Area) (**Figure 1-1 – Vicinity Map** and **Figure 1-2 – Eastern Coachella Valley Stormwater Master Plan Area**). The Master Plan Area is bounded on the north by ~~Avenue 52 Wasteway No. 2 Channel and the cities of Coachella and Indio~~, on the west by the ~~city of La Quinta, CVWD’s Dike No. 4, and the~~ Santa Rosa and San Jacinto Mountains Conservation Area,² on the east by the East Side Dike, and on the south by the Salton Sea and Travertine Palms area just south of the Riverside County border within northwestern Imperial County. ~~While no Facilities are proposed to be located in the City of La Quinta, a portion of the Master Plan Area is within that city.~~

The Master Plan Area encompasses approximately ~~167.9~~ 153 square miles³ within all or a portion of:

- Sections ~~8 through 17~~ 11 through 14, ~~21 through 28~~ 23 through 26, and ~~34~~ 35 through 36, Township 6 South, Range 7 East;
- Sections ~~8~~ 9 through 36, Township 6 South, Range 8 East;
- Sections 18, 19, 20, and 29 ~~28~~ through ~~33~~ 34, Township 6 South, Range 9 East;
- Sections 1 through 3, 11 through 13, ~~15, 22 through 24~~, Township 7 South, Range 7 East;
- Sections 1 through 36, Township 7 South, Range 8 East;
- Sections 2 through 36, Township 7 South, Range 9 East;
- Sections ~~15~~ 16 through 23 and 26 through 36, Township 7 South, Range 10 East;
- Sections 31 ~~through 35~~, Township 7 South, Range 11 East;
- Sections 1 through 4 6, 9 through 15, ~~22~~ 23 through 25 ~~27~~, and ~~35 through 36~~, Township 8 South, Range 8 East;
- Sections 4 through 7 8, ~~19~~ 17 through 21 and ~~28~~ 27 through 34, Township 8 South, Range 9 East;
- Sections ~~1, 2, 3 and 11 through 13~~, Township 8 South, Range 10 East;

¹ A small portion of the Eastern Coachella Valley (ECV) SMP around Travertine Point Channel No. 1 is located in Imperial County.

² There are three locations along the westerly boundary where the Master Plan boundary extends into the Santa Rosa and Santa Jacinto Mountains Conservation Area to take in the area associated with training levees and channels.

³ The Oasis/Valley Floor SMP encompasses approximately ~~107.6~~ 92.5 square miles and the Mecca/North Shore SMP encompasses approximately 60.3 square miles.



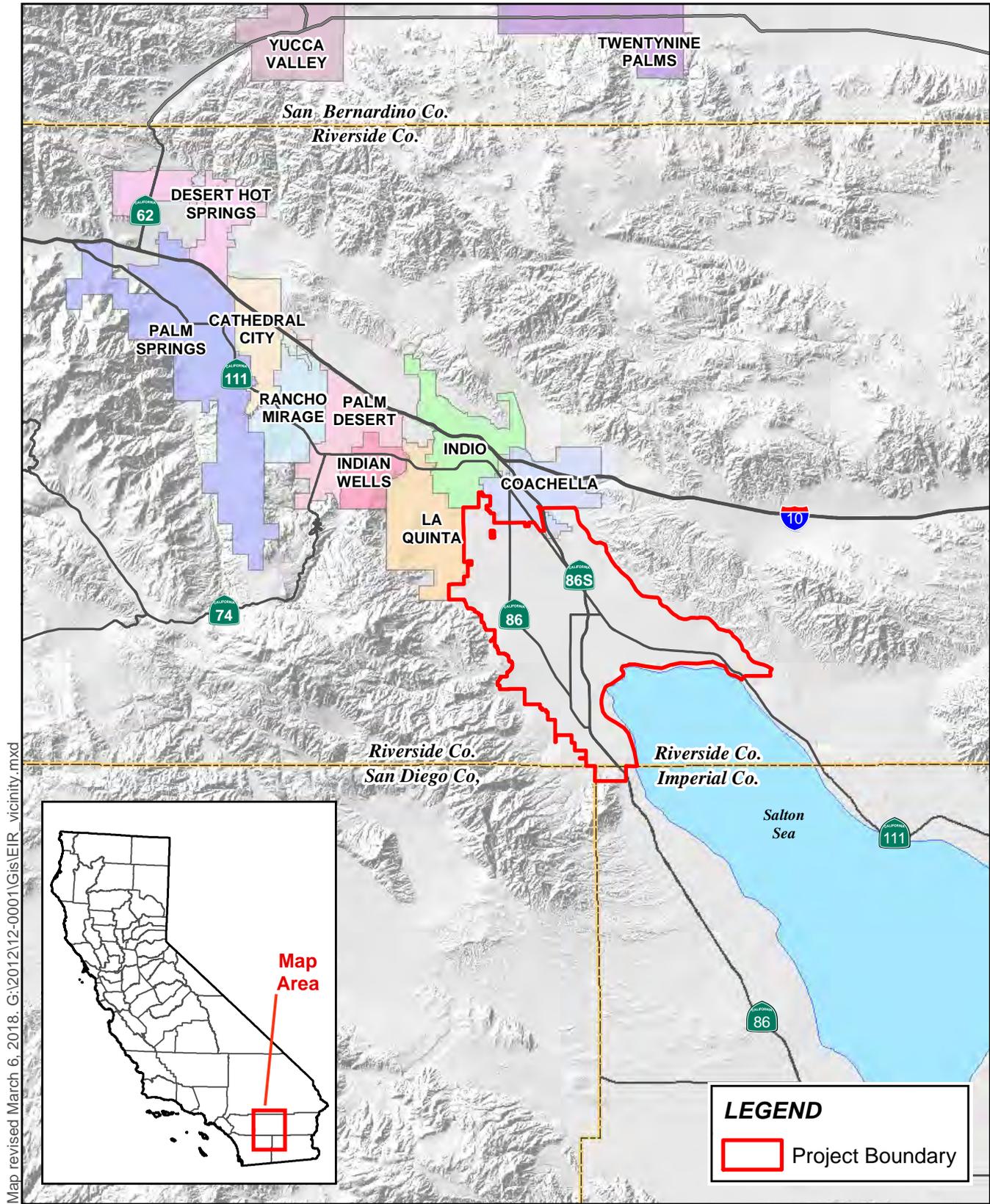
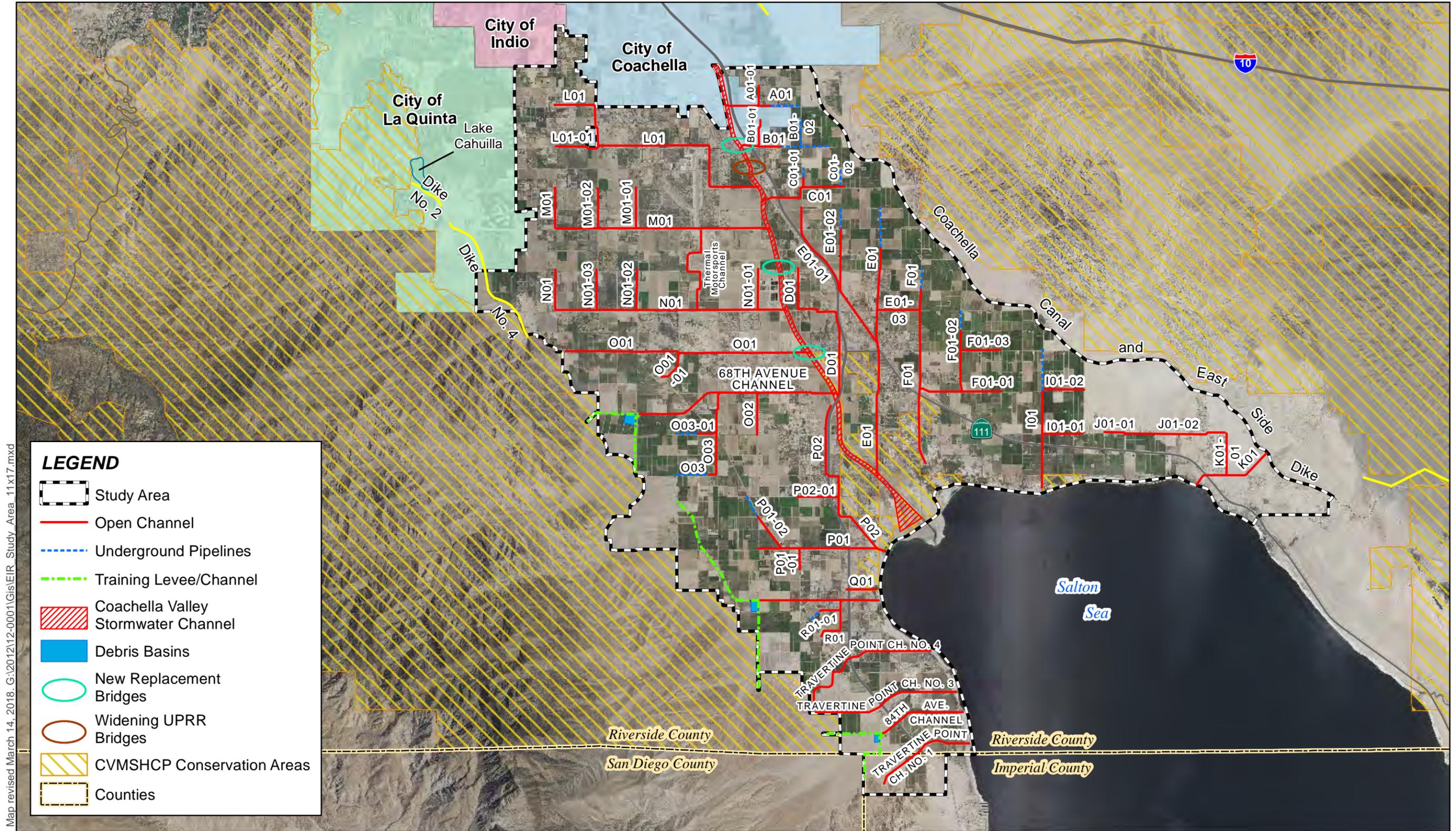


Figure 1-1 - Vicinity Map
 Eastern Coachella Valley Stormwater Master Plan





Map revised March 14, 2018. G:\2012\12-0001\GIS\EIR_Study Area_11x17.mxd

LEGEND

- Study Area
- Open Channel
- Underground Pipelines
- Training Levee/Channel
- Coachella Valley Stormwater Channel
- Debris Basins
- New Replacement Bridges
- Widening UPRR Bridges
- CVMSHCP Conservation Areas
- Counties

Sources: CVMSHCP, 2014; Riverside Co. GIS, 2018; USDA NAIP, 2016.

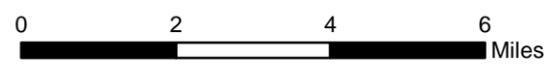


Figure 1-2 - Eastern Coachella Valley Stormwater Master Plan Area
Eastern Coachella Valley Stormwater Master Plan

- Section 5 and 6, Township 9 South, Range 9 East; Sections 1 through 29 and 33 through 36, Township 8 South, Range 11 East; and
- ~~Sections 6 through 8, 17 through 20 and 29 through 32, Township 8 South, Range 12 East, San Bernardino Base and Meridian.~~
- Section 24, Township 7 South, Range 7 East;
- Sections 22, 27 and 36, Township 8 South, Range 8 East, San Bernardino Base and Meridian.

1.1.1 General Plan Land Use Designation

The Master Plan would affect properties in portions of unincorporated Riverside County, the City of Coachella, and a small portion of the Master Plan Facilities are proposed around Travertine Point Channel No. 1, which is located in Imperial County. ~~Although a portion of the City of La Quinta is within the Master Plan Area, no Facilities are proposed within that city's limits.~~ Facilities proposed within unincorporated Riverside County are within the General Plan's Eastern Coachella Valley Area Plan. Please refer to **Figure 3-5 – General Plan Land Use** and **Figure 3-6 – Zoning Map** for land use designations and zoning within the Master Plan Area.

The primary land-use designation within the Oasis/Valley Floor area is agriculture. Other notable land use designations in the northern portion of this area include: commercial, retail, light industrial, heavy industrial, public facilities, and low- and medium- density residential. In the middle portion of the area, other notable land use designations, besides agriculture, include: Indian lands, low- medium- and high-density residential, commercial retail, light industrial and commercial tourist. In the southern portion of the area, other notable land use designations, besides agriculture include: Indian lands, commercial retail, medium- and medium-high-density residential, conservation habitat, public facilities, open space recreation, mixed-use policy area, and water.

The primary land use designation within the Mecca/North Shore area is also agriculture. Other notable land use designation in this area include: light industrial, commercial, retail, Indian Land, medium- and medium-high and very high-density residential, community center, open space recreation. Land use designations near the southeastern portion of the area include: rural desert, medium-density residential, medium-high density residential, high-density residential and commercial tourist.

With regard to the City of Coachella, proposed Facilities are located in areas designated by the General Plan for low-density residential with an agriculture to urban transition overlay, medium-density residential, light industrial, and general commercial. Facilities traverse the City of Coachella in areas designated for open space and light industrial.

With regard to the Imperial County, proposed Facilities are located in an area designated by the Imperial County General Plan for recreation/open space.



1.1.2 Surrounding Land Uses

The Master Plan is located within the Eastern Coachella Valley Area Plan (ECVAP), which is set within the southeast portion of the Coachella Valley, south and east of the City of Indio, and east of the City of La Quinta and the Santa Rosa Mountains, stretching to the Imperial County line on the south with a portion of proposed Master Plan Facilities extended into Imperial County. The area extends east of the All-American Canal, north and south of Interstate 10, taking in Chiriaco Summit. The Metropolitan Water District of Southern California's Colorado River Aqueduct traverses from east to west along the majority of the Eastern Coachella valley, paralleling Interstate 10 north and west along the majority of the Eastern Coachella valley, paralleling Interstate 10 north and west of Chiriaco Summit. The southeastern edge of the Eastern Coachella Valley is bounded by the Chocolate Mountain Naval Reservation Aerial Gunnery range. Physically, the Eastern Coachella Valley is bounded by the Santa Rosa Mountains to the west, and the Mecca Hills and the edge of Joshua Tree National Park to the northeast. The portion of the Eastern Coachella Valley east of the All-American Canal is either desert or mountainous terrain, and the Master Plan Area extends to the northern part of the Salton Sea. The surrounding land uses includes existing residential, commercial, public facilities, business park/light industrial land uses and is characterized with open space.

The Master Plan Area includes the unincorporated communities of Mecca, North Shore, Thermal, Oasis, and Vista Santa Rosa, as well as the city of Coachella and northwest Imperial County. Regarding the unincorporated Riverside County communities, the small residential community of Mecca is located southeast of Thermal east of State Route 111, and predominantly houses permanent residents working in the valley's agricultural sector. Areas are also set aside for light industrial and commercial uses. The North Shore resort community is located northeast of State Route 111 near the north shore of the Salton Sea. This area is largely undeveloped, with some pockets of residential and commercial tourist uses. The community of Thermal is located west of State Route 111, south of the City of Coachella, and contains light industrial uses as well as some residential and commercial uses.

The County-owned Desert Resorts Regional Airport (also known as the Jacqueline Cochran Regional Airport) is located in the westerly part of Thermal. Oasis, another valley agricultural community, is located along State Route 86 southeast of the community of Valerie Jean. This community particularly benefits from the realigned State Route 86 trade route to Mexico. The Vista Santa Rosa community's boundaries extend from Avenue 50 on the north, to Monroe Street on the west, to State Route 86 (Harrison Street) on the east, and south to Avenue 66. The area is an important producer of date crops. Rural residential uses are also prevalent, with an emphasis on equestrian activities including polo facilities.

~~While no Facilities are proposed within the City of La Quinta, a portion of the Master Plan Area includes that city's southeastern area. The City of La Quinta is located along the base of the Santa Rosa Mountains, west of the City of Coachella and the community of Thermal.~~



~~The City of La Quinta is known as a “resort city” from the high number of golf courses within its boundaries and is a popular destination for seasonal tourists. Much of the city within the Master Plan Area is disturbed and developed with residential and private recreational uses, primarily golf courses. As a contrast to the overall agricultural character of the Eastern Coachella Valley and majority of the Master Plan Area, developable land within the City of La Quinta is significantly built out/urbanized and agricultural uses are not designated within the city.~~

The City of Coachella is located in the northwest corner of the Eastern Coachella Valley. The Master Plan Area includes the southern portion of that city from Avenue 52 southward. Facilities are proposed within the city boundaries, which also includes a segment of the existing Coachella Valley Stormwater Channel (CVSC).⁴ The City of Coachella is actively growing and transforming from a small town to a medium-sized city, and in the process, developing a considerable amount of land within its boundary that was previously used for agricultural purposes. The portion of the city that is within the Master Plan Area is about half disturbed/developed with residential subdivisions as well as commercial uses generally along Old State Highway 86/Harrison Street and State Route 111. This area is also identified for future development to urban uses.

Facilities would also be just south of the Riverside County line within Imperial County. Land use within the portion of Imperial County adjacent to Master Plan Facilities consists primarily of undisturbed vacant land with some agricultural uses, State Route 86, and the Salton Sea (east of State Route 86).

The majority of land uses in the surrounding area are devoted to agricultural crops including date palms, grapes, citrus, and seasonal row crops, specifically within the Salton Trough, which encompasses the area surrounding the Salton Sea to the west and stretching north toward the City of Coachella. The majority of the area east of the All-American Canal is open space and rural due to the area’s remoteness and lack of services. There are also residential uses within the area primarily providing housing for the agricultural workers in the valley. However, considerable acreages in the Thermal area are designated for light and heavy industrial land uses, and higher-density residential land use is designated in an area east of the airport.

1.2 Project Description

1.2.1 Background

The *Eastern Coachella Valley Stormwater Master Plan* is a conceptual, long-term planning document that addresses the current and future stormwater and drainage needs of the Master Plan Area. The boundary of the Master Plan Area follows regional watershed limits divided by

⁴ CVSC is an engineered extension of the Whitewater River Stormwater Channel (WRSC), which serves agricultural irrigation return water and conveys treated wastewater and urban and stormwater runoff.



the CVSC. The proposed drainage facilities include channels, storm drains, levees, basins, dams, and other facilities capable of feasibly relieving flooding problems within the Master Plan Area. The Master Plan also includes an estimate of Facility capacity, sizes, and costs.

The Master Plan was prepared to:

- 1) *Identify solutions to existing flood hazards (riverine, alluvial fan and valley floor drainage) and opportunities to include economically feasible stormwater capture and low impact development;*
- 2) *Provide a guide for the long term scheduling of the regional and valley floor stormwater facilities;*
- 3) *Provide a guide for locating and sizing local drainage facilities that would be constructed by developers and others within the Master Plan Area; and*
- 4) *Provide an estimate of costs to resolve flooding issues within the Master Plan Area.*

1.2.2 The Master Plan

CEQA analysis of a stormwater master plan is more complex than the typical project because master plans have a variety of purposes that are implemented over time; in fact, some parts of the Master 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 Master Plan build-out, a PEIR was determined to be the appropriate CEQA document for the Master Plan. The Master Plan identifies conceptual locations for the future installation of drainage Facilities in response to the existing and planned land use within the Master Plan Area. Please refer to **Figure 1-2 – ECV SMP Area**, **Figure 1-3 – Oasis/Valley Floor Area**, and **Figure 1-4 – Mecca/North Shore Area** for the locations of the Facilities.

The Recirculated Draft PEIR for the Master Plan evaluates the “reasonably foreseeable impacts” of three separate Master Plan components:

- *Administration of the Master Plan*
- *Construction of Master Plan Facilities [including right-of-way acquisition, if needed]*
- *Operations and Maintenance of the Facilities*

Administration of the Master Plan

The first component of the Master Plan analyzed in this Recirculated Draft PEIR is the reasonably foreseeable impacts resulting from preparation and, ultimately, the adoption of the Master Plan as a long-range planning document. The Master Plan would be a guide for the alignment, type, size, and cost estimate of major proposed Facilities within the Master Plan Area to address the current and future drainage needs of the Eastern Coachella Valley.

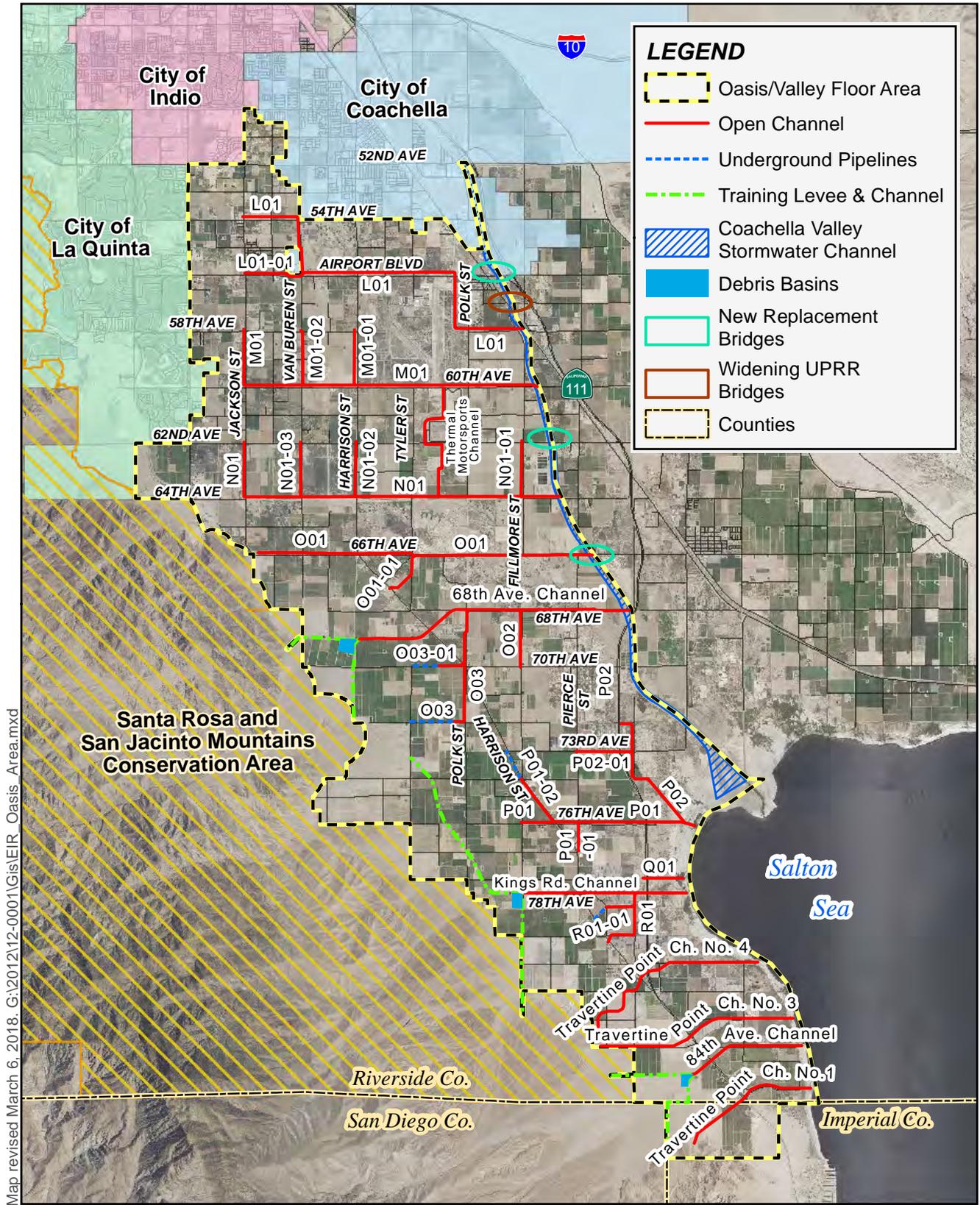
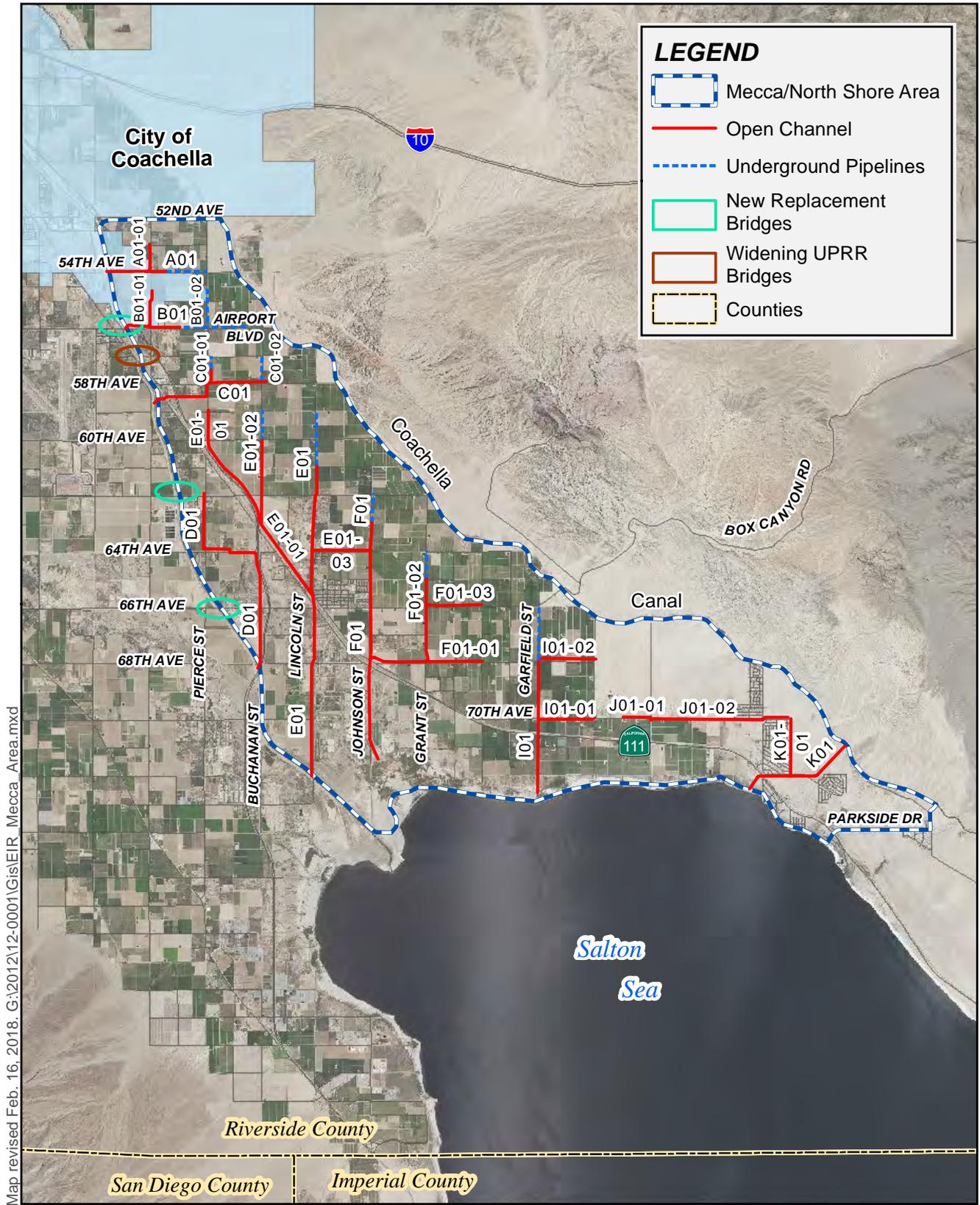


Figure 1-3 - Oasis/Valley Floor Area
Eastern Coachella Valley Stormwater Master Plan

0 1 2 3 4
Miles





Map revised Feb. 16, 2018. G:\2012\12-0001\GIS\EIR_Mecca_Area.mxd

Sources: Riverside Co. GIS, 2018; USDA NAIP, 2016.

Figure 1-4 - Mecca/North Shore Area
Eastern Coachella Valley Stormwater Master Plan

The Master Plan would be relied upon by CVWD, Riverside County, and the City of Coachella as these agencies review and approve development in the Master Plan Area. New development and property owners within the area may be required to construct Facilities, set aside rights-of-way for future Facilities, or participate in the financing of a portion of these facilities. CVWD, Riverside County, and the City of Coachella may also use the Master Plan to identify Facilities and cost estimates for inclusion in capital improvement programs. Finally, CVWD, Riverside County, the City of Coachella, and other agencies can use the Master Plan for long-range planning of other public infrastructure projects such as roads or utility pipelines.

Construction of Facilities

The second component of the Master Plan analyzed in this Recirculated Draft PEIR is the reasonably foreseeable impacts resulting from the acquisition of rights-of-way and construction of the Facilities. The Master Plan identifies the approximate location, size, and type of Facilities needed in order to manage flood hazards and provide an opportunity for stormwater capture within the Master Plan Area. The Master Plan proposes the construction of over 100 miles of storm drains and channels, approximately 99 acres of debris basins, 11.25 miles of training levees, and modifications to the existing CVSC as shown on **Figure 1-3**. The locations and types of Facilities depicted in the Master Plan 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 location or change in facility type. To add to that uncertainty, the construction of the Facilities would be completed in discrete phases over a number of decades, which is a challenge for long-term planning.

Despite this future environment of uncertainty and potential Facility variations, the Recirculated 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 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 Recirculated Draft PEIR include, but are not limited to:

- basin/channel excavation,
- channel/storm drain installation,
- levee construction, and
- asphalt replacement.

Construction would typically entail the use of heavy equipment such as backhoes, excavators, dozers, scrapers, water trucks, wheeled loaders, and dump trucks.



Facilities Operation and Maintenance

Once a Facility is constructed and the CVSC channel is improved as proposed, maintenance is required in order to retain function and flood control capacity. It is expected that CVWD and/or a developer would operate and maintain all of the Facilities. For a developer or private entity to operate and maintain any Facility (or Facilities) a recorded regional stormwater facilities agreement would be required per CVWD Ordinance 1234.1.

CVWD routinely inspects its facilities. 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 would not routinely occur while maintaining the underground storm drains and open concrete channels. To maintain the constructed Facilities, CVWD would occasionally use equipment similar to the types used to construct the proposed Facilities.

The routine maintenance of earthen channels and basins typically includes 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.

1.3 Project Objectives

A clear statement of Project objectives allows for the analysis of reasonable alternatives to the proposed Master Plan. Reasonable alternatives, both on and off site, must be analyzed per Section 15126.6 of the State *CEQA Guidelines*. The proposed Master Plan is intended to meet the following objectives:

1. Provide a single, comprehensive stormwater master plan that contains a drainage plan with the opportunity for stormwater capture for the Oasis/Valley Floor and Mecca/North Shore areas and supports the existing and proposed land uses in the Master Plan Area.
2. In conjunction with ultimate street improvements within the Master Plan Area, contain the 100-year return period flood flows and alleviate the primary sources of flooding within the Master Plan Area.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of Facilities to protect existing and future development.
4. Identify the most economical combination of facilities considering environmental constraints, right-of-way acquisition, construction, and maintenance costs.

5. Develop a plan which, when implemented, would result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Master Plan Area.
6. Minimize major diversions, provide stormwater capture opportunities and perpetuate the natural drainage pattern of the area to the maximum extent practicable.

1.4 Project Impacts

The Project's potential environmental impacts to the following resource topics considered in the Recirculated Draft PEIR would be less than significant with mitigation incorporated: biological resources, cultural resources, hydrology and water quality, and noise. Please refer to **Table 1-A – Mitigation Monitoring Program**. Impacts related to greenhouse gas emissions were determined to be less than significant without mitigation. The Project's Initial Study (included as Appendix A) determined impacts with regard to: aesthetics, 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 would be less than significant and therefore no mitigation is required for these issue areas.

As determined in the Recirculated Draft PEIR Section 5.1 Agriculture and Forestry Resources, the Project's impacts to agricultural resources after mitigation would be significant and unavoidable due to the conversion of state-designated Farmland (Prime Farmland, Farmland of Statewide Importance, and Unique Farmland) to non-agricultural uses. Additionally, the Project would significantly contribute to a cumulatively considerable loss of state-designated Farmland in the Plan Area.

As determined in the Recirculated Draft PEIR Section 5.2 Air Quality and Greenhouse Gas Emissions, the Project's impacts to air quality after mitigation would be significant and unavoidable as the short-term construction emissions, would exceed daily regional thresholds set by the South Coast Air Quality Management District (SCAQMD) for oxides of nitrogen (NO_x). The exposure of sensitive receptors to substantial pollution concentrations from the short-term emissions of NO_x is also significant and unavoidable, and this short-term emission would also result in impacts to ozone precursors, and as such, the incremental contribution is cumulatively considerable. Although these are direct, short-term impacts that would cease once construction is complete, they remain significant and unavoidable due to NO_x emissions. It should be noted that the referenced Section 5.2 analyzes impacts to both air quality and greenhouse gas (GHG) emissions, and only impacts to air quality were determined to be significant and unavoidable. Impacts with regard to GHG emissions would be less than significant.

The Project would result in significant and unavoidable impacts; as such, a *Statement of Overriding Considerations* would be required. CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable

environmental risks when determining whether to approve the project (State CEQA Guidelines Section 15093).

1.5 Required Actions and Approvals

Implementation of the Master Plan may require permits or other forms of approval from public agencies or other entities prior to construction of the Facilities.

- **Coachella Valley Water District**

CVWD owns and operates storm drains, channels, and basins within the Master Plan Area. To the extent that drainage and flood control improvements are proposed that affect CVWD's existing facilities; coordination and approval from CVWD would be necessary. Additionally, CVWD owns and operates water and wastewater conveyance systems within the Master Plan Area, and to the extent that construction of Facilities would impact and/or would require the relocation of existing water and wastewater facilities, coordination and approval from CVWD would be necessary.

Moreover, all new Facilities constructed by developers, City of Coachella, or Riverside County, or Riverside County, that require maintenance by CVWD, would require CVWD execution of a cooperative agreement and approval of plans and specifications.

- **U.S. Army Corps of Engineers**

A Clean Water Act Section 404 permit would be required if the construction or maintenance of Facilities involves the discharge of dredged or fill material within "waters of the United States" or adjacent wetlands.

- **Bureau of Reclamation (U.S. Department of the Interior)**

Encroachment permits would be required to construct Facilities within the rights-of-way of the Coachella Canal.

- **Bureau of Land Management (U.S. Department of the Interior)**

Encroachment permits would be required to construct Facilities within the boundaries of land managed by the Bureau of Land Management.

- **Railroads**

Encroachment permits would be required to construct Facilities within the rights-of-way of railroad property.

- **Coachella Valley Conservation Commission, a Joint-Powers Authority**

Permits would be required to construct Facilities located within the Coachella Valley Multiple Species Habitat Conservation Plan.

- **Regional Water Quality Control Board, Colorado River Region (RWQCB)**

National Pollutant Discharge Elimination System (NPDES) General Construction Permits would be required for grading activities of one acre or larger.



If a 404 Permit is required by the U.S. Army Corps of Engineers, then a Section 401 Water Quality Certification would be required from the RWQCB.

A Waste Discharge Permit would be required if ground dewatering is necessary during tunneling activities or if waste is discharged into “waters of the State” that are not also “waters of the U.S.”

- **California Department of Fish and Wildlife**

A Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement would be required if a jurisdictional streambed or stream banks would be altered.

- **California Department of Transportation**

Encroachment permits, plus Water Pollution Control Plans, as applicable, would be required if any work associated with Facilities is required within the right-of-way of State Routes 86, 86S, 111, or 195.

- **County of Riverside, City of Coachella**

Encroachment permits would be required to construct Facilities within roadway rights-of-way.

- **Imperial Irrigation District**

A cooperative agreement between the Facility proponent and Imperial Irrigation District for electrical transmission utility relocation, where necessary, would be required.

- **Torres Martinez Desert Cahuilla Indians**

Permission to construct Facilities on Tribal Land must be obtained.

- **Augustine Band of Cahuilla Indians**

Permission to construct Facilities on Tribal Land must be obtained.



1.6 Summary of Environmental Impacts and Mitigation Measures

The environmental impacts and applicable mitigation measures that have been developed to reduce impacts to a less than significant level, where possible, are summarized below in **Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program**. When mitigation is required, the timing of mitigation implementation, the identification of the responsible party for carrying out the mitigation measure, and the environmental impacts after mitigation is applied is listed for each impact.

Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
Agricultural and Forestry Resources	Threshold A: Convert Prime Farmland, Unique Farmland, of Statewide Importance (Farmland), as shown on the maps, prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use	<p>MM AG 1: Because the State reevaluates and changes Farmland designations approximately every two years, to determine the specific impacts to designated Farmland resulting from Master Plan Facilities to be constructed or funded by CVWD, as part of the design process for each CVWD constructed or funded-Facility, CVWD shall use the most current FMMP data available to determine the number of acres of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance that would be permanently converted to a non-agricultural use by such Facility. This number shall be referred to as the “Acres of Converted Farmland.”</p> <p>If the Acres of Converted Farmland for any CVWD constructed or funded Facility is greater than zero, CVWD shall, prior to construction of the Facility, provide mitigation at a ratio equivalent to the Acres of Converted Farmland using at least one of the following:</p> <ol style="list-style-type: none"> Placement of an agricultural easement for on property containing soils that meet the physical and chemical criteria for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as determined by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). The property need not be contiguous and may be located anywhere within CVWD’s boundaries. Cancellation of a Notice (or Notices) of Non-renewal or an agreement not to file a Notice of Non-renewal for Williamson Act contracts on property (or properties). The property need not be contiguous and may be located anywhere within CVWD’s boundaries. Placement of a new Williamson Act contract on property or properties. The property need not be contiguous and may be located anywhere within CVWD’s boundaries. Any combination of items a, b, or c, above that results in agricultural easements, stopping cancellation of Williamson Act contracts, or new Williamson Act contracts at a ratio equivalent to the Acres of Converted Farmland. 	During design and prior to construction	CVWD	Significant and unavoidable because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon Master Plan Facilities constructed as part of private development projects
Agricultural and Forestry Resources (continued)	Threshold B: Conflict with existing zoning for agricultural use, or a Williamson Act contract.	<i>Mitigation not required.</i>	<i>Not applicable</i>	<i>Not applicable</i>	<i>Mitigation not required.</i>



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
Air Quality and Greenhouse Gas Emissions	Threshold A: Violate any air quality standard or contribute substantially to an existing or projected air quality violation	<p>MM AQ 1: To reduce construction NO_x emissions, the contractor’s specification packages for each Facility construction project shall require construction equipment to meet <u>or exceed: Tier 3 CARB/U.S. EPA standards.</u></p> <ul style="list-style-type: none"> • <u>Tier 3 CARB/U.S. EPA standards for construction starting prior to 2027 and</u> • <u>Tier 4 Final CARB/U.S. EPA standards for construction starting in 2027.</u> <p>The contracting company’s fleet of off-road diesel-powered construction equipment shall meet or exceed Tier 3 off-road emissions standards. A copy of the fleet’s tier compliance documentation, and CARB or AQMD operating permit shall be provided to the Lead Agency (i.e., City of Coachella, Riverside County, or CVWD) at the time of mobilization of each applicable unit of equipment.</p> <p><u>An exemption from these requirements may be granted by CVWD in the event that the Lead Agency (i.e., City of Coachella, Riverside County, or CVWD, documents that (1) equipment with the required tier is not reasonably available (e.g., reasonability factors to be considered include those available within Riverside County within the scheduled construction period), and (2) corresponding reductions in criteria pollutant emissions are achieved from other construction equipment.</u></p> <p>MM AQ 2: To reduce construction NO_x emissions, the contractor’s specification packages for each Facility construction project shall require all dump trucks used for soil hauling during Project construction comply with either 2007 or 2010 engine emission standards pursuant to Title 13, Section 2025(d).</p>	During construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD)	Significant and unavoidable for the following emission NO _x ,
Air Quality and Greenhouse Gas Emissions (continued)	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)	<p>MM AQ 1 (see above)</p> <p>MM AQ 2 (see above)</p>	During construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD)	Significant and unavoidable for the following emission NO _x ,
Air Quality and Greenhouse Gas Emissions (continued)	Threshold C: Expose sensitive receptors to substantial pollutant concentrations.	<p>MM AQ 1 (see above)</p> <p>MM AQ 2 (see above)</p>	During construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD)	Significant and unavoidable for the following emission NO _x ,
Air Quality and Greenhouse Gas Emissions (continued)	Threshold D: Generate greenhouse gas emissions, either directly or indirectly,	<i>Mitigation not required.</i>	<i>Not applicable</i>	<i>Not applicable</i>	<i>Mitigation not required.</i>



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation																			
	that may have a significant impact on the environment.																							
Air Quality and Greenhouse Gas Emissions (continued)	Threshold E: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	<i>Mitigation not required.</i>	<i>Not applicable</i>	<i>Not applicable</i>	<i>Mitigation not required.</i>																			
Biological Resources	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 Wildlife or U.S. Fish and Wildlife Service.	<p>MM BIO 1 Conservation Area: Facility(ies) implemented within the Coachella Valley Stormwater Channel and Delta Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan shall be required to adhere to MM BIO-1, to minimize or avoid potential biological effects.</p> <p>Prior to ground-disturbing activities, the public agency or private developer implementing the Facility(ies) shall retain a qualified biologist to conduct a pre-construction clearance survey in accordance with the Coachella Valley Multiple Species Habitat Conservation Plan within 14 days prior to the ground disturbance activities per the instructions provided on the following table. Additionally the public agency or private developer implementing the Facility(ies) shall undertake a Joint Project Review with the Coachella Valley Conservation Commission, if required. Non-survey-related action related to mesquite hummocks is also shown on the table.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">Coachella Valley Stormwater Channel and Delta Conservation Area</th> </tr> <tr> <th style="width: 25%;">Species</th> <th style="width: 35%;">Conditions for Survey</th> <th style="width: 40%;">Subsequent Action</th> </tr> </thead> <tbody> <tr> <td>Ridgway’s rail and California black rail</td> <td>If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey to be conducted before any ground-disturbing activity in the Conservation Area.</td> <td>If rails are found, the habitat shall be avoided or measures approved by the USFWS and CDFW taken to ensure that no Take of an individual occurs. If rails are not present, the activities may proceed (CVMSHCP §4.3)</td> </tr> <tr> <td>Burrowing owl</td> <td><i>Refer to MM BIO 2</i></td> <td><i>Refer to MM BIO 2</i></td> </tr> <tr> <td>Least Bell’s vireo</td> <td>If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.</td> <td rowspan="2">If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. If surveys document that none of these species are present, then ground-disturbing activities may proceed (CVMSHCP §4.4).</td> </tr> <tr> <td>Summer tanager</td> <td rowspan="2">If CVMSHCP-modeled habitat is to be traversed within this</td> </tr> <tr> <td>Yellow warbler</td> <td></td> </tr> </tbody> </table>	Coachella Valley Stormwater Channel and Delta Conservation Area			Species	Conditions for Survey	Subsequent Action	Ridgway’s rail and California black rail	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey to be conducted before any ground-disturbing activity in the Conservation Area.	If rails are found, the habitat shall be avoided or measures approved by the USFWS and CDFW taken to ensure that no Take of an individual occurs. If rails are not present, the activities may proceed (CVMSHCP §4.3)	Burrowing owl	<i>Refer to MM BIO 2</i>	<i>Refer to MM BIO 2</i>	Least Bell’s vireo	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.	If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. If surveys document that none of these species are present, then ground-disturbing activities may proceed (CVMSHCP §4.4).	Summer tanager	If CVMSHCP-modeled habitat is to be traversed within this	Yellow warbler		Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified biologist, if applicable	Less than significant
Coachella Valley Stormwater Channel and Delta Conservation Area																								
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Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure		Implementation Timing	Responsible Party	Impact After Mitigation
		Yellow-breasted chat	Conservation Area, survey shall be conducted.			
		Crissal Thrasher and Le Conte's Thrasher	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted, and shall include the construction footprint and adjacent areas within 500 feet of the proposed construction footprint.	If active nests are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, shall be established around the nest site. The buffer shall be staked and flagged. No construction activities would be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged (CVMSHCP §4.4).		
		Mesquite hummocks	N/A	The final design of the Facility(ies) within this Conservation Area shall avoid mesquite hummock vegetation to the maximum extent feasible (CVMSHCP §4.4).		
		Southwestern willow flycatcher	Surveys shall be conducted to determine if any active nests are present. Restrict human access to southwestern willow flycatcher-occupied habitat during the breeding season, from May 1 to September 15.	If active nests are identified, construction shall not be conducted within 200 feet of an active nest. Maintain upland buffers for all occupied habitat. Buffers should be a minimum of 50 feet wide. Access to surface water is important for this species within the habitat area. Removal of tamarisk from riparian areas would enhance habitat for southwestern willow flycatcher.		
<p><i>Facility(ies) constructed within the Santa Rosa and San Jacinto Mountains Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan shall be required to adhere to MM BIO-1, to minimize or avoid potential biological effects.</i></p> <p>Prior to ground-disturbing activities, the public agency or private developer implementing the Facility(ies) shall retain a qualified biologist to conduct a pre-construction clearance survey in accordance with the Coachella Valley Multiple Species Habitat Conservation Plan within 14 days prior to the ground disturbance activities per the instructions provided on the following table. Additionally, the public agency or private developer implementing the Facility(ies) shall undertake the Habitat Assessment and Negotiation Strategy process and Joint Project Review both with the Coachella Valley Conservation Commission, if</p>						



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		<p>required. Non-survey-related actions related to Peninsular bighorn sheep and mesquite hummocks are also shown on the table.</p> <table border="1"> <thead> <tr> <th colspan="3">Santa Rosa and San Jacinto Mountains Conservation Area</th> </tr> <tr> <th>Species</th> <th>Conditions for Survey</th> <th>Subsequent Action</th> </tr> </thead> <tbody> <tr> <td>Burrowing owl</td> <td><i>Refer to MM BIO 2</i></td> <td><i>Refer to MM BIO 2</i></td> </tr> <tr> <td>Least Bell's vireo</td> <td>If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.</td> <td rowspan="4">If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. 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The buffer shall be staked and flagged. No construction activities would be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged (CVMSHCP §4.4).</td> </tr> <tr> <td>Desert Tortoise</td> <td>A presence/absence survey shall be conducted, and shall include the proposed construction footprint and adjacent areas within 200 feet of the construction footprint. Survey shall look for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells.</td> <td>If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the construction site. If fresh sign is located, the construction area shall be fenced with tortoise-proof fencing and a clearance survey conducted</td> </tr> </tbody> </table>	Santa Rosa and San Jacinto Mountains Conservation Area			Species	Conditions for Survey	Subsequent Action	Burrowing owl	<i>Refer to MM BIO 2</i>	<i>Refer to MM BIO 2</i>	Least Bell's vireo	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.	If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. If surveys document that none of these species are present, the ground-disturbing activities may proceed (CVMSHCP §4.4).	Summer tanager	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted. .	Yellow warbler	Yellow-breasted chat	Le Conte's Thrasher	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted, and shall include the construction footprint and adjacent areas within 500 feet of the proposed construction footprint.	If active nests are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, shall be established around the nest site. The buffer shall be staked and flagged. No construction activities would be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged (CVMSHCP §4.4).	Desert Tortoise	A presence/absence survey shall be conducted, and shall include the proposed construction footprint and adjacent areas within 200 feet of the construction footprint. Survey shall look for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells.	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Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure		Implementation Timing	Responsible Party	Impact After Mitigation	
			The survey shall cover 100 percent of the survey area.	during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to June 15 and September 1 to October 31 or in accordance with the most recent USFWS and CDFW protocols. Clearance surveys must cover 100 percent of the construction area. A clearance survey must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered would be moved from the construction site to a specified location per CVCC-approved protocol. (CVMSHCP §4.4)			
		Peninsular bighorn sheep	N/A	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, all construction-related activities shall be conducted outside of the January 1 – June 30 lambing season unless otherwise authorized through a minor amendment to the CVMSHCP with concurrence from the USFWS and CDFW (CVMSHCP §4.4).			
		Mesquite hummocks	N/A	The final design of the Facility(ies) within this Conservation Area shall avoid mesquite hummock vegetation to the maximum extent feasible (CVMSHCP §4.4).			
		Southwestern willow flycatcher	Surveys shall be conducted to determine if any active nests are present. Restrict human access to southwestern willow flycatcher-occupied habitat during the breeding season, from May 1 to September 15.	If active nests are identified, construction shall not be conducted within 200 feet of an active nest. Maintain upland buffers for all occupied habitat. Buffers should be a minimum of 50 feet wide. Access to surface water is important for this species within the habitat area. Removal of tamarisk from riparian areas would enhance habitat for southwestern willow flycatcher.			



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure			Implementation Timing	Responsible Party	Impact After Mitigation
		Triple-ribbed milkvetch	For construction within MSHCP-modeled habitat, surveys will be required for activities year-round.	Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent feasible. Known occurrences as mapped by CVCC shall not be disturbed.			
		<p>MM BIO 2 Burrowing Owl Survey: Prior to ground-disturbing activities, the public agency or private developer implementing a Facility(ies) shall retain a qualified biologist to conduct a Take avoidance (pre-construction) burrowing owl survey in accordance with the California Department of Fish and Wildlife’s <i>Staff Report on Burrowing Owl Mitigation</i> (March 7, 2012). This survey shall be conducted no less than 14 days prior to the ground disturbing activities. If no burrowing owls are detected during the Take avoidance (pre-construction) survey, implementation of ground disturbance activities may proceed without further consideration of this species. If burrowing owls are detected during the Take avoidance (pre-construction) survey, the taking of active nests shall be avoided. As some individual burrowing owls or pairs are more sensitive than others to specific stimuli and may habituate to ongoing visual or audible disturbance, if burrowing owls and their habitat can be protected-in-place adjacent to the Facility construction footprint, as determined by the qualified biologist, the use of buffer zones, visual screen, or other measures while construction activities are occurring may be utilized to minimize disturbance impacts. Passive relocation (use of one way doors and collapse of burrows) shall occur when owls are present outside the nesting season (February 1-August 31).</p> <p>MM BIO 3 Conservation: As a signatories and Permittees to the Coachella Valley Multiple Species Habitat Conservation Plan, CVWD, Riverside County, and the cities of Coachella and La Quinta, as applicable based on the location of the Facility(ies) being implemented, would pay the Local Development Mitigation Fee (LDMF) adopted pursuant to the Mitigation Fee Act, Government Code Section 66000 <i>et seq</i> prior to the completion of construction of the Facility(ies).</p> <p>If the Facility(ies) is/are being constructed by a private developer, the agency(ies) with jurisdiction based on the location of the Facility(ies), shall require the developer to pay the LDMF prior to completion of construction of the Facility(ies) and to provide documentation to that agency(ies) of LDMF payment. However, in lieu of LDMF payment, if determined adequate by the Coachella Valley Conservation Commission, the public agency implementing the Facility(ies) may conserve some of its existing land within the affected Conservation Area, if available.</p>					
Biological Resources (continued)	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 Wildlife or U.S. Fish and Wildlife Service.	<p>MMBIO 1 (see above)</p> <p>MMBIO 2 (see above)</p> <p>MMBIO 3 (see above)</p> <p>MM BIO 4 CVMSHCP Land Use Adjacency Guidelines: Prior to final design approval for a Facility(ies) within or adjacent to a Conservation Area, compliance with Section 4.5 (Land Use Adjacency Guidelines) of the Coachella Valley Multiple Species Habitat Conservation Plan shall be demonstrated by the public</p>			Prior to final design approval Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and	Less than significant



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
		<p>agency or private developer implementing a Facility(ies) to the approval of the Coachella Valley Water District. Such compliance shall include, but not necessarily be limited to, demonstrating the design of the Facility(ies) would not result in the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within or adjacent to a Conservation Area.</p> <p>MM BIO 5 Jurisdictional Water: Prior to construction of a Facility(ies) that would traverse land where riparian or wetland habitat occurs or is likely to occur, the public agency or private developer implementing a Facility(ies) shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters, as is applicable. This Facility(ies)-specific delineation 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. Impacts to jurisdictional waters would 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.</p>		qualified biologist, if applicable	
Biological Resources (continued)	Threshold C: Have a substantial adverse effect on 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.	MMBIO 5 (see above)	Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified biologist, if applicable	Less than significant
Biological Resources (continued)	Threshold D: 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	<p>MM BIO 1 (see above)</p> <p>MM BIO 2 (see above)</p> <p>MM BIO 3 (see above)</p> <p>MM BIO 4 (see above)</p> <p>MM BIO 6 Migratory Bird Treaty Act: Prior to ground-disturbing activities such as vegetation removal that would commence during the nesting/breeding season (February 1-August 31), the public agency or private developer implementing a Facility(ies) shall retain a qualified biologist to conduct a pre-construction field survey to determine if active nests of bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code – which are not otherwise covered by the Coachella Valley Multiple Species Habitat Conservation Plan – are present in the construction zone. This survey shall be conducted no less than 3 days prior to vegetation removal. If no active nests are located within the construction zone area, construction may be conducted during the nesting/breeding season. However, if active nests are located during the pre-construction field survey, no grading or heavy equipment activity shall take place</p>	Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified biologist, if applicable	Less than significant



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
		within the buffer areas designated by the qualified biologist until the nest is no longer active and the young have fledged.			
Biological Resources (continued)	Threshold E: Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	MM BIO 1 (see above) MM BIO 2 (see above) MM BIO 3 (see above) MM BIO 4 (see above) MM BIO 5 (see above) MM BIO 6 (see above)	Prior to final design approval Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified biologist, if applicable	Less than significant
Biological Resources (continued)	Threshold F: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan.	MM BIO 1 (see above) MM BIO 2 (see above) MM BIO 3 (see above) MM BIO 4 (see above)	Pre-construction	Private Developer, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified biologist, if applicable	Less than significant
Cultural Resources	Threshold A: Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5; and	MM CR 1 Cultural Resources Survey: Prior to final design approval for a Facility(ies), the Facility(ies) area shall be surveyed for historical and archaeological resources and properly assess unevaluated resources to determine if they are NRHP or CRHR-eligible or ineligible. The final design shall avoid historical and archaeological resources that are recommended eligible for the NRHP, CRHR, or local designation, as is reasonably feasible. As part of this survey, the agency or developer implementing the Facility(ies) shall consult with the Native American Heritage Commission (NAHC) and Native American tribal representatives identified by NAHC in order to identify potentially sacred sites and/or resources that may be impacted by the Facility(ies). MM CR 2 Cultural Resources Awareness Training: Prior to any ground-disturbing activities within areas identified by the surveys completed in mitigation measure MM CR 1 as having a potential to impact historical or archaeological resource(s), all non-archaeological construction personnel shall be briefed by a trained archaeologist on the importance of, and the legal basis for, the protection of significant archaeological resources. Personnel shall be given a training brochure regarding identification of historical and archaeological resources and reporting finds. The training may be conducted concurrent with other	Pre-construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified archaeologist, if applicable	Less than significant



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
		<p>environmental training (e.g., paleontological resources awareness training required by mitigation measure MM CR 5, safety training, etc.). Construction personnel will receive the training, even if not present at the start of construction. The Cultural Resources Awareness Training program may involve a brief oral presentation, video recording, and/or brochure/handout.</p> <p>MM CR 3 Discovery of Cultural Resource: Should any cultural and/or archaeological resources be discovered during construction of a proposed Facility, construction activities in the vicinity of the discovery shall immediately halt and construction shall be moved to other parts of the subject Facility footprint or alignment. A qualified archaeologist shall be retained by the proponent (or designee) of such 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. 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>			
Cultural Resources (continued)	Threshold B: Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5	<p>MM CR 1 (see above)</p> <p>MM CR 2 (see above)</p> <p>MM CR 3 (see above)</p>	Pre-construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified archaeologist, if applicable	Less than significant

Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
Cultural Resources (continued)	Threshold C: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	<p>MM CR 4 Paleontological Resource Survey: Prior to any ground-disturbing activities, a qualified paleontologist (“Project Paleontologist”) shall be retained to conduct a field reconnaissance survey of the Facility(ies) being implemented. The purpose of the field survey shall be to visually inspect the ground surface for exposed fossils or traces thereof and to evaluate geologic exposures for their potential to contain preserved fossil material at the subsurface. All geologic units within the Master Plan Area shall be subject to a pedestrian walkover, excluding those that have been visibly disturbed or are obscured by developments (e.g., existing roadway, canal, building, heavy vegetation, etc.). Particular attention shall be paid to rock outcrops, both within and in the vicinity of the Facility(ies) being implemented, and any areas where geologic sediments are well exposed. This survey may be conducted concurrently with mitigation measure MM CR 1.</p> <p>All fossil occurrences observed during the course of fieldwork, significant or not, shall be adequately documented and recorded at the time of discovery. The data collected for each fossil occurrence shall include, at minimum, the following information: Universal Transverse Mercator (UTM) coordinates, approximate elevation, description of taxa, lithologic description, and stratigraphic context (if known). In addition, each locality shall be photographically documented with a digital camera. If feasible, all significant or potentially significant fossils shall be collected at the time they are observed in the field with prior consent of the landowner(s). If the fossil discovery is too large to collect during the survey (e.g., a whale skeleton or bone bed) and requires a large-scale salvage effort, then it shall be documented and a mitigation strategy shall be devised pursuant to guidelines set forth in <i>Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources</i> (2010) by the Society of Vertebrate Paleontology.</p> <p>MM CR 5 Paleontological Resources Awareness Training: Prior to any ground-disturbing activities within areas identified by the surveys completed in mitigation measure MM CR 4 as having a potential to impact paleontological resource(s), all field personnel shall receive a worker’s environmental awareness training module on paleontological resources. The training shall provide a description of the fossil resources that may be encountered in the area of the Facility(ies) being implemented, outline steps to follow in the event that a fossil discovery is made, and provide contact information for the Project Paleontologist and on-site monitor(s). The training shall be developed by the Project Paleontologist and may be conducted concurrent with other environmental training (e.g., historical and archaeological resources awareness training required by mitigation measure MM CR 2, safety training, etc.).</p>	Pre-construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD), and qualified paleontological monitor, if applicable	Less than significant
Cultural Resources (continued)	Threshold D: Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.	<i>Mitigation not required.</i>	<i>Not applicable</i>	<i>Not applicable</i>	<i>Mitigation not required.</i>
Hydrology and Water Quality	Threshold A: 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	MM HYD 1: Prior to approval of any Facility, or portion thereof, the design and plans shall demonstrate storm flows and runoff from that portion of the being implemented would be conveyed to an adequate outlet system or suitable interim condition that does not induce flooding, to the satisfaction of the Coachella Valley Water District.	Prior to approval of any Master Plan Facility	Lead Agency (City of Coachella, Riverside	Less than significant



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
	amount of surface runoff in a manner which would result in flooding on- or off-site.			County, or CVWD)	
Hydrology and Water Quality (continued)	Threshold B: Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	MM HYD 1 (see above)	Prior to approval of any Master Plan Facility	Lead Agency (City of Coachella, Riverside County, or CVWD)	Less than significant
Noise	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	<p>MM NOI 1 Temporary Noise Barrier: Facilities constructed within a quarter-mile of a noise-sensitive receptor, including an existing inhabited residential dwelling, hospital, or school, shall install temporary noise barriers by the constructing entity with a Sound Transmission Class rating of no less than 32 unless a subsequent noise analysis demonstrates construction noise will not result in a substantial temporary or periodic increase in ambient noise levels in the vicinity of such Facility or Facilities above existing levels.</p> <p>MM NOI 2 Construction Equipment:</p> <ol style="list-style-type: none"> 1. The Contractor shall be required to provide and maintain construction equipment in good condition and in proper tune per manufacturer’s specifications, and to the satisfaction of the Coachella Valley Water District, Riverside County, Imperial County, and/or City of Coachella, as appropriate based on the location of the Facility(ies) being implemented. Equipment maintenance records and equipment design specification data sheets shall be available to CVWD for review upon request. 2. The contractor shall require all construction equipment, fixed or mobile, be equipped with properly operating and maintained mufflers, consistent with manufacturers’ standards. 3. The construction supervisor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the project site. 4. The construction supervisor shall locate equipment staging in areas that would create the greatest distance between construction-related noise sources and noise-sensitive receptors(i.e., on the access roads or at the center of each facility). 5. The construction supervisor shall limit haul truck deliveries to the same hours specified for construction equipment. 6. The construction supervisor shall require truck trips be limited to the hours of construction activity. 7. The construction supervisor shall maintain quality pavement conditions on the property that are free of vertical deflection (i.e. speed bumps) to minimize truck noise. 8. The construction supervisor shall require the truck access gates and loading areas be posted with signs which state: 	Construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD)	Less than Significant



Table 1-A – Summary of Environmental Impacts and Mitigation Monitoring Program

Impact Category	CEQA Threshold	Mitigation Measure	Implementation Timing	Responsible Party	Impact After Mitigation
		9. Truck drivers shall turn off engines when not in use; 10. No music or electronically reinforced speech from workers shall be audible at noise sensitive properties.			
Noise (continued)	Threshold B: Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.	<i>Mitigation not required</i>	<i>Not applicable</i>	<i>Not applicable</i>	<i>Mitigation not required.</i>
Noise (continued)	Threshold C: Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	MM NOI 1 (see above) MM NOI 2 (see above)	Construction	Contractor, and Lead Agency (City of Coachella, Riverside County, or CVWD)	Less than Significant



1.7 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 be identified 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 (IS) and Notice of Preparation (NOP). Comments in response to the IS/NOP were received from:

- Augustine Band of Cahuilla Indians;
- Imperial Irrigation District;
- Governor's Office of Planning and Research (State Clearinghouse);
- Riverside County Planning Department (Transportation and Land Management Agency); and
- South Coast Air Quality Management District.

The Initial Study, NOP distribution list, and comment letters received during the public review period are included in Appendix A of this Recirculated Draft PEIR.

No comments were received at the Project's August 4, 2015 scoping meeting. CEQA does not require issuance of a new NOP or another public scoping meeting be conducted as part of preparation of this Recirculated Draft PEIR.

Moreover, State *CEQA Guidelines* Section 15123(b)(3) requires that an EIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts.

The major issues to be resolved for the Project include decisions by the District as to whether:

- the Recirculated 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;
- the Project should or should not be approved as proposed; or
- the Project should be modified based on the alternatives considered in the PEIR.

1.8 Summary of 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 impacts of the proposed project. The rationale for



selecting the alternatives to be evaluated and a discussion of the “no project” alternative are also required.

A preliminary, “high-level” hydrology analysis was prepared for the study alternatives to determine hydraulic sizing for each alternative. Moreover, a preliminary capital cost analysis and a 40-year operational and maintenance cost analysis was prepared for each alternative, which contributed in part to the rejection of the earthen-lined open channels from further consideration, as mentioned above.

The Project proposes facilities based on historic and natural drainage patterns, rainfall data, existing and planned land uses and growth projections, and expected debris flow from the higher elevations of the mountains and hills flanking the Master Plan Area. The Project also focused on minimizing right-of-way acquisition by proposing the majority of the facilities within or immediately adjacent to existing and future street rights-of-way, as feasible. This Recirculated Draft PEIR evaluates the following five alternatives:

- **No Project Alternative:** Assumes the continued implementation of the existing 1991 Moreno MDP.
- **Alternative 1 (Oasis/Valley Floor Area):** Consists of an alternate alignment in the Oasis/Valley Floor that would entail concrete-lined open channels with 1.5:1 side slopes and minimum bottom width of 6 feet . Underground storm drains are provided for those tributary areas larger than one square mile. The goal of this alternative is to minimize the number of mainline channels and outfalls to CVSC.
- **Alternative 2 (Oasis/Valley Floor Area):** Consists of an alternate alignment in the Oasis/Valley Floor which would entail concrete-lined open channels with 1.5:1 side slopes and minimum bottom width of 6 feet, and underground storm drains in those tributary areas larger than one square mile. The goal of this alternative is to optimize the alignments of Alternative 1 by distributing the tributary areas more evenly and adding one more mainline storm drain.
- **Alternative 3 (Mecca/North Shore Area):** Consists of an alternate alignment in the Mecca/North Shore of the Master Plan Area which would entail concrete-lined channels with a 1.5:1 side slope, minimum bottom width of 5 feet, a maximum hydraulic depth of 6 feet, and grade controls where the open channel velocities exceed 6 feet per second from topography. The facilities in this alternative have been designed to convey the 100-year flood discharge. Additionally, underground storm drains are proposed in this alternative and have been sized based on normal depth capacity and with a maximum diameter of 96 inches. Open channels are also proposed where the capacity of the 96-inch storm drains are. However, unlike the Project, the boundary for the Mecca/North Shore area under this alternative would extend past Parkside Drive and father southeast



into the North Shore area to the Riverside County line, and additional open channel and underground storm drain facilities would be located in this expanded area.

- **Alternative 4 (Mecca/North Shore Area):** Consists of an alternate alignment in the Mecca/North Shore of the Master Plan Area which would entail concrete-lined channels with a 1.5:1 side slope, minimum bottom width of 5 feet, a maximum hydraulic depth of 6 feet, and grade controls where the open channel velocities exceed 6 feet per second from topography. The facilities in this alternative have been designed to convey the 100-year flood discharge. Additionally, underground storm drains are proposed in this alternative and have been sized based on normal depth capacity and with a maximum diameter of 96 inches. Open channels are also proposed where the capacity of the 96-inch diameter storm drain would be exceeded. This alternative’s boundary mimics Alternative 3. However this alternative proposes a greater quantity of open channels as well as different facility alignments than Alternative 3.

State *CEQA Guidelines* Section 15126.6(e)(2) requires the identification of the environmentally superior alternative. In order to achieve Project Objective 1 and provide a single master plan that contains a drainage plan for the Oasis/Valley Floor and Mecca/North Shore Regions, a combination of Alternatives 1 or 2 along with Alternatives 3 or 4⁵ must be implemented. Because Alternatives 3 and 4 include a larger geographic area, any combination of alternatives would encompass a larger area than the proposed Project. Any combination of alternatives would provide the same level of flood protection as the proposed Project, that is, the facilities in Alternatives 1 through 4 have been designed to provide protection from the 100-year return period flow and implementation of any combination of alternatives would remove their respective areas from FEMA’s mapped Special Flood Hazard Area.

Construction of Alternatives 1, 2, 3, or 4 individually or in combination is not likely to reduce the amount of NO_x generated during construction to below the SCAQMD daily threshold; thus the significant and unavoidable impact to criteria pollutants would not be eliminated.

With regard to the conversion of state-designated Farmland, **Table 1-B** compares the amount of Farmland converted by the proposed Project with the possible combinations of Alternatives.

Table 1-B – 2014 2016 FMMP Mapped Farmland Converted by Project Alternatives

FMMP Farmland Categories	Master Plan (acres)	Alternatives 1 and 3 (acres)	Alternatives 1 and 4 (acres)	Alternatives 2 and 3 (acres)	Alternatives 2 and 4 (acres)
Prime Farmland	1,337 <u>1,297</u>	1,153 <u>1,122</u>	1,143 <u>1,110</u>	1,167 <u>1,133</u>	1,157 <u>1,121</u>

⁵ The possible combinations are Alternatives 1 and 3, Alternatives 1 and 4, Alternatives 2 and 3, or Alternatives 2 and 4.



FMMP Farmland Categories	Master Plan (acres)	Alternatives 1 and 3 (acres)	Alternatives 1 and 4 (acres)	Alternatives 2 and 3 (acres)	Alternatives 2 and 4 (acres)
Farmland of Statewide Importance	57 <u>55</u>	45 <u>44</u>	45 <u>43</u>	45 <u>44</u>	45 <u>43</u>
Unique Farmland	240 <u>254</u>	201	205	202	206
Farmland of Local Importance	958 <u>968</u>	957 <u>971</u>	917 <u>931</u>	963 <u>980</u>	923 <u>940</u>
Sub-Total (Farmland)	2,592 <u>2,574</u>	2,356 <u>2,338</u>	2,310 <u>2,289</u>	2,377 <u>2,359</u>	2,331 <u>2,310</u>
Urban and Built Up	23 <u>40</u>	94 <u>114</u>	87 <u>107</u>	98 <u>115</u>	91 <u>108</u>
Water	112 <u>111</u>	86	113	86	113
Other	1,277 <u>1,278</u>	789 <u>786</u>	922 <u>923</u>	809	942 <u>946</u>
Other (Imperial County)	59	59	59	59	59
Sub-Total (Non-Farmland)	1,471 <u>1,488</u>	1,028 <u>1,045</u>	1,181 <u>1,202</u>	1,052 <u>1,069</u>	1,205 <u>1,226</u>
Total^a	4,063 <u>4,062</u>	3,384 <u>3,383</u>	3,491	3,429 <u>3,428</u>	3,356 <u>3,536</u>

Note: ^a Changes in total acreage are the result of rounding or correction of typographical errors.

Construction of any combination of Alternatives would entail the conversion of state-designated Farmland to non-agricultural uses; thus, the significant and unavoidable impact to agricultural resources would not be eliminated. Only the No Project Alternative, which does not entail any new construction, would reduce impacts to air quality and agricultural resources to less than significant. Because the No Project Alternative would not result in the construction of new drainage facilities, impacts with regard to flooding and exceeding the capacity of storm drainage facilities would be greater than the proposed Project and could be considered significant. Nonetheless, because the No Project Alternative eliminates the significant impacts from air quality emissions during construction and the conversion of Farmland, it 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 previously discussed, because none of the alternatives include the facilities in both the Oasis/Valley Floor and Mecca/North Shore Regions, and thus, do not include the entirety of the Master Plan Area, none of these alternatives meet all of the Project objectives. Specifically, Alternatives 1 through 4 do not meet Project Objectives 1, 2, and 5 (see Section 7.1, above). Thus a combination of alternatives must be implemented to meet the Project Objectives. As shown in **Table 1-B**, because the combination of Alternatives 1 and 4 would result in the conversion of less Farmland than the proposed Project and all other combinations of alternatives, this combination of alternatives is considered the environmentally superior alternative.

The potential environmental impacts resulting from each alternative to the Project are compared on the following page in **Table 1-C – Comparison of Alternatives Matrix**. Each alternative is ranked as better, same, or worse in comparison to the significance determinations that the proposed Project would have with respect to each environmental threshold.

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Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
Agriculture and Forestry Resources (Threshold A) Loss of Farmland	Significant Unavoidable Impact: Construction of the Facilities would result in the conversion of approximately 1,337 <u>1,297</u> acres of Prime Farmland, 57 <u>55</u> acres of Farmland of Statewide Importance, and 240 <u>254</u> acres of Unique Farmland to a permanent, non-agricultural use. This quantity of Farmland converted is considered significant. The Project would implement mitigation measure MM AG 1 ; however, this MM is only applicable to CVWD funded or constructed Facilities. Because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon Facilities that may be constructed as part of a development project, impacts remain significant and unavoidable.	Impacts Less Than the Project – No Impact: No Farmland would be lost since there would be no new construction of Facilities.	Impacts Less than the Project – Significant Unavoidable Impact: Construction of the Alternative 1 Facilities would result in the conversion of approximately 809 <u>783</u> acres of Prime Farmland, 36 <u>34</u> acres of Farmland of Statewide Importance, and 180 acres of Unique Farmland to a permanent, non-agricultural use. This quantity of Farmland converted is considered significant. Alternative 1 would be required to implement mitigation measure MM AG 1 ; however, this MM is only applicable to CVWD funded or constructed Facilities. Because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon the Alternative 1 Facilities that may be constructed as part of a development project, impacts remain significant and unavoidable.	Impacts Less than the Project – Significant Unavoidable Impact: Construction of the Alternative 2 Facilities would result in the conversion of approximately 823 <u>794</u> acres of Prime Farmland, 36 <u>34</u> acres of Farmland of Statewide Importance, and 181 acres of Unique Farmland to a permanent, non-agricultural use. This quantity of Farmland converted is considered significant. Alternative 2 would be required to implement mitigation measure MM AG 1 ; however, this MM is only applicable to CVWD funded or constructed Facilities. Because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon the Alternative 2 Facilities that may be constructed as part of a development project, impacts remain significant and unavoidable.	Impacts Less than the Project – Significant Unavoidable Impact: Construction of the Alternative 3 Facilities would result in the conversion of approximately 344 <u>339</u> acres of Prime Farmland, 9 <u>10</u> acres of Farmland of Statewide Importance, and 21 acres of Unique Farmland to a permanent, non-agricultural use. This quantity of Farmland converted is considered significant. Alternative 3 would be required to implement mitigation measure MM AG 1 ; however, this MM is only applicable to CVWD funded or constructed Facilities. Because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon the Alternative 3 Facilities that may be constructed as part of a development project, impacts remain significant and unavoidable.	Impacts Less than the Project – Significant Unavoidable Impact: Construction of the Alternative 4 Facilities would result in the conversion of approximately 334 <u>327</u> acres of Prime Farmland, 9 acres of Farmland of Statewide Importance, and 25 acres of Unique Farmland to a permanent, non-agricultural use. This quantity of Farmland converted is considered significant. Alternative 4 would be required to implement mitigation measure MM AG 1 ; however, this MM is only applicable to CVWD funded or constructed Facilities. Because CVWD does not have the necessary land use authority to impose CEQA mitigation measures upon the Alternative 4 Facilities that may be constructed as part of a development project, impacts remain significant and unavoidable.
Agriculture and Forestry Resources (Threshold B) Agricultural Zoning or Williamson Act	Less Than Significant Impact: The Facilities are consistent with agricultural zoning, and as the proposed Facilities are for flood control, they are considered a compatible use with Williamson Act contract lands.	Impacts Less Than the Project – No Impact: No impacts to agricultural zoning or Williamson Act contracts would occur since there would be no new Facilities constructed.	Impacts Same as the Project – Less Than Significant Impact: This alternative would affect a greater quantity of land zoned for agricultural uses as well as land under a Williamson Act contract than the proposed Project. However, as with the proposed Project, these facilities would be considered consistent with zoning and compatible with Williamson Act lands. Thus, impacts would	Impacts Same as the Project – Less Than Significant Impact: This alternative would affect a greater quantity of land zoned for agricultural uses as well as land under a Williamson Act than the proposed Project. However as with the proposed Project, these facilities would be considered consistent with zoning and compatible with Williamson Act lands. Thus, impacts would be	Impacts Same as the Project – Less Than Significant Impact: This alternative would affect a smaller quantity of land zoned for agricultural uses as well as land under a Williamson Act contract than the proposed Project. However, as with the proposed Project, these facilities would be considered consistent with zoning and compatible with Williamson Act lands. Thus, impacts would	Impacts Same as the Project – Less Than Significant Impact: This alternative would affect a smaller quantity of land zoned for agricultural as well as land under a Williamson Act contract than the proposed Project. However as with the proposed Project, these facilities would be considered consistent with zoning and compatible with Williamson Act lands. Thus, impacts would be



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
			be similar to the Project, which were determined to be less than significant.	similar to the Project, which were determined to be less than significant.	be similar to the Project, which were determined to be less than significant.	similar to the Project, which were determined to be less than significant.
Air Quality and Greenhouse Gas Emissions (Threshold A) Air Quality Standards	Significant Unavoidable Impact: Short-term construction emissions would exceed daily regional thresholds set by SCAQMD for NO _x during construction of the Facilities, and mitigation measure MM AQ 1 and MM AQ 2 would reduce short-term impacts but not to a level that is below the SCAQMD threshold. Therefore, impacts to air quality standards from construction are considered regionally significant. The Project would not result in significant operational impacts to regionalized air quality standards or significant construction and operational impacts to localized air quality standards. None the less, a Statement of Overriding Considerations would be required.	Impacts Less than the Project – No Impact: No construction emissions would occur under the No Project Alternative.	Impacts Same as the Project – Significant Unavoidable Impacts: Alternative 1 consists of an approximate 9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of proposed Facilities for the Oasis/Valley Floor Region. Implementation of this alternative, which does not include facilities in the Mecca/North Shore Region, would not reduce construction-generated NO _x emissions to below the daily regional threshold set by SCAQMD. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impacts: Alternative 2 consists of an approximate 44 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of proposed Facilities for the Oasis/Valley Floor Region. Implementation of this alternative, which does not include facilities in the Mecca/North Shore Region, would not reduce construction-related NO _x emissions to below the daily regional threshold set by SCAQMD. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impacts: Alternative 3 consists of an approximate 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of proposed Facilities for the Mecca/North Shore Region. Implementation of this alternative, which does not include facilities in the Oasis/Valley Floor Region, would not reduce construction-related NO _x emissions to below the daily regional threshold set by SCAQMD. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impacts: Alternative 4 consists of an approximate 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of proposed Facilities under the proposed Project for the Mecca/North Shore Region. Development of this alternative, which does not include facilities in the Oasis/Valley Floor Region, would not reduce construction-related NO _x emissions to below the daily regional threshold set by SCAQMD. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.
Air Quality and Greenhouse Gas Emissions (Threshold B) Cumulatively Considerable Contribution to a Criteria Pollutant	Significant Unavoidable Impact: The portion of the Basin within which the Project is located is designated as a non-attainment area for ozone and PM-10 under both federal and state standards. Because no new long-term uses are proposed, air quality impacts associated with operational air pollutant emissions would be less than significant. And while the	Impacts Less than the Project – No Impact: No impacts to criteria pollutants would occur since there would be no new construction of Facilities.	Impacts Same as the Project – Significant Unavoidable Impacts: Although Alternative 1 would be in conformance with the AQMP, because short-term construction emissions would result in impacts to ozone precursors after implementation of mitigation measure MM AQ 1 and MM AQ 2 , the incremental contribution is cumulatively	Impacts Same as the Project – Significant Unavoidable Impacts: Although Alternative 2 would be in conformance with the AQMP, because short-term construction emissions would result in impacts to ozone precursors after implementation of mitigation measure MM AQ 1 and MM AQ 2 , the incremental contribution is cumulatively	Impacts Same as the Project – Significant Unavoidable Impacts: Although Alternative 3 would be in conformance with the AQMP, because short-term construction emissions would result in impacts to ozone precursors after implementation of mitigation measure MM AQ 1 and MM AQ 2 , the incremental contribution is cumulatively	Impacts Same as the Project – Significant Unavoidable Impacts: Although Alternative 4 would be in conformance with the AQMP, because short-term construction emissions would result in impacts to ozone precursors after implementation of mitigation measure MM AQ 1 and MM AQ 2 , the incremental contribution is cumulatively



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	proposed Project would be in conformance with the AQMP, because the Project's short-term emissions would result in impacts to ozone precursors after implementation of mitigation measure MM AQ 1 and MM AQ 2 , the incremental contribution is cumulatively considerable. Therefore, the impact is considered significant after mitigation, and a Statement of Overriding Considerations would be required.		considerable. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	considerable. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	considerable. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	considerable. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.
Air Quality and Greenhouse Gas Emissions (Threshold C) Sensitive Receptors	Significant Unavoidable Impact: The majority of sensitive receptors are primarily existing residences and schools in proximity to proposed Facilities, at varying distances. Emissions of NO _x during construction are above SCAQMD recommended daily regional thresholds after implementation of mitigation measure MM AQ 1 and MM AQ 2 , and therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant after mitigation. A Statement of Overriding Considerations would be required.	Impacts Less than the Project – No Impact: No impacts to sensitive receptors would be because there would be no new construction of Facilities.	Impacts Same as the Project – Significant Unavoidable Impact: Alternative 1 would not reduce NO _x emissions to below the daily regional threshold set by SCAQMD after implementation of mitigation measure MM AQ 1 and MM AQ 2 . Therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant after mitigation. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impact: Alternative 2 would not reduce NO _x emissions to below the daily regional threshold set by SCAQMD, after implementation of mitigation measure MM AQ 1 and MM AQ 2 . Therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant after mitigation. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impact: Alternative 3 would not reduce NO _x emissions to below the daily regional threshold set by SCAQMD, after implementation of mitigation measure MM AQ 1 and MM AQ 2 . Therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant after mitigation. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.	Impacts Same as the Project – Significant Unavoidable Impact: Alternative 4 would not reduce NO _x emissions to below the daily regional threshold set by SCAQMD, after implementation of mitigation measure MM AQ 1 and MM AQ 2 . Therefore, exposure of sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered potentially significant after mitigation. Thus, impacts would be similar to the Project, which were determined to be significant and unavoidable.
Air Quality and Greenhouse Gas Emissions	Less than Significant Impact: Because GHG emissions are below CVWD's adopted	Impacts Less than the Project – No Impact: No impacts greenhouse gas emissions would	Impacts Same as the Project – Less than Significant Impact: Although Alternative 1 consists of	Impacts Same as the Project – Less than Significant Impact: Although Alternative 2 consists of	Impacts Same as the Project – Less than Significant Impacts: Although Alternative 3 consists of	Impacts Same as the Project – Less than Significant Impacts: Although Alternative 4 consists of



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
(Threshold D) Generate Significant Greenhouse Gas Emissions	emissions thresholds, the estimated amount of emissions from construction of the Facilities, and the negligible operational emissions from infrequent maintenance vehicles, the proposed Project would not generate a significant amount of GHG emissions, and the impact is considered to be less than significant without mitigation required.	occur under the No Project Alternative.	an approximate 9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region. Implementation of this alternative does not include facilities in the Mecca/North Shore Region. Because construction of the Alternative 1 Facilities would use the same type and quantities of construction equipment as the Project, GHG emissions from construction-related activities would likely be the same under this alternative as the proposed Project.	an approximate 44 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region. Implementation of this alternative does not include facilities in the Mecca/North Shore Region. Because construction of the Alternative 2 Facilities would use the same type and quantities of construction equipment as the Project, GHG emissions from construction-related activities would likely be the same under this alternative as the proposed Project.	an approximate 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region. Implementation of this alternative does not include facilities in the Oasis/Valley Floor Region. Because construction of the Alternative 3 Facilities would use the same type and quantities of construction equipment as the Project, GHG emissions from construction-related activities would likely be the same under this alternative as the proposed Project.	an approximate 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region. Implementation of this alternative does not include facilities in the Oasis/Valley Floor Region. Because construction of the Alternative 4 Facilities would use the same type and quantities of construction equipment as the Project, GHG emissions from construction-related activities would likely be the same under this alternative as the proposed Project.
Air Quality and Greenhouse Gas Emissions (Threshold E) Greenhouse Gas Plan, Policy, Regulation	Less than Significant Impact: There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear stormwater control project such as the proposed Project. Additionally, the Project would not generate GHG that would cause a significant impact on the environment. Impacts would be less than significant.	Impacts Less than the Project – No Impact: No impacts would occur since there would be no new construction of Facilities.	Impacts Same as the Project – Less than Significant Impact: There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear stormwater control facilities such as Alternative 1. Additionally, Alternative 1 would not generate GHG that would cause a significant impact on the environment. Impacts would be the same as the Project.	Impacts Same as the Project – Less than Significant Impact: There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear stormwater control facilities such as Alternative 2. Additionally, Alternative 2 would not generate GHG that would cause a significant impact on the environment. Impacts would be the same as the Project.	Impacts Same as the Project – Less Than Significant Impact: There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear stormwater control facilities such as Alternative 3. Additionally, Alternative 3 would not generate GHG that would cause a significant impact on the environment. Impacts would be the same as the Project.	Impacts Same as the Project – Less Than Significant Impact: There are no applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions (i.e., Climate Action Plan) for a linear stormwater control facilities such as Alternative 4. Additionally, Alternative 4 would not generate GHG that would cause a significant impact on the environment. Impacts would be the same as the Project.
Biological Resources (Threshold A) Candidate,	Less than Significant Impacts with Mitigation: Biological resources were evaluated at a programmatic level in the	Impacts Less than the Project – No Impact: No impacts would occur since there would be no new construction of Facilities.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: Alternative 1 consists of an overall approximate	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 2 consists of an overall	Impacts Greater than the Project – Less than Significant Impacts with Mitigation: Alternative 3's 47 <u>6</u> percent	Impacts Greater than the Project – Less than Significant Impacts with Mitigation: Alternative 4's 45 <u>15</u> percent



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
Sensitive, or Special-Status Plant Species	<u>Recirculated</u> Draft PEIR. Special status plant and animal species occur within the Master Plan Area; however, with CVMSHCP compliance as required by mitigation measures MM BIO 1 through MM BIO 3 , impacts to special status species in Riverside County would be less than significant as these mitigation measures require pre-construction surveys and payment of fees or conservation of existing land within a Conservation Area. In Imperial County, impacts from Facilities in that county were determined by the Travertine Point Specific Plan EIR to be less than significant with mitigation, and as such, additional mitigation measures required by this <u>Recirculated</u> Draft PEIR are unnecessary.		9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region. Implementation of this alternative does not include facilities in the Mecca/North Shore Region. Construction of Alternative 1 Facilities would comply with biological resource protection regulations like the CVMSHCP in the Riverside County portion of the Master Plan Area through mitigation measures as appropriate, as the affected agencies are Permittees to the CVMSHCP. Moreover, the Alternative 1 Facilities are in the same general location as the proposed Facilities and do not otherwise impact biologically sensitive areas to a greater extent than the Project. Further, any Alternative 1 Facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	approximately 44 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region. Implementation of this alternative does not include facilities in the Mecca/North Shore Region. Construction of Alternative 2 Facilities would comply with biological resource protection regulations like the CVMSHCP in the Riverside County portion of the Master Plan Area through mitigation measures as appropriate, as the affected agencies are Permittees to the CVMSHCP. Moreover, the Alternative 2 Facilities are in the same general location as the proposed Facilities and do not otherwise impact biologically sensitive areas to a greater extent than the Project. Further, Alternative 2 Facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, and listed endangered species may also be affected more so under this alternative (MNSA, p. 6-1). Thus, although impacts would be greater than the proposed Project, they are expected to be less than significant with additional mitigation measures.	increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, and listed endangered species may also be affected more so under this alternative (MNSA, p. 6-1). Thus, although impacts would be greater than the proposed Project, they are expected to be less than significant with additional mitigation measures.
Biological Resources (Threshold B) Riparian or Sensitive Habitat	Less than Significant Impacts with Mitigation: Riparian and sensitive community habitat is present within the Plan Area. Compliance with mitigation	Impacts Less than the Project – No Impact: It is not anticipated that riparian habitat would be impacted since maintenance activities would occur within	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 1 consists of an overall approximately 9 <u>25</u> percent	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 2 consists of an overall approximately 44 <u>25</u> percent	Impacts Same as the Project – Less than Significant Impacts with Mitigation: Alternative 3's 47 <u>6</u> percent increase in the amount of land disturbance	Impacts Same as the Project – Less than Significant Impacts: Alternative 4's 45 <u>15</u> percent increase in the amount of land disturbance compared to the



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	measures MM BIO 1 through MM BIO 3 as well as MM BIO 4 , which requires compliance with the CVMSHCP land use adjacency guidelines within and adjacent to Conservations Areas, and MM BIO 5 , which requires a jurisdictional delineation and adherence to applicable permit conditions and measures, would ensure impacts to riparian habitats in Riverside County would be less than significant. In Imperial County, impacts from Facilities in that county were determined by the Travertine Point Specific Plan EIR to be less than significant with mitigation, and as such, additional mitigation measures required by this <u>Recirculated</u> Draft PEIR are unnecessary.	previously disturbed areas where the existing drainage facilities are located.	increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be negligible <u>not significantly reduce impacts to biological resources</u> as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and permit conditions from affected resource agencies in the Riverside County portion of the Plan Area through mitigation measures as appropriate. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be negligible <u>not significantly reduce impacts to biological resources</u> as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP in Riverside County portion of the Plan Area through mitigation measures as appropriate, as the affected agencies are Permittees to the CVMSHCP. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, including sensitive habitat (MNSA, p. 6-1). However, with implementation of new mitigation measures impacts would be the same as the Project.	amount and size of Facilities under the proposed Project for the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, including sensitive habitat (MNSA, p. 6-1). However, with implementation of new mitigation measures impacts would be the same as the Project.
Biological Resources (Threshold C) Federal Wetlands	Less than Significant Impacts with Mitigation: Potentially jurisdictional areas are present within the boundaries of the Plan Area, and may be significantly impacted by Facilities. However, any impacts would be mitigated	Impacts Less than the Project – No Impact: No jurisdictional delineations would be required since no improvements or new construction of Facilities would occur under the No Project Alternative.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 1 consists of an overall approximately 9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 2 consists of an overall approximately 11 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to	Impacts Same as the Project – Less than Significant Impacts with Mitigation: Alternative 3's 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for	Impacts Same as the Project – Less than Significant Impacts with Mitigation: Alternative 4's 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	with implementation of mitigation measure MM BIO 5 , which requires a jurisdictional delineation and compliance with any related permits from the appropriate resource agency(ies). Therefore, any potential impacts to federally protected wetlands in Riverside County would be mitigated to less than significant. In Imperial County, impacts from Facilities in that county were determined by the Travertine Point Specific Plan EIR to be less than significant with mitigation, and as such, additional mitigation measures required by this <u>Recirculated</u> Draft PEIR are unnecessary.		the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be negligible <u>not significantly reduce impacts to biological resources</u> as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and permit conditions from the affected agency through similar mitigation measure as the Project's. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be negligible <u>not significantly reduce impacts to biological resources</u> as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and permit conditions from the affected agency through similar mitigation measure as the Project's. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.	the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, which may include jurisdictional wetlands (MNSA, p. 6-1). However, with implementation of new mitigation measures and obtaining any necessary regulatory permits, impacts would be the same as the Project.	Project for the Mecca/North Shore Region is due to the proposed facilities extending past Parkside Drive and farther southeast into the North Shore area. This additional area contains a notably higher degree of biological sensitivity. A preliminary analysis of the biological constraints associated with this alternative determined that new mitigation measures would likely be necessary for encroaching into this sensitive area, which may include jurisdictional wetlands (MNSA, p. 6-1). Thus, impacts would be greater than the proposed Project and potentially significant and unavoidable. However, with implementation of new mitigation measures and obtaining any necessary regulatory permits, impacts would be the same as the Project.
Biological Resources (Threshold D) Native Resident or Migratory Fish or Wildlife Species	Less than Significant Impacts with Mitigation: There are no CVMSHCP-modeled biological corridors or linkages in the Plan Area; however, migratory species may still utilize vegetation within the Plan Area. Compliance to the CVMSHCP as required by mitigation measures MM BIO 1 through MM BIO 4 , and thus, impacts to migratory bird species	Impacts Less than the Project – No Impact: No established migratory corridors or nursery sites would be affected by maintenance of existing drainage facilities. No new Facilities would be constructed by the No Project Alternative.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 1 consists of an overall approximately 9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 2 consists of an overall approximately 11 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, the increase <u>decrease</u> would be	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 3 consists of an overall approximately 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region, the increase would be negligible	Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 4 consists of an overall approximately 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region, the increase would be negligible



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	<p>covered by the CVMSHCP would be less than significant. For migratory birds that are listed by the Migratory Bird Treaty Act (MBTA), but not by the CVMSHCP, mitigation measure MM BIO 6 requires pre-construction nesting surveys for such bird species if the construction activity requires vegetation removal and avoidance if such species are found to be present. Thus, related impacts in Riverside County would be less than significant with mitigation. In Imperial County, the availability of open space was determined to be adequate so as to avoid significantly impacting migratory bird species. Therefore, related impacts in Imperial County would be less than significant.</p>		<p>negligible <u>not significantly reduce impacts to biological resources as</u> as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and MBTA through similar mitigation measure as the Project's. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project including corridors or linkages. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.</p>	<p>negligible <u>not significantly reduce impacts to biological resources as</u> it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and MBTA through similar mitigation measure as the Project's. Moreover, these Facilities are in the same general location as the proposed Project and do not otherwise impact other biologically sensitive areas than the Project including corridors or linkages. Further, facilities in Imperial County would be developed in accordance with the Travertine Pointe project and its Specific Plan and EIR analysis. Thus, impacts would be the same as the Project.</p>	<p>as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and MBTA through similar mitigation measure as the Project's in regards to this threshold. Moreover, the additional facilities proposed farther southwest into the North Shore area are not within a CVMSHCP-modeled corridor or linkage. Thus, impacts would be the same as the Project.</p>	<p>as it is reasonably anticipated development under this alternative would comply with biological resource protection regulations like the CVMSHCP and MBTA through similar mitigation measure as the Project's in regards to this threshold. Moreover, the additional facilities proposed farther southwest into the North Shore area are not within a CVMSHCP-modeled corridor or linkage. Thus, impacts would be the same as the Project.</p>
<p>Biological Resources (Threshold E) Local Policies or Ordinances Protecting Biological Resources</p>	<p>Less than Significant Impacts with Mitigation: With the incorporation of mitigation measures MM BIO 1 through MM BIO 6, the Project is consistent with applicable local policies protecting biological resources in Riverside County and the city of Coachella. Moreover, the Project is consistent with applicable Imperial County policies without the need for mitigation measures.</p>	<p>Impacts Less than the Project – No Impact: Because there would be no construction of Facilities, there would be no impacts with regard to local policies or ordinances protecting biological resources.</p>	<p>Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 1 consists of an approximately 9 25 percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, given the nature of the stormwater infrastructure that would be developed under this alternative and that these facilities would be in the same general location as those proposed by the</p>	<p>Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 2 consists of an approximately 11 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Oasis/Valley Floor Region, given the nature of the stormwater infrastructure that would be developed under this alternative and that these facilities would be in the same general location as those proposed by the</p>	<p>Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 3 consists of an overall approximately 47 <u>6</u> increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region, given the nature of the stormwater infrastructure that would be developed under this alternative and that these facilities would be in the same general location as those proposed by the</p>	<p>Impacts Same as the Project – Less than Significant Impacts with Mitigation: While Alternative 4 consists of an approximately 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of Facilities under the proposed Project for the Mecca/North Shore Region, given the nature of the stormwater infrastructure that would be developed under this alternative and that these facilities would be in the same general location as those proposed by the Project,</p>



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
			Project, Alternative 1 would not conflict with local policies or ordinances protecting biological resources within the affected jurisdictions through the anticipated requirement of similar mitigation measures as those required of the proposed Project. Therefore, impacts would be the same as the Project.	Project, Alternative 2 would not conflict with local policies or ordinances protecting biological resources within the affected jurisdictions through the anticipated requirement of similar mitigation measures as those required of the proposed Project. Therefore, impacts would be the same as the Project.	Project, Alternative 3 would not conflict with local policies or ordinances protecting biological resources within the affected jurisdictions through the anticipated requirement of similar mitigation measures as those required of the proposed Project. Therefore, impacts would be the same as the Project.	Alternative 4 would not conflict with local policies or ordinances protecting biological resources within the affected jurisdictions through the anticipated requirement of similar mitigation measures as those required of the proposed Project. Therefore, impacts would be the same as the Project.
Biological Resources (Threshold F) Conflict with the Provisions of an adopted HCP.	Less than Significant Impacts with Mitigation: The Riverside County portion of the Plan Area is located within the boundaries of the CVMSHCP. The Project would be compliance with the CVMSHCP with incorporation of mitigation measures MM BIO 1 through MM BIO 6 . There are no other conservation plans in the area, which also includes the Imperial County portion of the Plan Area.	Impacts Less than the Project – No Impact: There would be no CVMSHCP requirements since no new construction is proposed under the No Project Alternative.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: For facilities within Riverside County, the affected jurisdictions are Permittees to the CVMSHCP, and therefore require compliance with the CVMSHCP, which would be achieved through the implementation of mitigation measures MM BIO 1 through MM BIO 6 . Therefore, impacts would be the same as the Project.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: For facilities within Riverside County, the affected jurisdictions are Permittees to the CVMSHCP, and therefore require compliance with the CVMSHCP, which would be achieved through implementation of mitigation measures MM BIO 1 through MM BIO 6 . Therefore, impacts would be the same as the Project.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: The affected jurisdictions are Permittees to the CVMSHCP, and therefore require compliance with the CVMSHCP, which would be achieved through implementation of mitigation measures MM BIO 1 through MM BIO 6 . Therefore, impacts would be the same as the Project.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: The affected jurisdictions are Permittees to the CVMSHCP, and therefore require compliance with the CVMSHCP, which would be achieved through implementation of mitigation measures MM BIO 1 through MM BIO 6 . Therefore, impacts would be the same as the Project.
Cultural Resources (Threshold A) Historic Resources (Threshold B) Archaeological Resources	Less than Significant Impacts with Mitigation: Potentially significant impacts may occur to known and potentially occurring historic and archaeological resources in the Plan Area, thus, mitigation measures MM CR 1 through MM CR 3 are required. These measures would minimize potential impacts to such resources by requiring a field survey, Native American consultation, worker education,	Impacts Less than the Project – No Impact: Because no new facilities would be constructed and no existing facilities expanded or altered, there would be no impacts to historic or archaeological resources.	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation or Potentially Significant: Alternative 1 consists of an overall approximately 9 <u>25</u> percent <u>increase decrease</u> in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Oasis/Valley Floor Region. Moreover, the facilities’	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation or Potentially Significant: Alternative 2 consists of an overall approximately 11 <u>25</u> percent <u>increase decrease</u> in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Oasis/Valley Floor Region. Moreover, the facilities’	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation or Potentially Significant: Alternative 3 consists of an overall approximately 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Mecca/North Shore Region. Moreover, the facilities’	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation or Potentially Significant: Alternative 4 consists of an overall approximately 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Mecca/North Shore Region. Moreover, the facilities’



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	and procedures for inadvertent finds during construction.		alignments proposed under this alternative have not undertaken a records search, Native American outreach, and Sacred Lands File search specific to these alignments. As such, there exists the potential that implementation of this alternative may result in either the same level of impacts or greater impacts than the proposed Project to historic and/or archaeological resources in the area, which may be potentially significant whereas impacts would be reduced to less than significant levels with mitigation measures incorporated.	alignments proposed under this alternative have not undertaken a records search, Native American outreach, and Sacred Lands File search specific to these alignments. As such, there exists the potential that implementation of this alternative may result in either the same level of impacts or greater impacts than the proposed Project to historic and/or archaeological resources in the area, which may be potentially significant whereas impacts would be reduced to less than significant levels with mitigation measures incorporated.	alignments proposed under this alternative have not undertaken a records search, Native American outreach, and Sacred Lands File search specific to these alignments. As such, there exists the potential that implementation of this alternative may result in either the same level of impacts or greater impacts than the proposed Project to historic and/or archaeological resources in the area, which may be potentially significant whereas impacts would be reduced to less than significant levels with mitigation measures incorporated.	alignments proposed under this alternative have not undertaken a records search, Native American outreach, and Sacred Lands File search specific to these alignments. As such, there exists the potential that implementation of this alternative may result in either the same level of impacts or greater impacts than the proposed Project to historic and/or archaeological resources in the area, which may be potentially significant whereas impacts would be reduced to less than significant levels with mitigation measures incorporated.
Cultural Resources (Threshold C) Paleontological Resources	Less than Significant Impacts with Mitigation: There is a high paleontological resource potential in the Master Plan Area, and potentially significant paleontological resources may be impacted from the construction of Facilities. Thus, mitigation measures MM CR 4 through MM CR 6 are required to minimize potential impacts to paleontological resources by requiring a field reconnaissance survey, worker education, and a Paleontological Resources Mitigation Plan, where appropriate.	Impacts Less than the Project – No Impact: Because no new facilities would be constructed and no existing facilities expanded or altered, there would be no impacts to paleontological resources.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: There is a high paleontological resource potential in the Alternative 1 area. However, with implementation of mitigation measures MM CR 4 through MM CR 6 potential impacts would be reduced to less than significant levels. Therefore, impacts would be the same as the Project.	Impacts Same as the Project – Less than Significant Impacts with Mitigation: There is a high paleontological resource potential in the Alternative 2 area. However, with implementation of mitigation measures MM CR 4 through MM CR 6 , potential impacts would be reduced to less than significant levels. Therefore, impacts would be the same as the Project.	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation: There is a high paleontological resource potential in the Alternative 3 area. However, with implementation of mitigation measures MM CR 4 through MM CR 6 potential impacts would be reduced to less than significant levels. Therefore, impacts would be the same as the Project.	Impacts Same as or Greater than the Project – Less than Significant Impacts with Mitigation: There is a high paleontological resource potential in the Alternative 4 area. However, with implementation of mitigation measures MM CR 4 through MM CR 6 potential impacts would be reduced to less than significant levels. Therefore, impacts would be the same as the Project.
Cultural Resources	Less Than Significant Impacts: The Master Plan area is within the	Impacts Less than the Project – No Impact: Because no new	Impacts Same as the Project – Less than Significant Impact:	Impacts Same as the Project – Less than Significant Impact:	Impacts Same as the Project – Less than Significant Impact:	Impacts Same as the Project – Less than Significant Impact:



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
(Threshold D) Tribal Cultural Resources	traditional use area of several Native American Tribes. Therefore, as future stormwater projects are initiated in the Master Plan area, CVWD would continue tribal outreach, such as consultation, cultural report preparation and field survey, including tribal monitoring as requested or determined appropriate in project-specific environmental review.	facilities would be constructed and no existing facilities expanded or altered, there would be no impacts to tribal cultural resources.	The Alternative 1 area is within the traditional use area of several Native American Tribes. Therefore, as future stormwater projects are initiated in the Master Plan area, CVWD would continue tribal outreach, such as consultation, cultural report preparation and field survey, including tribal monitoring as requested or determined appropriate in project-specific environmental review. Impacts are the same as for the proposed Project.	The Alternative 2 area is within the traditional use area of several Native American Tribes. Therefore, as future stormwater projects are initiated in the Master Plan area, CVWD would continue tribal outreach, such as consultation, cultural report preparation and field survey, including tribal monitoring as requested or determined appropriate in project-specific environmental review. Impacts are the same as for the proposed Project.	The Alternative 3 area is within the traditional use area of several Native American Tribes. Therefore, as future stormwater projects are initiated in the Master Plan area, CVWD would continue tribal outreach, such as consultation, cultural report preparation and field survey, including tribal monitoring as requested or determined appropriate in project-specific environmental review. Impacts are the same as for the proposed Project.	The Alternative 4 area is within the traditional use area of several Native American Tribes. Therefore, as future stormwater projects are initiated in the Master Plan area, CVWD would continue tribal outreach, such as consultation, cultural report preparation and field survey, including tribal monitoring as requested or determined appropriate in project-specific environmental review. Impacts are the same as for the proposed Project.
Hydrology and Water Quality (Threshold A) Substantially Alter Existing Drainage Patterns or Increase Surface Runoff that would Result in Flooding	Less than Significant with Mitigation: The Facilities were designed and sized to follow the historic and natural drainage conditions. Existing drainage patterns also includes alluvial fan sheet flow from the Santa Rosa Mountains via nine canyons, which would be conveyed to the stormwater conveyance infrastructure to protect property and human safety. When completed, the SMP Facilities would provide a comprehensive drainage system and protection from 100-year return period flow within the Plan Area and remove the Plan Area from FEMA's mapped Special Flood Hazards Area. However, as SMP Facilities would be constructed over a span of many years, implementation of	Impacts Less than the Project – No Impact: Because no new facilities would be constructed and no existing facilities expanded or altered, there would be no alteration to existing drainage patterns or increase in surface runoff.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 1 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Oasis/Valley Floor Region from the 100-year return period flow. Additionally, as with the proposed Project, Alternative 1 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 2 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Oasis/Valley Floor Region from the 100-year return period flow. Additionally, as with the proposed Project, Alternative 2 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 3 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Mecca/North Shore Region from 100-year return period flow. Additionally, as with the proposed Project, Alternative 3 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 4 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Mecca/North Shore Region from 100-year return period flow. Additionally, as with the proposed Project, Alternative 4 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding. Therefore, the impacts would be similar to the proposed Project.



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
	mitigation measure MM HYD 1 would ensure that individual SMP Facilities are completed so that storm flows from each Facility would be conveyed to an adequate outlet to avoid flooding.					
Hydrology and Water Quality (Threshold B) Runoff Exceeding Capacity of Drainage System	Less than Significant with Mitigation: The Master Plan is designed to prevent overflow of existing and proposed SMP Facilities through the design and construction of new and revised, adequately-designed facilities that would convey stormwater, especially 100-year return period flow, in the Plan Area. However, as fragmentation of the network may occur as individual SMP Facility are constructed over the span of many years, mitigation measure MM HYD 1 would require the development of the each SMP Facility to ensure storm flows from that Facility being implementing would be conveyed to an adequate outlet, and potential impacts to the stormwater drainage system existing at that time are avoided.	Impacts Less than the Project – No Impact: Because no new facilities would be constructed and no existing facilities expanded or altered, there would be no change in the amount of runoff in the Master Plan Area.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 1 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Oasis/Valley Floor Region from the 100-year return period flow. Additionally, as with the proposed Project, Alternative 1 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding and would not otherwise exceed drainage system capacity. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 2 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Oasis/Valley Floor Region from the 100-year return period flow. Additionally, as with the proposed Project, Alternative 2 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding and would not otherwise exceed drainage system capacity. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 3 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Mecca/North Shore Region from 100-year return period flow. Additionally, as with the proposed Project, Alternative 3 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding and would not otherwise exceed drainage system capacity. Therefore, the impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impacts with Mitigation: As with the proposed Project, Alternative 4 would modify the existing drainage condition by collecting and conveying the current sheet flows, and the facilities have been designed to protect the Mecca/North Shore Region from 100-year return period flow. Additionally, as with the proposed Project, Alternative 4 would implement the same mitigation measure to ensure that individual facilities are completed so that storm flows from each facility would be conveyed to an adequate outlet to avoid flooding and would not otherwise exceed drainage system capacity. Therefore, the impacts would be similar to the proposed Project.
Noise (Threshold A) Exposure or Generation of Noise in Excess of Standards	Less than Significant with Mitigation: Long term noise vibration associated with the maintenance of the proposed Facilities would be negligible.	Impacts Less than the Project – No Impact: No construction noise would be generated under the No Project Alternative because no new facilities would be constructed. Therefore, noise	Impacts Same than the Project – Less Than Significant Impacts with Mitigation: Alternative 1 would result in the exposure of more <u>fewer</u> people to construction noise than the proposed Project as a result of the approximately 9	Impacts Same than the Project – Less Than Significant Impacts with Mitigation: Alternative 2 would result in the exposure of more <u>fewer</u> people to construction noise than the proposed Project as a result of the approximately	Impacts Same than the Project – Less Than Significant Impacts with Mitigation: Alternative 3 would result in the exposure of more people to construction noise than the proposed Project as a result of the approximately 47 <u>6</u>	Impacts Same than the Project – Less Than Significant Impacts with Mitigation: Alternative 4 would result in the exposure of more people to construction noise than the proposed Project as a result of the approximately 45 <u>15</u>



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
(Threshold C) Substantial Temporary or Periodic Noise Increase	Because construction of certain Facilities may take place within 50 feet of existing noise-sensitive receptors, mitigation measures. MM NOI 1 and MM NOI 2 would reduce impacts to less than significant..	levels would not exceed each jurisdiction’s noise thresholds.	25 percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Oasis/Valley Floor Region. However, because Alternative 1 would implement mitigation measures MM NOI 1 and MM NOI 2 impacts would be similar to the proposed Project.	44 25 percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Oasis/Valley Floor Region. However, because Alternative 2 would implement mitigation measures MM NOI 1 and MM NOI 2 impacts would be similar to the proposed Project.	percent increase in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Mecca/North Shore Region. However, because Alternative 3 would implement mitigation measures MM NOI 1 and MM NOI 2 impacts would be similar to the proposed Project.	percent increase in the amount of land disturbance compared to the amount and size of SMP Facilities under the proposed Project for the Mecca/North Shore Region. However, because Alternative 4 would implement mitigation measures MM NOI 1 and MM NOI 2 impacts would be similar to the proposed Project.
Noise (Threshold B) Exposure or Generation of Excessive Groundborne Vibration or Noise	Less than Significant: Groundborne vibration may occur during construction of the Facilities. However, 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. For these reasons impacts would be less than significant.	Impacts Less than the Project – No Impact: No groundborne vibration or noise would be generated under the No Project Alternative because no new facilities would be constructed.	Impacts Same as the Project – Less Than Significant Impact: Alternative 1 would result in the exposure of more <u>fewer</u> people and structures to groundborne vibration than the proposed Project as a result of the approximately 9 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of the Facilities under the proposed Project for the Oasis/Valley Floor Region. However <u>Nonetheless</u> , because construction of the Alternative 1 Facilities would use the same type and quantities of construction equipment as the Project impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impact: Alternative 2 would result in the exposure of more <u>fewer</u> people and property to groundborne vibration than the proposed Project as a result of the approximately 44 <u>25</u> percent increase <u>decrease</u> in the amount of land disturbance compared to the amount and size of the Facilities under the proposed Project for the Oasis/Valley Floor Region. However <u>Nonetheless</u> , because construction of the Alternative 2 Facilities would use the same type and quantities of construction equipment as the Project impacts would be similar to the proposed Project.	Impacts Same as the Project – Less Than Significant Impact: Alternative 3 would result in the exposure of more people and property to groundborne vibration impacts than the proposed Project as a result of the approximately 47 <u>6</u> percent increase in the amount of land disturbance compared to the amount and size of the Facilities under the proposed Project for the Mecca/North Shore Region. However, because construction of the Alternative 3 Facilities would use the same type and quantities of construction equipment as the Project impacts would be similar to the proposed Project.	Impacts Greater than the Project – Less Than Significant Impact: Alternative 4 would result in the exposure of more people and property to groundborne vibration impacts than the proposed Project as a result of the approximately 45 <u>15</u> percent increase in the amount of land disturbance compared to the amount and size of the Facilities under the proposed Project for the Mecca/North Shore Region. However, because construction of the Alternative 4 Facilities would use the same type and quantities of construction equipment as the Project impacts would be similar to the proposed Project.
Environmentally Superior to Proposed Project?	Not applicable	Yes	Yes Although substantially less Farmland would be permanently converted under Alternative 1, it is important to note that this	Yes Although substantially less Farmland would be permanently converted under Alternative 2, it is important to note that this	Yes Although substantially less Farmland would be permanently converted under Alternative 3, it is important to note that this	Yes Although substantially less Farmland would be permanently converted under Alternative 4, it is important to note that this



Table 1-C - Comparison of Alternatives Matrix

Environmental Issue	Proposed Project	No Project Alternative	Alternative 1 (Oasis/Valley Floor Region)	Alternative 2 (Oasis/Valley Floor Region)	Alternative 3 (Mecca/North Shore Region)	Alternative 4 (Mecca/North Shore Region)
			alternative does not include any facilities in the Mecca/North Shore Region.	alternative does not include any facilities in the Mecca/North Shore Region.	alternative does not include any facilities in the Oasis/Valley Floor Region.	alternative does not include any facilities in the Oasis/Valley Floor Region.

Section 2 – Introduction

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example text.)

The Coachella Valley Water District (CVWD) has prepared this Recirculated Draft Program Environmental Impact Report (PEIR¹) to evaluate and disclose potential environmental impacts resulting from implementation of the proposed Eastern Coachella Valley Stormwater Master Plan, which is hereinafter referred to as the “Project” or “Master Plan”. The Master Plan is described in Section 3 of this Recirculated Draft PEIR, and is provided in its entirety in Appendix D to the Recirculated Draft PEIR.

A Programmatic EIR, as described in Section 15168 of Guidelines for the Implementation of the California Environmental Quality Act (*CEQA Guidelines*) 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-range planning document, such as a General Plan, or in this case, a Stormwater Master Plan, that provides the framework for future stormwater conveyance and flood control facilities.

The Project consists of an assemblage of stormwater conveyance facilities (Facilities) that are anticipated to be implemented separately by multiple entities, e.g., CVWD, Riverside County, city of Coachella, and/or private developers, over a series of years as development occurs in the eastern Coachella Valley. Please refer to Section 3 of this Recirculated Draft PEIR for a list of Facilities.

2.1 Purpose and Scope

CEQA Guidelines Section 15088.5 requires that a lead agency recirculate an EIR, or portions of an EIR, when significant new information is added to the EIR after public notice for public review of the Draft EIR, but prior to certification. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project, or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project’s proponent has declined to implement.

“Significant new information” requiring recirculation includes, for example, a disclosure showing that:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented;

¹In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code [PRC] 21000 et seq.), and the *CEQA Guidelines* (California Code of Regulations [CCR] 15000 et seq.)



2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance;
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the project, but the project's proponents decline to adopt it; or
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. (See CEQA Guidelines §15088.5, subdivisions (a)(1)-(4).)

Under CEQA, if the revision is limited to a few chapters or portions of the DEIR, the lead agency need only recirculate the chapters or portions that have been modified (CEQA Guidelines Section 15088.5, subdivisions (c)).

Recirculation of an EIR requires notice pursuant to CEQA Guidelines Section 15087 and consultation pursuant to CEQA Guidelines Section 15086.

The Eastern Coachella Valley Stormwater Master Plan Recirculated Draft PEIR is being recirculated to inform the public regarding the following changes:

1. Revisions to the boundaries of the Master Plan as shown on **Figure 2.1 – Proposed Boundary Changes** and described below:
 - a. removal of territory within the city of La Quinta, in which no Facilities are proposed;
 - b. removal of territory within the city of Coachella west of the Coachella Valley Stormwater Channel, in which no facilities are proposed;
 - c. addition of the unincorporated territory between the cities of Coachella and La Quinta north of Avenue 52.
 - d. revision of the western boundary of the Master Plan to conform to the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan Santa Rosa and San Jacinto Mountains Conservation Area, except in the locations in which the conceptual alignment of proposed Facilities extend into the conservation area.
2. Deletion of all discussion regarding the La Quinta General Plan and municipal code, except in the context of cumulative impacts in Section 5.5 – Hydrology and Water Quality.
3. Revisions to sections to update the amount of acreage in the Master Plan.



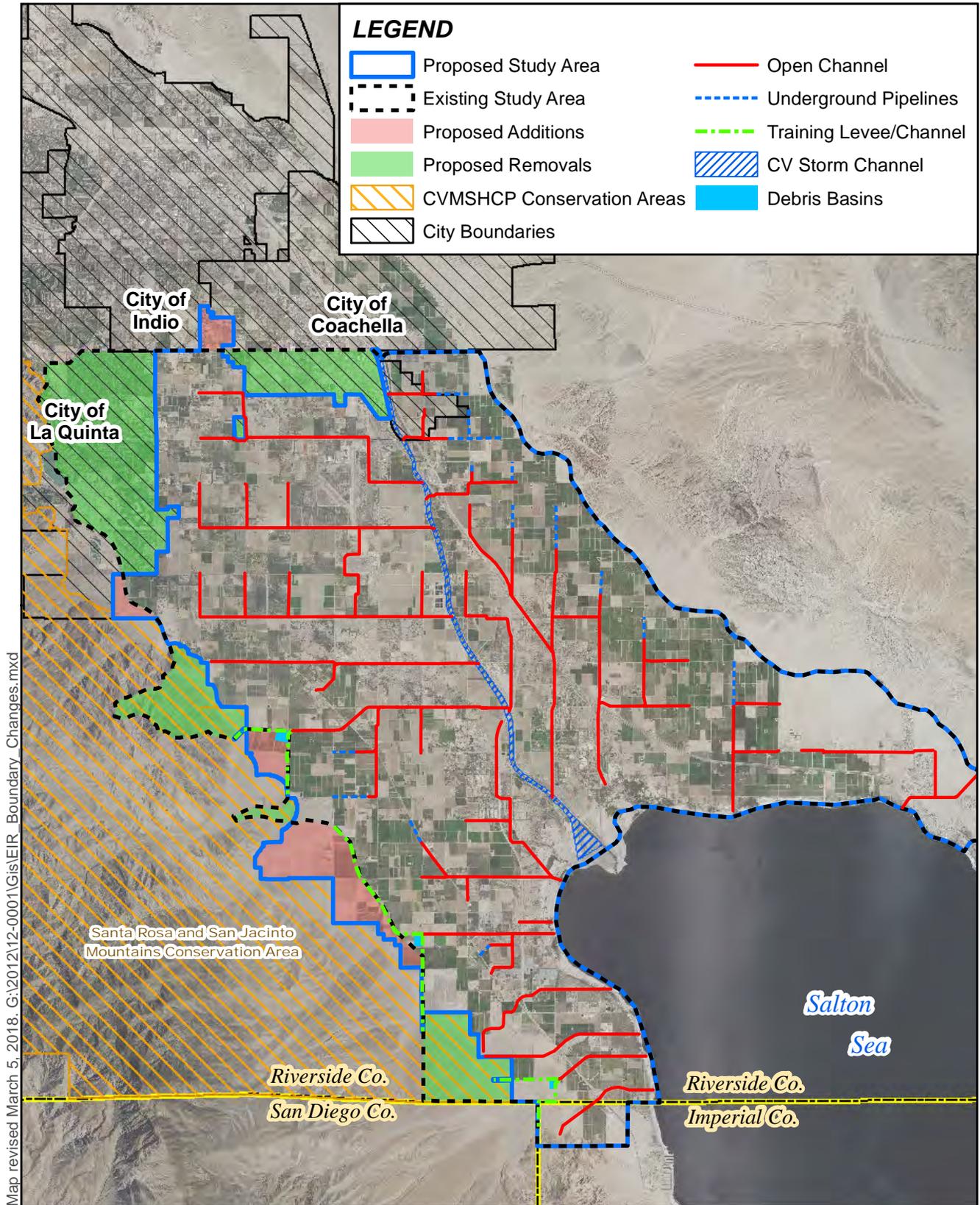


Figure 2-1 - Proposed Boundary Changes
Eastern Coachella Valley Stormwater Master Plan

0 2 4 6 Miles



4. Revisions to Section 5.1 – Agricultural and Forestry Resources to:
 - a. incorporate the most recent (2016) agricultural statistics from the Riverside County Agricultural Commissioners’ Office;
 - b. incorporate the most recent (2016) Farmland Mapping California and Monitoring Program (FMMP) data from the California Department of Conservation;
 - c. incorporate current Williamson Act contract information.
5. In response to comments received from the South Coast Air Quality Management District on the Draft PEIR, mitigation measure **MM AQ 1** was revised and mitigation measure and **MM AQ 2** was added to Section 5.2 – Air Quality and Greenhouse Gas Emissions.
6. Travertine Point Specific Plan EIR mitigation measures 6.4-47 and 6.4-49 have been added to Section 5.2 – Biological Resources.
7. Incorporation of the most recent (2016) Farmland Mapping California and Monitoring Program (FMMP) data from the California Department of Conservation in Section 7 – Alternatives to the Proposed Project.

There are no changes to the proposed Master Plan Facilities from what was described and evaluated in the Draft PEIR.

As reflected in the analyses presented in this Recirculated Draft PEIR, the changes in the Project and updated information do not represent significant new information or identify any new significant impacts from what was disclosed in the Draft PEIR. Rather, given this is a document from which future analysis may be tiered, CVWD determined that a Recirculated Draft PEIR is desirable in light of the changes to the Master Plan boundary.

This Recirculated PEIR addresses the potential for significant program-level environmental impacts to occur with implementation of the revisions to the Master Plan boundary. This program-level analysis is not intended to describe or address the impacts in detail. Rather, the program-level analysis will serve as a basis and beginning point for future detailed evaluation of specific Facilities that will be conducted as part of a Facility-specific CEQA review.

As set forth in Section 15002(a) of the State *CEQA Guidelines*, the basic purposes of CEQA are 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.*
- (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.*

Other objectives of and benefits from the CEQA process include fostering interagency cooperation and enhancing public participation in the planning process.

2.1.1 Subsequent Tiering

As provided and encouraged by Section 15152 of the State *CEQA Guidelines*, CVWD expects that the individual Facilities will “tier” off this Recirculated PEIR and PEIR and that each future 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 Facility is implemented.

With regards to use of a PEIR for subsequent activities, Section 15168(c) of the State *CEQA Guidelines* states:

Use with Later Activities. 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.*
- (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.*
- (5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the*

scope of the project described in the program EIR, and no further environmental documents would be required.

Subsequent CEQA documents may consist of, but are not limited to; an exemption, negative declaration, mitigated negative declaration, addendum or supplements to the Recirculated PEIR, PEIR, or environmental impact report as determined by the Lead Agency for the Facility or Facilities. It is reasonably foreseeable that some Facilities will be constructed as part of private development projects. Therefore, subsequent CEQA analysis and documentation for some proposed Facilities may be included as part of the evaluation of larger projects.

2.2 Lead Agency

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. This Recirculated Draft PEIR has been prepared by CVWD as Lead Agency in accordance with the State *CEQA Guidelines* §15367. The proposed Master Plan evaluated in this Recirculated Draft PEIR constitutes a “project,” as defined by Section 15378 of the State *CEQA Guidelines*.

In 2015, the CVWD prepared an Initial Study (Appendix A) that determined the Master Plan may have a significant adverse impact on the environment; and therefore, preparation of a PEIR was required pursuant to Section 15081 of the State *CEQA Guidelines*.

As Lead Agency, CVWD has discretionary approval of the Master Plan. The intent of this PEIR is to enable CVWD’s key decision-makers, responsible agencies, and interested parties to understand the potential environmental effects of the Master Plan.

Lead Agency Contact:

Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211
Contact: William Patterson ~~Luke Stowe~~, Environmental Supervisor
Phone: (760) 398- 2651, ext. 2545 or Email: wpatterson@cvwd.org ~~LStowe@cvwd.org~~

2.3 Responsible Agencies

A Responsible Agency refers to all public agencies other than Lead Agency that may have discretionary approval over a proposed project. Although approval of the Master Plan rests solely with CVWD, because certain Facilities are located within the City of Coachella, Riverside County, and Imperial County, and may be approved by the City of Coachella, Riverside County, or Imperial County as part of private development projects within those respective jurisdictions, the City of Coachella, Riverside County, and Imperial County may be Responsible Agencies.



Other agencies that also have some authority or responsibility to issue discretionary permits for Master Plan implementation are designated as Responsible Agencies. Potential responsible agencies for the Facilities may include:

- California Department of Transportation (Caltrans) could be a responsible agency for any Facility or Facilities that entail construction within the rights-of-way (ROW) of the state highway or interstate highway systems if obtaining an encroachment permit is considered a discretionary action.
- Imperial Irrigation District (IID) would be a responsible agency for any Facility or Facilities that entails construction within IID ROW or relocation of IID-owned improvements, for which an encroach or relocation permits is considered a discretionary action.
- United States Army Corps of Engineers (USACE) may use this PEIR for any Facility or Facilities that entails construction within Waters of the U.S. for which a permit is required pursuant to Section 404 of the Clean Water Act.
- California Department of Fish and Wildlife (CDFW) would be a responsible agency for any Facility or Facilities that entails construction within Waters of the State for which a Lake or Streambed Alteration Agreement is required pursuant to California Fish and Game Code Section 1602.
- Colorado River Basin Regional Water Quality Control Board (RWQCB) would be a responsible agency for any Facility or Facilities that entails construction within Waters of the U.S. for which a Water Quality Certification is required pursuant to Section 401 of the Clear Water Act.

2.4 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 30-day public scoping period,
3. Notice of Completion/Notice of Availability (NOC/NOA), and circulation of the Draft PEIR for a 45-day public review period,
4. Final EIR and Response to Comments received on the Draft EIR,
5. Project review/hearing by decision-makers, and
6. Notice of Determination (NOD).

Pursuant to Section 15063 of the *CEQA Guidelines*, CVWD prepared an Initial Study for the Master Plan in order to determine if the Master Plan may have a significant effect on the



environment. Based upon the findings contained with the Initial Study, CVWD concluded that an EIR should be prepared.

An NOP for the Draft PEIR was distributed to the State Clearinghouse, Responsible Agencies, and other interested parties on July 17, 2015. A notice advising of the availability of the NOP was posted by the Riverside County Clerk on July 17, 2015. Pursuant to Section 15082 of the State *CEQA Guidelines*, recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. Copies of the NOP and the NOP distribution list are located in Appendix A.

A public scoping meeting was held on August 4, 2015, at CVWD’s Forbes Board Room located at 51-501 Tyler Street, Coachella, CA 92236, pursuant to the requirements of Section 15082(c)(1) of the State *CEQA Guidelines*. Comments regarding the NOP received by CVWD as well as at the public scoping meeting are summarized in **Table 2-A**, below. Copies of comment letters received are included in Appendix A.

Table 2-A – Summary of Comments Received in Response to the Notice of Preparation

Commenter / Agency	Area of Controversy/Summary of Comment	Location in Draft PEIR where Comment is Addressed
Written comments received on the NOP		
Jillian Wong, Ph.D., Program Supervisor South Coast Air Quality Management District (SCAQMD)	<ul style="list-style-type: none"> • SCAQMD requests a copy of the Draft PEIR upon completion, including all appendices and original technical data files related to air quality and greenhouse gas analyses and air quality modeling and health risk assessment files • SCAQMD recommends CVWD use the Air Quality Handbook (1993) and CalEEMod software to assist with the analyses • PEIR should identify potential adverse direct and indirect impacts that occur from all phases of the Project and all air pollution sources related to the Project (including construction, demolition, and operation) • SCAQMD requests the PEIR quantify criteria pollutant emissions and compare the results to recommended regional and localized significance thresholds • If the Project will generate or attract vehicular trips, especially heavy-duty diesel-fueled vehicles, a mobile source health risk assessment is recommended, and should include toxic air contaminant impacts due to the use of equipment potentially generating such pollutants 	Section 5.2, Air Quality and Greenhouse Gas Emissions



Commenter / Agency	Area of Controversy/Summary of Comment	Location in Draft PEIR where Comment is Addressed
	<ul style="list-style-type: none"> • Refer to California Air Resources Board’s <i>Air Quality and Land Use Handbook: A Community Perspective</i> (2005) as a guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process • If the Project will generate significant adverse air quality impacts, all feasible mitigation measures that go beyond what is required by law are to be utilized to minimize or eliminate these impacts, and any impacts resulting from mitigation measures must also be discussed • SCAQMD rules and air quality data is publicly available, and staff is also available to work with CVWD to ensure Project emissions are accurately evaluated and mitigated where feasible 	
<p>Mary Ann Green, Tribal Chairperson</p> <p>Augustine Band of Cahuilla Indians ("Augustine Tribe")</p>	<ul style="list-style-type: none"> • Augustine Tribe has reviewed the NOP and sent a staff member (Becky J. Ross) to the scoping meeting • Augustine Tribe asks how CVWD determined the location of the facility lines for the Project, especially Lines L01 and L01-01 • Augustine Tribe asks what specific criteria will be used for the open channel facilities in the Oasis/Valley Floor area of the Project, and states that the NOP only gave specific criteria for the Mecca/North Shore area 	<p>Comment is addressed in Section 4.3, Areas of Controversy, below</p>
<p>Robert Esparza, GIS Technician</p> <p>Imperial Irrigation District (IID)</p>	<ul style="list-style-type: none"> • Commenter has been tasked with overlaying the proposed Project’s facilities with IID’s electrical network, and requested shapefiles for the Study Area, Coachella Valley Stormwater Channel(s), Training Levee/Channel, Debris Basin, New Replacement Bridges, and Widened Union Pacific Railroad Bridges 	<p>Letter does not include an environmental comment.</p>
<p>Scott Morgan, Director</p> <p>State Clearinghouse</p>	<ul style="list-style-type: none"> • Commenter provided a copy to CVWD of the letter transmitted to reviewing agencies for comment on the NOP • Comment also provided a copy of the State Clearinghouse database’s document details report for the Project, confirmed receipts copy of the Notice of Completion and the NOP distribution list 	<p>Letter does not include an environmental comment.</p>
<p>Bob Lyman, Regional Office Manager – Palm Desert</p>	<ul style="list-style-type: none"> • Commenter states the TLMA will work in close cooperation with CVWD as a major stakeholder in this process, and that the commenter will be attending the scoping meeting and submitted comments afterwards 	<p>Letter does not include an environmental comment.</p>



Commenter / Agency	Area of Controversy/Summary of Comment	Location in Draft PEIR where Comment is Addressed
Riverside County Transportation and Land Management Agency (TLMA)	<ul style="list-style-type: none"> • Commenter provided maps of proposed increased densities for affordable housing as part of the County’s proposed Housing Element update for CVWD’s review and consideration; commenter added that in order to provide affordable housing, flood protection is critical 	
Comments received at the public scoping meeting		
<i>No comments were received at the public scoping meeting for this Project.</i>		

CEQA does not require issuance of a new NOP or another public scoping meeting be conducted as part of preparation of this Recirculated Draft PEIR.

A recirculated EIR (or Recirculated PEIR in this case) 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 Recirculated Draft PEIR identifies possible ways to minimize these potentially significant impacts (referred to as mitigation) at a programmatic level and describes alternatives to the Master Plan that may also reduce its significant impacts.

The Recirculated Draft PEIR will be circulated for public review along with the Notice of Competition/Notice of Availability. After the state-mandated 45-day public review period, the Lead Agency will prepare responses to comments received on the Recirculated Draft PEIR, and prepare the Final PEIR.

CVWD’s Board of Directors will consider the information in this Recirculated PEIR in their evaluation of the Master Plan. The findings and conclusions presented in the Recirculated PEIR regarding environmental impacts do not control CVWD’s discretion to approve, deny, or modify the Master Plan, but instead are presented as information to aid the decision-making process.

As set forth in Section 15021 of the *CEQA Guidelines*, CVWD has the duty to minimize environmental damage and balance competing project objectives. Further, Section 15021(d) states: “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 a lead agency determines the benefits of a proposed project outweigh any significant unavoidable environmental effects, the lead agency is required to adopt a statement of overriding considerations stating the reasons supporting their action notwithstanding a project’s significant environmental effects. Once a PEIR (or in this instance the Recirculated



PEIR) is approved, a Notice of Determination is posted with the County Clerk and State Clearinghouse.

Other public agencies (i.e., Responsible and Trustee Agencies) that may use this Recirculated PEIR in their decision-making or permit processing, will consider the information in this Recirculated 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 Master Plan that cannot be mitigated to below a level of significance.

2.4.1 Area of Controversy

During the Initial Study public review comment period, a concern was raised by the Augustine Tribe as to how CVWD determined the location of the Facilities, especially Lines L01 and L01-01, and the specific criteria that will be used for the open channel facilities in the Oasis/Valley Floor area of the Master Plan Area.

The siting of the Facilities identified in this Recirculated PEIR is conceptual at this time. As discussed in Section 3, Project Description, the Master Plan is intended to be used as long-term planning guide for locating and sizing regional stormwater and valley floor drainage facilities; however, the final location and type of Facility may change as more detailed information becomes available during the final design process including changes to the built environment at that time as well. Nonetheless, the Master Plan's conceptual design identified in this Recirculated PEIR has been designed such to contain the 100-year return period flood flows, in conjunction with ultimate street improvements, and to alleviate the primary sources of flooding within the Master Plan Area in the most economical way (i.e., considering environmental constraints, right-of-way acquisition, construction and maintenance costs, and generally following historic and natural drainage patterns in the Master Plan Area). Thus, when the Master Plan is fully implemented, the existing FEMA-designated Special Flood Hazard Areas within the boundaries of the Master Plan Area will be eliminated. These Master Plan objectives are similarly applicable to the current design of Lines L01 and L01-01.

Lines L01 and L01-01 are designed to capture and convey flood flows eastward to the Coachella Valley Stormwater Channel (CVSC) where flows will ultimately be conveyed to the Salton Sea. These lines, currently proposed to be open channels, run generally adjacent to right-of-way before traversing the Thermal Airport property and connecting with the CVSC via Avenue 58. The design takes into consideration water surface control elevations, hydraulic conditions, and historic hydrological data for the area as well as economic efficiency.

The reference to the "specific criteria" listed in the Initial Study for open channel facilities proposed in the Mecca/North Shore area is actually a list identifying open channels with a proposed above-grade structure achieving heights greater than five feet above grade, all of which happen to be in the Mecca/North Shore area. The list should not be understood as specific criteria, but a notable design disclosure that accounts for the topography and



hydraulics of conveying the stormwater adequately for these certain segments of lines within that area. Moreover, only a few of the proposed lines in the Mecca/North Shore area are proposed with portions that achieve above-grade heights greater than five feet, and the remainder of the lines will consist of open channel above-grade heights between approximately 1 to 3 feet. The open channel facilities proposed for the Oasis/Valley Floor area also will consist of open channel above-grade heights between approximately 1 to 3 feet.

2.4.2 Less Than Significant Environmental Effects

CEQA requires consideration and discussion of significant environmental effects. Sections 15126–15126.2(a) of the *CEQA Guidelines* state: “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 the significant effects created by the project onto the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence.

Pursuant to CEQA Guideline 15143, environmental factors determined in the Initial Study as less than significant and unlikely to occur need not be discussed further in the Recirculated Draft PEIR unless information inconsistent with the finding in the Initial Study is subsequently received by the Lead Agency (State *CEQA Guidelines* §15143). Therefore, the following impact areas are not be further analyzed in the Recirculated PEIR or PEIR because, as analyzed in the Initial Study and noticed in the NOP, the Project would not result in significant impacts to the following list of resource topics:

- *Aesthetics*
- *Geology/Soils*
- *Hazards & Hazardous Materials*
- *Land Use*
- *Mineral Resources*
- *Population/Housing*
- *Public Services*
- *Recreation*
- *Transportation/Traffic*
- *Utilities/Service Systems*

2.4.3 Environmental Assessment

Section 5 of the Recirculated Draft PEIR addresses environmental effects that were determined to be potentially significant during initial project scoping with the circulation of the NOP, and as analyzed in the Initial Study (Appendix A). Each potential effect is organized into a resource area. The Recirculated Draft PEIR analyzes the following list of resource topics:

- Agriculture and Forestry Resources (Section 5.1)
- Air Quality and Greenhouse Gas Emissions (Section 5.2)



- Biological Resources (Section 5.3)
- Cultural Resources (Section 5.4)
- Hydrology and Water Quality (Section 5.5)
- Noise (Section 5.6)

2.5 Format of the Recirculated Draft PEIR

This Recirculated Draft PEIR is organized in several sections as follows:²

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 Recirculated 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 Recirculated Draft PEIR, identifies the Project applicant and Lead Agency, provides a brief summary of the CEQA process to date, summarizes and identifies the documents incorporated by reference in the Recirculated 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 revisions to the 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 Recirculated Draft PEIR.

Section 4 – Environmental Effects Found Not to be Significant identifies those environmental effects found not to be significant during preparation of the Initial Study. This section also identifies the agencies and other interested parties that provided comments in response to the NOP, summarizes the comments provided, and identifies the location in the Recirculated Draft PEIR in which the comments are addressed.

Section 5 – Environmental Assessment satisfies the requirements of Sections 15125, 15126, 15126.2, and 15126.4 of the *CEQA Guidelines* by including an analysis of each environmental

² Not all of the sections from the Draft PEIR are part of the Recirculated Draft PEIR.

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, the sub-section includes a discussion of:

- *Environmental setting to which each issue area is analyzed [physical baseline];*
- *Regulations affecting the proposed Project;*
- *Significance threshold criteria;*
- *Assessment of the proposed Project's environmental impacts,*
- *Mitigation measures to reduce or lessen potential impacts, where applicable;*
- *Residual Project impacts after implementation of mitigation measures;*
- *Cumulative impacts; and*
- *References.*

Section 6 – Other CEQA Topics satisfies the requirements of Sections 15126(b-d) of the State *CEQA Guidelines*, and includes a discussion of the Project's unavoidable adverse impacts and growth-inducing impacts.

Section 7 – Alternatives to the Proposed Project satisfies the requirements of Section 15126.6 of the *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 by identifying the environmentally superior alternative. This section also includes a brief description of alternatives that were considered and rejected.

Section 8 – References and Persons Consulted includes a list of all reference materials, the organizations and persons contacted in preparing the Draft Recirculated PEIR, and a list of preparers as required by Section 15129 of the *CEQA Guidelines*.

2.6 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 Recirculated Draft PEIR and the 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, CVWD, Riverside County Planning Department, Imperial County Planning and Development Services, or City of Coachella Development Services Department. 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



Recirculated Draft PEIR, and are also included in the CD-ROM attached to the front cover of hard copy versions of the Recirculated Draft PEIR.

2.6.1 Riverside County General Plan

Riverside County (County) adopted General Plan Amendment (GPA) No. 960 (2015) on December 8, 2015. Although GPA No. 960 is currently the subject of active litigation, it is the current Riverside County General Plan and is hereinafter referred to as the “2015 RCGP”. The 2015 RCGP is the first general plan review cycle since the County adopted a general plan in 2003 (the 2003 RCGP) as part of the larger Riverside County Integrated Project. 2015 RCGP was developed to ensure that the 2003 RCGP remains a useful blueprint for Riverside County’s growth. As the currently adopted County General Plan, 2015 RCGP describes the future growth and development within Riverside County over the long term. It acts as a constitution for both public and private development, the foundation upon which decision-makers make growth and land-use related decisions. Both the 2015 RCGP and 2003 RCGP express the community’s goals with respect to both human-made and natural environments and sets forth the policies and implementation measures to achieve them for the welfare of those who live, work, and do business in Riverside County. The 2015 RCGP includes the following elements: Land Use, Circulation, Multipurpose Open Space, Safety, Noise, Housing, Air Quality, Healthy Communities, and Administration.

While the 2015 RCGP covers the entire unincorporated portion of Riverside County, it is augmented by 19 more detailed area plans covering Riverside County’s territory with the exception of the undeveloped desert areas and the March Air Joint Reserve Base (2015 RCGP, p. I-2). Whereas the purpose of the 2015 RCGP is to manage the overall pattern of development more effectively, the area plans provide a clear and more focused opportunity to enhance community identity within Riverside County and stimulate quality of life at the community level (2015 RCGP, pp. I-2–1-3).

The Project is located entirely within the Eastern Coachella Valley Area Plan (2015 ECVAP), which is also incorporated by reference as discussed below. The 2015 ECVAP encompasses nearly 670 square miles within the southeast portion of the Coachella Valley, south and east of the City of Indio, and east of the City of La Quinta and the Santa Rosa Mountains, stretching to the Imperial County line on the south. The ECVAP boundary extends east of the All-American Canal and includes Chiriaco Summit and the southeast edge of the ECVAP is bounded by the Chocolate Mountain Naval Reservation Aerial Gunnery Range. The Torres Martinez Desert Cahuilla Indians Reservation occupies significant portions of the southwestern ECVAP. This reservation is designated in a checkerboard pattern extending south from 62nd Avenue to through to the Riverside County border and into Imperial County. The ECVAP includes policies that cover land use, policy areas, circulation, multipurpose open space, and hazards specific to the planning area (2015 ECVAP, p. 6).



2.6.2 Imperial County General Plan

The *Imperial County General Plan* (ICGP) is the blueprint for Imperial County and describes the future growth and development with that county over the long term. The ICGP is intended to guide the decision-makers on land-use related decisions in Imperial County. The ICGP was adopted in 1993 and contains 10 elements: Land Use, Housing, Circulation and Scenic Highways, Noise, Seismic and Public Safety, Agricultural, Conservation and Open Space, Geothermal/Alternative Energy and Transmission, Water, and Parks and Recreation. Certain of these elements have been revised/updated subsequent to their 1993 adoption including the Agricultural Element (adopted in 1996), Circulation and Scenic Highways Element (adopted in 2008), Geothermal/Alternative Energy and Transmission Element (adopted in 2006), Housing Element (adopted in 2013), Land Use Element (adopted in 2008), Noise Element (adopted in 1996), and Parks and Recreation Element (adopted in 2008) (ICGP).

The comprehensive ICGP was developed following a thorough examination of Imperial County's physical and cultural resources, socio-economic conditions, and business climate. It provides a balance of land use policies and programs which seek to maintain the quality of life in the region. The ICGP is also a dynamic document in that it can and should be amended as needed to respond to changing community and regional goals, physical and public infrastructure resources, and social concerns. The ICGP provides mechanisms to achieve desired community goals and objectives through a coordinated implementation program (ICGP).

2.6.3 City of Coachella General Plan

The *City of Coachella General Plan Update 2035* (CGP) was adopted on April 22, 2015. The CGP contains goals and policies that serve as the planning framework for the City of Coachella in addition to providing direction for operations and programs, and serves as a guide to public and private decision making. The CGP includes the following elements: Land Use & Community Character, Mobility, Community Health & Wellness, Sustainability & the Natural Environment, Safety, Infrastructure & Public Services, Noise, and Housing (CGP, p. 1-7). The planning area boundary of the CGP includes the 29 square miles of Coachella's incorporated limits and 23 square miles of Coachella's Sphere of Influence (CGP, p. 1-3).

2.6.4 City of Coachella Municipal Code

The City of Coachella Municipal Code complements the CGP. The Coachella Municipal Code contains, among other ordinances, the Comprehensive Zoning Ordinance of the City of Coachella, which is a mechanism to implement and enforce the goals, objectives, policies, and programs articulated in the CGP. Many of the potential environmental concerns considered in this Recirculated Draft PEIR are adequately addressed through application of regulations contained in the Coachella Municipal Code.

2.6.5 City of La Quinta General Plan

The *2035 La Quinta General Plan (2035 LQGP)* was adopted on February 19, 2013 and amended on November 19, 2016. The 2035 LQGP supports, encourages, and upholds individual rights and freedoms, and the protection of private property rights and is designed with the intent of improving the quality of life in La Quinta. The LQGP includes all the required elements organized into four chapters, Community Development (includes the Land Use; Circulation; Livable Community; Economic Development; Parks, Recreation and Trails; and Housing elements), Natural Resources (includes the Air Quality, Energy and Mineral Resources, Biological Resources, Water Resources, and Open Space and Conservation elements), Environmental Hazards (includes the Noise, Soils and Geology, Flooding and Hydrology, and Hazardous Materials element), and Public Infrastructure & Services (includes the Emergency Services; Water, Sewer & Other Utilities, and Public Facilities elements.) (2035 LQGP, pp. 1-4-1-5.)

2.6.6 City of La Quinta Municipal Code

The City of La Quinta Municipal Code (LQMC) provides a scheme of organization for the grouping of ordinances that the La Quinta City Council has found desirable and in the public interest. (LQMC, Section 1.01.001.) The LQMC addresses drainage in Title 8 Buildings and Construction, Title 9 Zoning, Title 11 Peace, Morals and Safety, Title 13 Subdivision Regulations, and Title 14 Streets and Sidewalks. The drainage provisions in the LQMC are intended to make sure that grading and development within La Quinta occurs in such a manner that adequate drainage is provided to protect life and property within the city.

2.7 Project Technical Studies and Supporting Analyses

The analysis contained in the Initial Study and Recirculated Draft PEIR is supported by the following Project-specific technical studies as discussed in below in section 2.7.1 through 2.7.4.

2.7.1 Initial Study, NOP and NOP Comment Letters

The Initial Study, along with the NOP and comment letters received in response to the NOP, are included in Appendix A of this Recirculated Draft PEIR. Based on the Initial Study and responses to the NOP, the Recirculated Draft PEIR focuses on the topics identified in Section 2.5.2, above.

2.7.2 Air Quality/Greenhouse Gas Analysis

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/Greenhouse Gas Analysis for the Eastern Coachella Valley Stormwater Master Plan* (Albert A. WEBB Associates, January 16, 2015). This document is included as Appendix B to the Recirculated Draft PEIR.



2.7.3 Historical/Archeological Resources Analysis

The *Class I Cultural Resources Inventory of the Salton Sea Region* (Tetra Tech, August 2002) presents the results of an inventory of cultural resources for the Coachella Valley and used for the cultural resources section. This document is included as Appendix C.1 to the Recirculated Draft PEIR.

2.7.4 Paleontological Resources Analysis

Potential paleontological impacts of the Project's construction and operation are presented in *Paleontological Resource Assessment for the Master Drainage Plan and Programmatic Environmental Impact Report for the Coachella Valley Water District for the Region I-Oasis Area and Region II-Mecca/North Shore, Riverside and Imperial Counties, California* (Applied Earthworks, November 2014). This document is included as Appendix C.2 to the Recirculated Draft PEIR.

2.8 References

The following references were used in the preparation of this section of the Recirculated Draft PEIR:

- | | |
|--------------------------|---|
| 2003
RCGP | Riverside County, <i>General Plan</i> , adopted October 2003 and as amended through December 9, 2014. (Available at http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx , accessed December 15, 2014.) |
| 2003
RCGP EIR | Riverside County, <i>General Plan Final Program Environmental Impact Report, Volume 1</i> , certified October 2003. (Available at http://planning.rctlma.org/Portals/0/genplan/content/eir/volume1.html , accessed January 23, 2015.) |
| 2015
ECVAP | Riverside County, <i>Eastern Coachella Valley Area Plan</i> , adopted December 8, 2015. (Available at http://planning.rctlma.org/Portals/0/genplan/general_plan_2016/area_plans/ECVAP_120815m.pdf?ver=2016-04-01-100905-193 , accessed September 15, 2016.) |
| 2015
RCGP | Riverside County, <i>Riverside County General Plan</i> , December 8, 2015. (Available at http://planning.rctlma.org/Portals/0/genplan/general_plan_2016/elements/C_h01_Intro_120815.pdf?ver=2016-04-01-100743-193 , accessed September 15, 2016.) |
| 2035
LQGP | City of La Quinta, <i>2035 La Quinta General Plan</i>, November 19, 2013. (Available at City of La Quinta Community Development Department Planning Division, 78 495 Calle Tampico, La Quinta, CA 92253.) |



- CGP City of Coachella, *General Plan 2035*, adopted April 22, 2015. (Available at <http://www.coachella.org/Home/ShowDocument?id=3221>, accessed September 11, 2015.)
- CGPU EIR City of Coachella, *General Plan Update Public Draft EIR*, July 2014. (Available at <http://cityofcoachellageneralplanupdate.weebly.com/final-eir.html>, accessed September 11, 2015.)
- CVMSHCP Coachella Valley Association of Governments. *Final Recirculated Coachella Valley Multiple Species Habitat Conservation Plan*. September 2007. (Available at <http://www.cvmshcp.org/>).
- CVMSHCP EIR/EIS Coachella Valley Association of Governments. *Final Recirculated Coachella Valley Multiple Species Habitat Conservation Plan Environmental Impact Report/Statement*. September 2007. (Available at <http://www.cvmshcp.org/>).
- ICGP Imperial County Planning & Development Services, General Plan 1993 and as amended. (Available at: <http://www.icpds.com/?pid=571>, accessed September 15, 2016.)
- ~~LQMG City of La Quinta, La Quinta Municipal Code, current through June 2016. (Available at <http://qcode.us/codes/laquinta/>, accessed September 15, 2016.)~~
- TPEIR Impact Sciences, Inc., *Travertine Point Revised Draft EIR*. May 2011. (Available at County of Imperial, Planning & Development Services, 801 Main St., El Centro, CA 92243.)

Section 3 – Project Description

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example text.)

The Eastern Coachella Valley Stormwater Master Plan Project (Master Plan) is designed as a long-term, comprehensive stormwater master plan that identifies conceptual locations, alignments, and sizes for primary stormwater facilities within the ~~167~~ approximately 153 square mile Study Area (~~107,471.4~~ 97,182 acres). The Master Plan is intended to be used as a long-term planning guide for locating and sizing regional stormwater and drainage facilities (Facilities). It is anticipated these Facilities will be constructed by CVWD and/or others over time as continued urban development takes place within the area. The Master Plan has been designed to be inherently flexible to allow CVWD to respond to changed physical, environmental, regulatory, and economic conditions.

The Master Plan is comprised of two regional plans: the Oasis/Valley Floor Stormwater Master Plan (Oasis/Valley Floor SMP) and the Mecca/North Shore Area Stormwater Master Plan (Mecca/North Shore SMP). These two areas are physically separated by the Coachella Valley Stormwater Channel (CVSC); with the Oasis/Valley Floor SMP encompassing the areas west of the CVSC and the Mecca/North Shore SMP encompassing the areas east of the CVSC.¹ The Master Plan includes modifications to the CVSC.

The Federal Emergency Management agency (FEMA) has certain design standards for flood control structures. CVWD has design standards that can be more stringent than FEMA. When implemented, the Master Plan would provide flood protection to meet FEMA and/or CVWD standards. The Master Plan is designed to address several existing flood hazards in the Oasis/Valley Floor Region and the Mecca/North Shore Region including: the flash floods that come from the Santa Rosa Mountains from nine canyons between Avenue 62 and the Riverside/Imperial County Line; numerous unimproved open channels with limited capacities; and unstable/unlined channel banks of the CVSC that would have major overbank flows during 100-year (and greater) flooding events. The Master Plan was developed with the anticipation that future Master Plan Facilities would be designed with the applicable FEMA and/or CVWD design standards at the time of implementation.

There are existing CVWD facilities which do not meet FEMA's 100-Year design standard or CVWD's design standard per Ordinance 1234.1 within the Master Plan area. An example facility is the CVSC which is currently under a physical map revision (PMR) by FEMA for the portion from Monroe Drop Structure to the Salton Sea. The portion of the CVSC PMR included in the Master Plan has a reach that does not provide the minimum FEMA design standard for protection to life and property to adjacent areas during the 100-year flood. Due to this existing

¹ CVSC is an engineered extension of the Whitewater River Stormwater Channel (WRSC), which serves agricultural irrigation return water and conveys treated wastewater and urban and stormwater runoff.



deficiency, CVWD's primary objective for future projects will be to increase capacity of the CVSC to meet at a minimum FEMA's design standard for the 100-year flood. Improvements required to meet the CVWD design standards per CVWD Ordinance 1234.1 include additional infrastructure modifications that may not be feasible in the near future due to cost and longer time needed for implementation. These infrastructure modifications include: the replacement of bridges at Airport Boulevard, Avenue 62, and Avenue 66 over the CVSC; widening two Union Pacific Railroad (UPRR) bridges to the north of Highway 111; and acquisition of required right-of-way to build the project.

3.1 Project Location

The Master Plan Area is generally located in the eastern portion of the Coachella Valley in unincorporated Riverside County² (**Figure 3-1—Vicinity Map** and **Figure 3-2 – Eastern Coachella Valley Stormwater Master Plan Area**) and includes the communities of Mecca, North Shore, Thermal, Oasis, and Vista Santa Rosa in addition to portions of the cities of La Quinta and Coachella. The Master Plan Area is bounded on the north by Avenue 52, on the west by the Santa Rosa Mountains, on the east by the East Side Dike, and on the south by the Salton Sea and Travertine Palms area just south of the Riverside County border within northwestern Imperial County. While no Facilities are proposed to be located in the City of La Quinta, a portion of the Master Plan Area is within that city.

The Master Plan Area is generally located in the eastern portion of the Coachella Valley in unincorporated Riverside County² (**Figure 3-1 Vicinity Map** and **Figure 3-2 – Eastern Coachella Valley Stormwater Master Plan Area**) and includes the communities of Mecca, North Shore, Thermal, Oasis, and Vista Santa Rosa in addition to a portion of the city of Coachella.

The Master Plan Area is bounded on the north by Wasteway No. 2 Channel, and the cities of Coachella and Indio, on the west by the city of La Quinta, CVWD's Dike No. 4, and the Santa Rosa and San Jacinto Mountains Conservation Area,³ on the east by the East Side Dike, and on the south by the Salton Sea and Travertine Palms area just south of the Riverside County border within northwestern Imperial County.

The Eastern Coachella Valley Stormwater Master Plan Recirculated Draft PEIR is being recirculated to inform the public regarding the following changes:

1. Revisions to the boundaries of the Master Plan as shown on **Figure 2.1 – Proposed Boundary Changes** and described below:
 - a. removal of territory within the city of La Quinta, in which no Facilities are proposed;

² A small portion of the Master Plan Area near Travertine Point Channel No. 1 is located in Imperial County.

³ There are three locations along the westerly boundary where the Master Plan boundary extends into the Santa Rosa and Santa Jacinto Mountains Conservation Area to take in the area associated with training levees and channels.



- b. removal of territory within the city of Coachella west of the Coachella Valley Stormwater Channel, in which no facilities are proposed;
- c. addition of the unincorporated territory between the cities of Coachella and La Quinta north of Avenue 52;
- d. revision of the western boundary of the Master Plan to conform to the boundary of the Coachella Valley Multiple Species Habitat Conservation Plan Santa Rosa and San Jacinto Mountains Conservation Area, except in the locations in which the conceptual alignment of proposed Facilities extend into the conservation area.

The Master Plan Area encompasses approximately ~~167~~ 153 square miles⁴ within all or a portion of:

- Sections ~~8 through 17~~ 11 through 14, ~~21 through 28~~ 23 through 26 and ~~34~~ 35 through 36, Township 6 South, Range 7 East;
- Sections ~~8~~ 9 through 36, Township 6 South, Range 8 East;
- Sections ~~18, 19~~, 20 and ~~29~~ 28 through ~~33~~ 34, Township 6 South, Range 9 East;
- Sections 1 through 3, 11 through ~~13~~ 15, ~~22 through 24~~, Township 7 South, Range 7 East;
- Sections 1 through 36, Township 7 South, Range 8 East;
- Sections 2 through 36, Township 7 South, Range 9 East;
- Sections ~~15~~ 16 through 23 and 26 through 36, Township 7 South, Range 10 East;
- Sections ~~31 through 35~~, Township 7 South, Range 11 East;
- Sections 1 through 4, ~~6~~, 9 through 15, ~~22~~ 23 through 25 27, and ~~35 through 36~~, Township 8 South, Range 8 East;
- Sections 4 through 7 ~~8~~, ~~19~~ 17 through 21 and ~~28~~ 27 through 34, Township 8 South, Range 9 East;
- Sections ~~1, 2, 3~~ and ~~11 through 13~~, Township 8 South, Range 10 East;
- Sections 5 and 6, Township 9 South, Range 9 East ~~1 through 29 and 33 through 36, Township 8 South, Range 11 East;~~ and
- Sections ~~6 through 8, 17 through 20 and 29 through 32, Township 8 South, Range 12 East, San Bernardino Base and Meridian.~~
- Section 24, Township 7 South, Range 7 East:
- Sections 22, 27 and 36, Township 8 South, Range 8 East, San Bernardino Base and Meridian.

⁴ The OASMP encompasses ~~104~~ 92.5 square miles and the MASMP encompasses ~~103~~ 60.3 square miles.



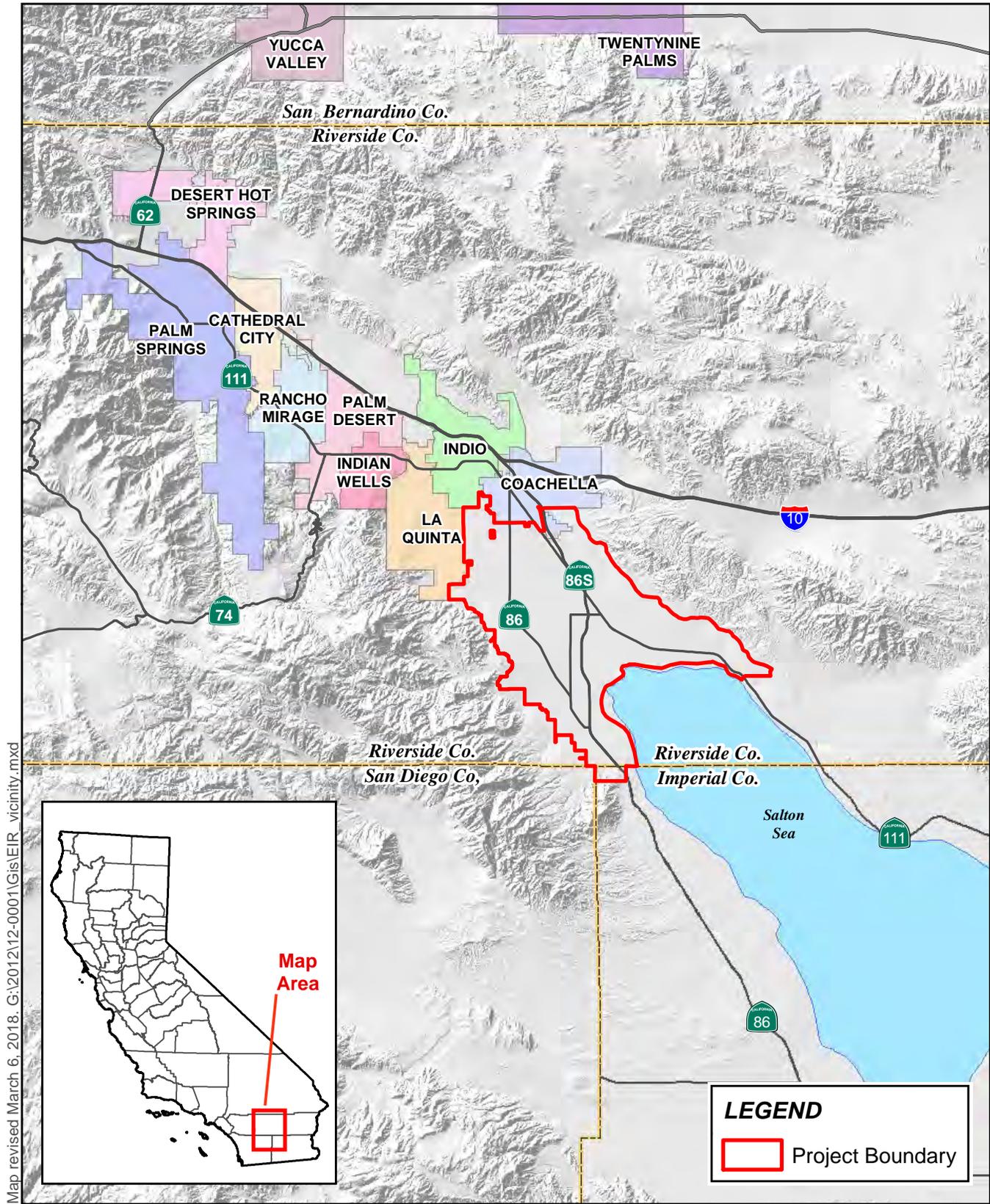
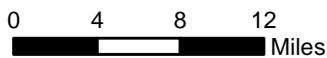


Figure 3-1 - Vicinity Map
 Eastern Coachella Valley Stormwater Master Plan



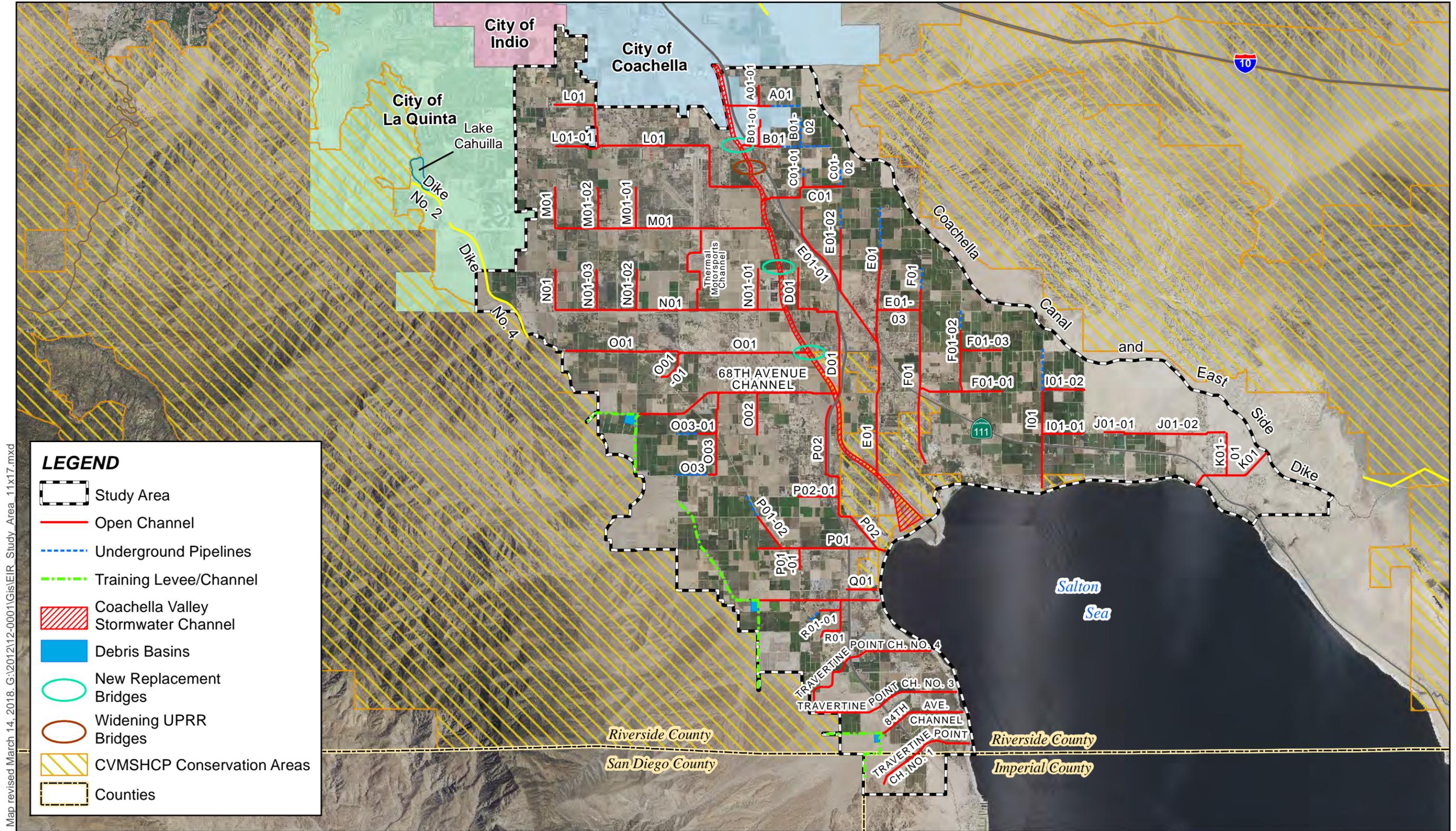


Figure 3-2 - Eastern Coachella Valley Stormwater Master Plan Area
 Eastern Coachella Valley Stormwater Master Plan

0 2 4 6 Miles



3.2 Background

As a long-term, comprehensive planning document, the Master Plan addresses the current and future drainage needs of the Master Plan area. The boundary of the Master Plan follows regional watershed limits divided by the CVSC. The proposed stormwater and drainage facilities include channels, storm drains, levees, basins, dams, and other facilities capable of feasibly capturing stormwater and relieving flooding problems within the Master Plan area. The Master Plan includes an estimate of Facility capacity, sizes, and costs.

The Master Plan was prepared to:

- 1) *Identify solutions to existing flood hazards (riverine, alluvial fan and valley floor drainage) and opportunities to include economically feasible stormwater capture and low impact development;*
- 2) *Provide a guide for the long term scheduling of the regional and valley floor stormwater facilities;*
- 3) *Provide a guide for locating and sizing local drainage facilities that would be constructed by developers and others within the Master Plan Area; and*
- 4) *Provide an estimate of costs to resolve flooding issues within the Master Plan Area.*

3.3 Master Plan Components

Environmental analysis of a stormwater master plan is more complex than the typical project because master plans have a variety of purposes that are implemented over time; in fact, some parts of the Master 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 Master Plan build-out, a Program Environmental Impact Report (PEIR) was determined to be the appropriate CEQA document to evaluate the Master Plan. The proposed Master Plan identifies conceptual locations for the future installation of stormwater and drainage Facilities in response to the existing and planned land use within the Master Plan Area.

The Recirculated Draft PEIR for the Master Plan evaluates the “reasonably foreseeable impacts” of three separate components. Each of these three components are discussed below in sections 3.3.1 through 3.3.3.

- *Administration of the Master Plan*
- *Construction of Master Plan Facilities [including right-of-way acquisition, if needed]*
- *Operations and Maintenance of the Facilities*

3.3.1 Administration of the Master Plan

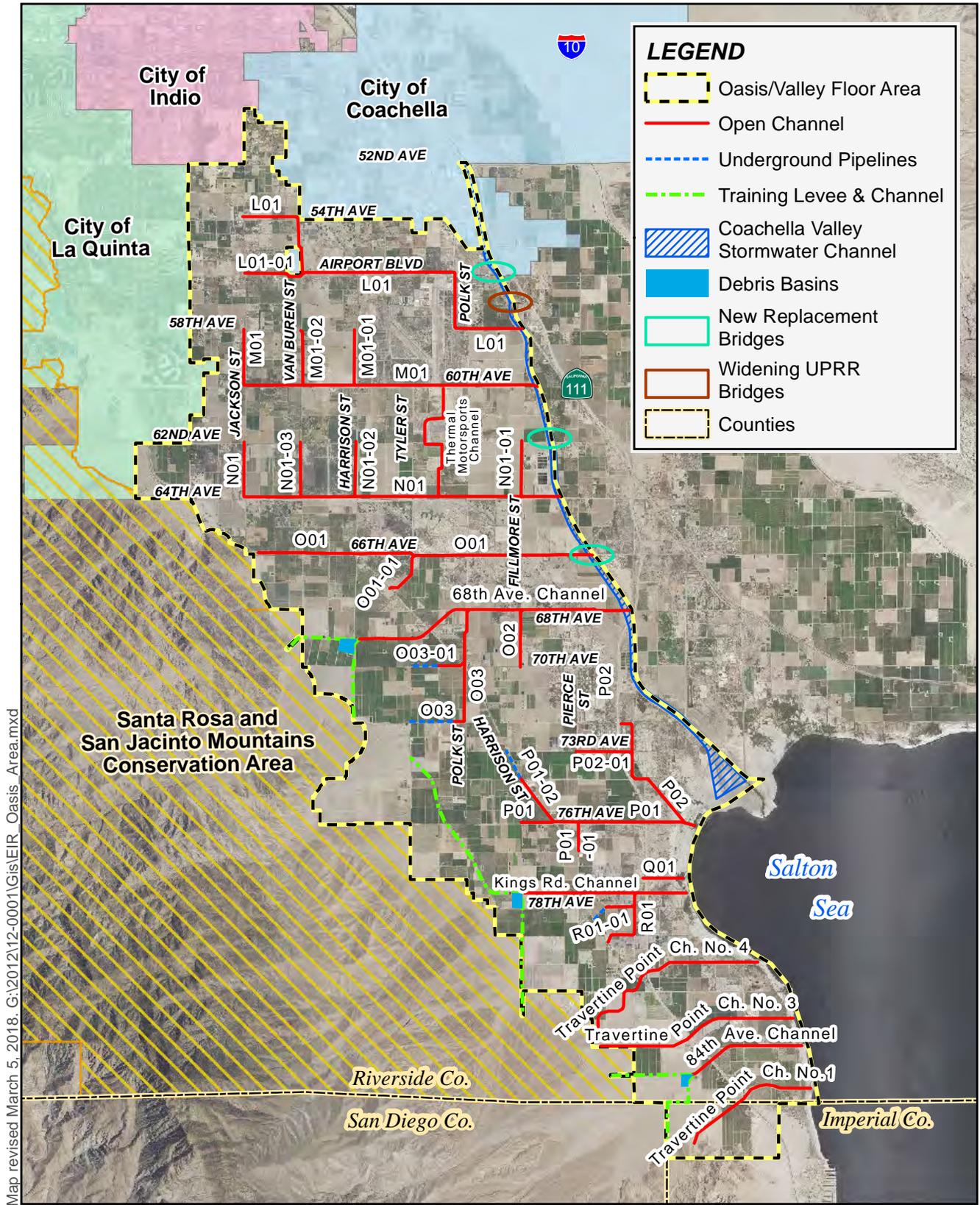
The first component of the Master Plan analyzed in this Recirculated Draft PEIR is the reasonably foreseeable impacts resulting from preparation and, ultimately, the adoption of the Master Plan as a long-range planning document. The Master Plan would be a guide for the

alignment, type, size, and cost estimate of major proposed Facilities within the Master Plan Area to address the current and future drainage needs of the Eastern Coachella Valley.

The Master Plan would be relied upon by CVWD, Riverside County, and the City of Coachella as these agencies review and approve development in the Master Plan Area. New development and property owners within the area may be required to construct Facilities, set aside rights-of-way for future Facilities, or participate in the financing of a portion of these Facilities. CVWD, Riverside County, and the City of Coachella may also use the Master Plan to identify Facilities and cost estimates for inclusion in capital improvement programs. Finally, CVWD, Riverside County, the City of Coachella, other agencies, and developers may use the Master Plan for long-range planning of other public infrastructure projects such as roads or utility pipelines.

3.3.2 Construction of Master Plan Facilities

The second component of the Project analyzed in this Recirculated Draft PEIR is the reasonably foreseeable impacts resulting from the acquisition of rights-of-way and construction of Facilities. The Master Plan identifies the approximate location, size, and type of Facilities needed to manage flood hazards and provide an opportunity for stormwater capture within the Master Plan Area. The Master Plan proposes the construction of over 100 miles of storm drains and channels, approximately 99 acres of debris basins, 11.25 miles of training levees, and modifications to the existing CVSC as shown on **Figure 3-3 – Oasis/Valley Floor Region** and **Figure 3-4 – Mecca/North Shore Area Region**.



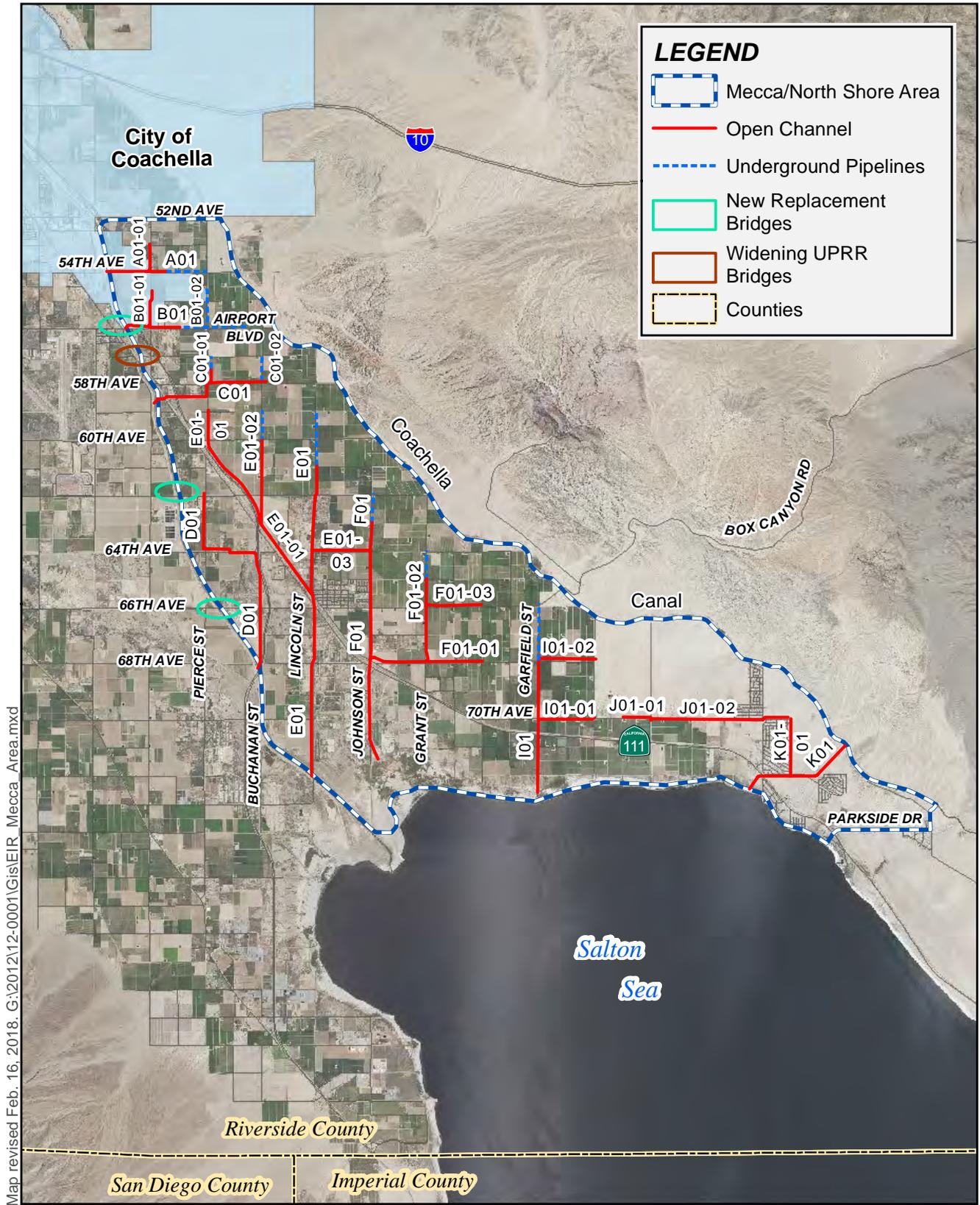
Map revised March 5, 2018. G:\2012\12-0001\GIS\EIR_Oasis_Area.mxd

Sources: Riverside Co. GIS, 2018; CVMSHCP, 2015; USDA NAIP, 2016.

Figure 3-3 - Oasis/Valley Floor Area
Eastern Coachella Valley Stormwater Master Plan

0 1 2 3 4 Miles





Map revised Feb. 16, 2018. G:\2012\12-0001\GIS\EIR_Mecca_Area.mxd

Sources: Riverside Co. GIS, 2018; USDA NAIP, 2016.

Figure 3-4 - Mecca/North Shore Area
Eastern Coachella Valley Stormwater Master Plan

The locations and types of Facilities depicted in the Master Plan 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 location or change in facility type. To add to that uncertainty, the construction of the Facilities would be completed in discrete phases over a number of decades, which is a challenge for long-term planning.

Despite this future environment of uncertainty and potential Facility variations, the Recirculated 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 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 Recirculated Draft PEIR include, but are not limited to:

- basin/channel excavation
- channel/storm drain installation
- levee construction
- asphalt replacement

Construction would typically entail the use of heavy equipment such as backhoes, excavators, dozers, scrapers, water trucks, wheeled loaders, and dump trucks. The Facilities are described in either the Oasis/Valley Floor SMP or the Mecca/North Shore SMP, depending on which side of the CVSC they are located. The Oasis/Valley Floor SMP and Mecca/North Shore SMP are included as Appendix D to this Recirculated Draft PEIR.

Proposed Oasis/Valley Floor SMP Facilities

The Oasis/Valley Floor SMP proposes the following drainage systems listed below, and as shown on **Figure 3-3 – Oasis/Valley Floor Region**.⁵

- Line L Stormwater System (Drains to the CVSC)
 - Jackson Street/Avenue 54 area (Mainline) - 6.9 miles
 - Jackson Street/Avenue 56 area (Lateral) - 1.1 miles
- Line M Stormwater System (Drains to the CVSC)
 - Avenue 58/Jackson Street area (Mainline) - 6.3 miles
 - Avenue 58/Harrison Street area (Lateral 1) - 1.0 mile
 - Avenue 58/Van Buren Street area (Lateral 2) - 1.0 mile
- Line N Stormwater System (Drains to the CVSC)
 - Avenue 62/Jackson Street area (Mainline) - 6.7 miles

⁵ Described on pages 1-6-1-8 of the Oasis/Valley Floor SMP, which is included as Appendix D to this Draft PEIR.



- Avenue 62/Fillmore Street area (Lateral 1) - 1.0 mile
- Avenue 62/Harrison Street area (Lateral 2) - 1.0 mile
- Avenue 62/Van Buren Street area (Lateral 3) - 1.0 mile

- Line 01 Stormwater System (Drains to the CVSC)
 - Jackson Street/Avenue 66 area (Mainline) – 6.2 miles
 - Harrison Street/Avenue 66 area (Lateral) - 0.9 miles

- 68th Avenue Stormwater System (Drains to the CVSC)
 - Training Levees - 2.5 miles
 - Concrete Trapezoidal Channel- 6.0 miles

- Line 02 Stormwater System (Drains to the 68th Ave Stormwater System)
 - Avenue 70/Fillmore Street area (Mainline) – 1.1 miles

- Line 03 Stormwater System (Drains to the 68th Ave Stormwater System)
 - Tyler Street/Polk Street area (Mainline) – 3.0 miles
 - Tyler Street/Harrison Street area (Lateral) - 1.0 mile

- Line P Stormwater System (Drains directly into the Salton Sea)
 - Fillmore Street/Highway 86 area (Mainline 1) – 3.1 miles
 - Avenue 77/Pierce Street area (Lateral 1) - 0.5 miles
 - Avenue 73/Harrison Street area (Lateral 2) - 1.6 miles
 - Avenue 70/Buchanan Street area (Mainline 2) – 4.3 miles
 - Pierce Street/Avenue 73 area (Lateral 1) - 1.0 mile

- Line Q Stormwater System (Drains directly into the Salton Sea)
 - Highway 86/Salton Sea area (Mainline 1) – 0.72 miles

- King’s Road Stormwater System (Drains directly into the Salton Sea)
 - Training Levees - 6.3 miles
 - Concrete Trapezoidal Channel - 3.0 miles

- Line R Stormwater System (Drains to Kings Road System)
 - Harrison Street/Kings Road Channel area (Mainline) – 1.3 miles
 - Harrison Street area (Lateral) - 0.84 miles



- 84th Avenue Stormwater System (Drains directly into the Salton Sea)
 - Training Levees - 2.5 miles
 - Concrete Trapezoidal Channel - 2.3 miles

- Travertine Point Stormwater System (Drains directly into the Salton Sea)
 - Channel 1 - 2.6 miles
 - Channel 3 - 3.6 miles
 - Channel 4 - 3.7 miles

Proposed Mecca/North Shore SMP Facilities

The Mecca/North Shore SMP proposes the following drainage systems as listed below and shown on **Figure 3-4 – Mecca/North Shore Region.**⁶

- Line A Stormwater System (Drains to the CVSC)
 - Pierce Street/Avenue 54 area (Mainline) – 1.8 miles
 - Fillmore Street/Avenue 54 area (Lateral) - 0.5 miles

- Line B Stormwater System (Drains to the CVSC)
 - Buchanan Street/Highway 86 area (Mainline) – 2.2 miles
 - Avenue 55/Fillmore Street area (Lateral 1) - 0.7 miles
 - Avenue 55/Pierce Street area (Lateral 2) - 0.7 miles

- Line C Stormwater System (Drains to the CVSC)
 - Buchanan Street/Highway 111 area (Mainline) – 2.2 miles
 - Pierce Street/Avenue 58 area (Lateral 1) - 0.5 miles
 - Avenue 57/Buchanan Street area (Lateral 2) - 0.5 miles

- Line D Stormwater System (Drains to the CVSC)
 - Avenue 62/Avenue 66 area (Mainline) – 4.0 miles

- Line E Stormwater System (Drains to the CVSC)
 - Avenue 59/Lincoln Street Stormwater Channel area (Mainline) – 6.5 miles
 - Avenue 59/Highway 111 area (Lateral 1) - 3.6 miles
 - Avenue 59/Highway 111 area (Lateral 2) - 2.1 miles
 - Johnson Street/Lincoln Street area (Lateral 3) - 1.0 mile

- Line F Stormwater System (Drains directly into the Salton Sea)
 - Avenue 62/Johnson Street Stormwater Channel area (Mainline) – 4.8 miles

⁶ Described on pages 1-6-1-8 of the Mecca/North Shore SMP, which is included as Appendix D to this Draft PEIR.

- Hayes Street/Grant Street area (Lateral 1) - 2.0 miles
- Avenue 64/Grant Street area (Lateral 2) - 2.0 miles
- Hayes Avenue/Avenue 66 area (Lateral 3) - 1.0 mile
- Line I Stormwater System (Drains directly into the Salton Sea)
 - Avenue 66/Salton Sea area (Mainline) – 3.4 miles
 - Arthur Street/Avenue 70 area (Lateral 1) - 1.0 mile
 - Arthur Street/Avenue 68 area (Lateral 2) - 1.0 mile
- Line J Stormwater System (Drains directly to existing Detention Channel No. 1)
 - Detention Channel No. 1 (Cleveland Street)/Avenue 70 area (Lateral 1) - 0.4 miles
 - Vander Veer Road/ Detention Channel No. 1 area (Lateral 2) - 2.5 miles
- Line K Stormwater System (Drains directly into the Salton Sea)
 - Coachella Canal/ Salton Sea area (Mainline) – 2.0 miles
 - Avenue 70/Avenue 72 area (Lateral) - 1.0 mile

Open Channels

The Master Plan proposes channels that are either trapezoidal- or rectangular-shaped and may be either totally earthen, partially-lined with concrete paving of the sides and an earthen bottom, or fully-lined with concrete paving on the sides and bottom. For trapezoidal channels, sides slope upward from the bottom at a variable rate depending on the lining type. The Master Plan's proposed channels have a bottom width ranging from 6 to 425 feet and a depth ranging from 6 to 20 feet. The channels may also include a low berm feature from 1 to 3 feet above grade to account for the topography along the alignment and ensure adequate freeboard (i.e., distance between the water level and top of the facility). Along portions of a few alignments in the Mecca/North Shore area, the open channel would include an above grade structure with heights greater than 5 feet. These lines include the following:

- Line A01, approximately 6 feet above grade where open channel is proposed
- Line A01-01, approximately 6 feet above grade
- Line D01, north from CVSC to Avenue 66, approximately 7 to 9 feet above grade
- Line D01, north from Avenue 66 to Avenue 64, approximately 4 to 6 feet above grade
- Line E01, north from the northern terminus of the proposed underground pipeline for the line to Avenue 68, approximately 6 feet above grade
- Line F01, from the southern starting point of the alignment north to Avenue 70, approximately 12 feet above grade
- Line F01, north from Avenue 70 to State Route 111, approximately 10 feet above grade.

The remainder of the Mecca/North Shore area system would consist of open channel above grade heights between approximately 1 to 3 feet.

Open channel rights-of-way must accommodate the channel footprint plus areas needed for channel maintenance, including access roads and fences. 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 Master Plan as well as local drainage facilities to be built by developers and others. All open channels proposed in the Master Plan are designed to carry the runoff from a 100-year return period storm.

Underground Storm Drains

The underground storm drains proposed by the Master Plan, generally consist of reinforced concrete pipe (RCP), ranging in size from 60 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 would be installed or cast-in-place, which means the concrete for the RCB was mixed and poured into a frame at a project site.

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.

Underground drainage facilities are only proposed in those locations within the Master Plan where open channels are not feasible, either because of topographic constraints or existing development. Where possible, underground storm drains proposed in the Master Plan are located in existing or future street rights-of-way.

Debris Basins

The Master Plan proposes three debris basins in the Oasis/Valley Floor area as part of the 68th Avenue, Kings Road, and 84th Avenue systems to capture sediment and prevent its transport to downstream channels. The reduction of peak flows and debris allows for smaller, less costly facilities downstream of the basins. The proposed debris basins are designed for 100-year sediment inflow, plus 10 percent for a factor of safety. The basins are designed to direct discharge into the flood channel system. Flows exceeding the design capacity of a basin would pass over the emergency spillway in flow patterns approximating current conditions.

During minor flooding events, the three debris basins will also serve to capture stormwater along with debris which may provide opportunities for groundwater replenishment at these sites. The economic feasibility of increasing stormwater capture may require further analysis and/or design modification of the debris basins should replenishment become a requirement or necessity at the time of specific project implementation.

Training Levees

The Master Plan proposes approximately 11.25 miles of training levees. A training levee is a partial levee system that does not tie off to high ground at one or both ends and functions as a raised revetted berm to direct the main flow of stormwater toward the detention basins, which then discharge to the inlet of conveyance channels. A training levee is revetted to prevent erosion during channel migration or avulsion on the fan. The levee is also designed to provide freeboard over the 100-year (base) flood. Diversion of alluvial fans in the Oasis/Valley Floor area would be accomplished primarily with the use of training levees. The location of the training levees along the western boundary of the Master Plan Area near the base of the Santa Rosa Mountains is limited by development constraints. The proposed training levees may consist of above grade structural features achieving heights from approximately 6.4 feet to 13.5 feet with a 15-foot-wide top width to provide an access road. The training levees would be located in the Oasis/Valley Floor area as shown on **Figure 3-3**. Specifically, two training levees are associated with the proposed open channel that directly outlets into the CVSC generally along Avenue 68, two training levees are associated with the proposed open channel that directly outlets into the Salton Sea generally along Kings Road, and two training levees are associated with the proposed open channel that outlets directly into the Salton Sea generally along Avenue 84. The following lists the greatest approximate height associated with each training levee:

- Avenue 68 (west-trending), approximately 12.6 feet
- Avenue 68 (south-trending), approximately 12.6 feet
- Kings Road (north-trending), approximately 12 feet
- Kings Road (south-trending), approximately 13.4 feet
- Avenue 84 (north-trending), approximately 6.5 feet
- Avenue 84 (south-trending), approximately 13.4 feet

It should be noted that these heights also include the minimum 4 feet of freeboard (i.e., distance between the water level and top of the facility).

Coachella Valley Stormwater Channel Improvements

The Master Plan contemplates two alternatives with regard to proposed modifications to the existing CVSC. One alternative proposes lowering the channel bed (which would require removal of existing vegetation) and constructing concrete-lined channel/levee banks extending from (just) north of Avenue 52 south to Airport Boulevard, where the channel transitions to a fully lined concrete section downstream to the existing Thermal Drop Structure.⁷ From the Thermal Drop Structure, the channel would have concrete-lined channel/levee banks extending to downstream of Lincoln Street. The purpose of the concrete section is to improve the

⁷ Drop structures are manmade structures which are intended to control the energy and velocity of flow from higher elevations to lower elevations. Drop structures also serve to oxygenate water and prevent erosion. It should be noted that drop structures are unlike dams in that they are not intended to impound water.



channel conveyance at the existing State Route 111/UPRR crossing to limit the required infrastructure improvements, utility processing, and required right-of-way acquisition. In addition to the channel improvements, a reduction in the height of the existing Thermal Drop Structure, grading of the CVSC from Lincoln Street to upstream of Avenue 52, new replacement bridges along Airport Boulevard, Avenue 62, and Avenue 66 over the CVSC, and widening two UPRR bridges over the CVSC is proposed by the Master Plan.

The second alternative proposes an earthen bottom CVSC with concrete-levee banks, relocation of the Thermal Drop Structure to upstream of the UPRR Bridges, and a new side-weir channel with earthen bottom and concrete-lined slopes. This alternative entails minimal disturbance to the existing CVSC channel bed because storm flows during high volume events would be conveyed by the new side-weir channel.

3.3.3 Facilities Operation and Maintenance

Once a Facility is constructed and the CVSC channel improved as proposed, maintenance is required in order to retain function and flood control capacity. It is expected that CVWD and/or a developer would operate and maintain all of the Facilities. For a developer or private entity to operate and maintain any Facility (or Facilities) a recorded regional stormwater facilities agreement would be required per CVWD Ordinance 1234.1.

CVWD routinely inspects its facilities. 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 would not routinely occur while maintaining the underground storm drains and open concrete channels. To maintain the Facilities, CVWD would occasionally use equipment similar to the types used to construct the proposed Facilities.

The routine maintenance of maintenance roads, levees, 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.

3.3.4 Traffic Control Measures

As a number of Facilities would be within existing roadway rights-of-way, Traffic Control Plans would be prepared and implemented as part of design of the individual Facilities when the construction of the Facility requires temporary closure of a travel lane or road segment. The Traffic Control Plan would require that access and circulation be maintained throughout



construction activities or a detour provided around the construction site. The Traffic Control Plan would be prepared by the party constructing the Facility or Facilities (e.g., CVWD, Riverside County, City of Coachella, and/or private developer) and submitted to the Riverside County Transportation Department or City of Coachella Public Works Department, as appropriate, for approval. The Traffic Control Plan would include the estimated day(s), time(s), and duration of any lane or road segment closure that are anticipated to be required on affected roadways for Facility construction.

The Traffic Control Plan shall include measures such as, but not limited to, signage, flagmen, cones, advance community notice, or other acceptable measures to the satisfaction of the Riverside County Transportation Department or City of Coachella Public Works Department, as appropriate. The purpose of the measures are to safely guide motorists, cyclists, and pedestrians, minimize traffic impacts and ensure the safe and even flow of traffic consistent with the affected jurisdiction's standards and requirements, in the event that construction requires any lane or road segment closures. If the construction activity would affect access to transit lines, such as SunLine Transit Agency buses, the party constructing the Facility would be required to coordinate with the affected transit agency in advance to maintain service in the area.

The party constructing the Facility (or Facilities) would notify the Riverside County Transportation Department-or City of Coachella Public Works Department, as appropriate, at least five business days in advance of any planned lane closure that would be caused by construction. The County or City, as appropriate, would evaluate any other known lane closures, construction activities or special events which may conflict with the Facility's scheduled lane or road closure and create additional impacts to traffic flow on the affected roadway; and, if deemed necessary by the Riverside County Transportation Department or City of Coachella Public Works Department, as appropriate, the Facility's lane or road segment closure may be postponed or rescheduled.

3.4 Project Objectives

A clear statement of Project objectives allows for the analysis of reasonable alternatives to the proposed Master Plan. The proposed Master Plan is designed to meet the following objectives:

1. Provide a single, comprehensive stormwater master plan that contains a drainage plan with the opportunity for stormwater capture for the Oasis/Valley Floor and Mecca/North Shore areas and supports the existing and proposed land uses in the Master Plan Area.
2. In conjunction with ultimate street improvements within the Master Plan Area, contain the 100-year return period flood flows and alleviate the primary sources of flooding within the Master Plan Area.
3. Identify preferred facility alignments, sizing, and right-of-way required for the future construction of Facilities to protect existing and future development.



4. Identify the most economical combination of facilities considering environmental constraints, right-of-way acquisition, construction, and maintenance costs.
5. Develop a plan which, when implemented, would result in the elimination of FEMA designated Special Flood Hazard Areas within the boundaries of the Master Plan Area.
6. Minimize major diversions, provide stormwater capture opportunities and perpetuate the natural drainage pattern of the area to the maximum extent practicable.

3.5 Environmental Setting

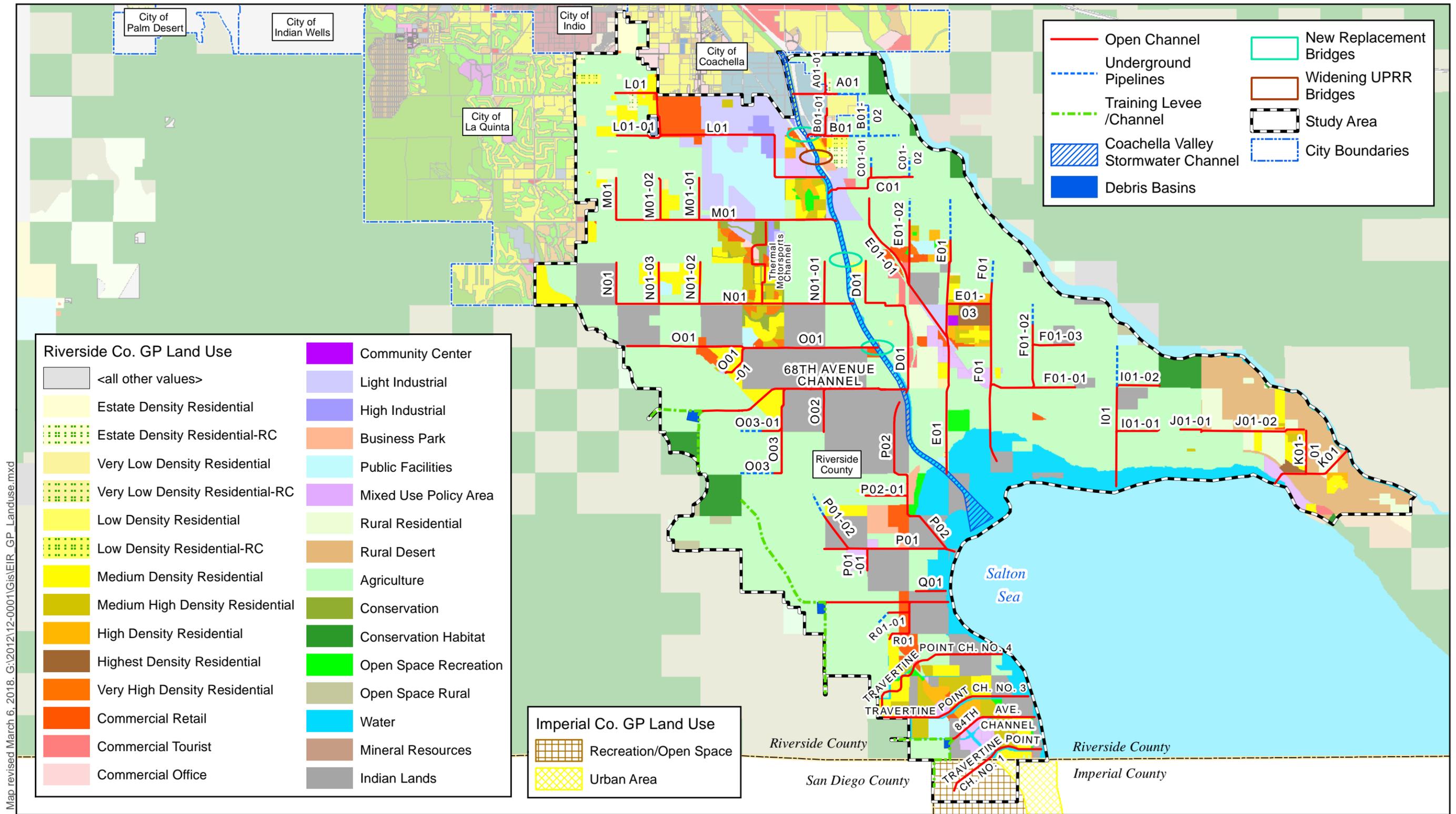
Land uses and zoning within the Master Plan Area are primarily agricultural but also include developed residential, commercial, public facilities, business park/light industrial and open space as shown on Figure 3-5 – General Plan Land Use and Figure 3-6 – Zoning Map. Additional information regarding the environmental setting is provided Sections 5.1 through 5.6.

3.5.1 Existing Drainage Facilities

Existing drainage facilities in the Master Plan Area are currently limited and consist primarily of roadside ditches and agricultural drains generally flowing to the CVSC and Salton Sea, which are inadequate to handle runoff generated in the area. With the exception of the CVSC; USBR Dike Nos. 2 and 4, which run along the northwestern boundary of the Master Plan Area generally from Avenue 58 south to Avenue 65 near the City of La Quinta; the Avenue 64 Evacuation Channel; and the East Side Dike System, which are designed to protect the Coachella Canal along the eastern boundary of the Master Plan Area, there are no existing major drainage facilities in the Master Plan Area. During periods of runoff, the floodwaters, silt and other debris impact a wide area of agricultural land and developed communities, which results in property damage and flooded roadways. These existing drainage features generally convey the flow of runoff to CVSC and eventually to the Salton Sea.

3.5.2 Oasis/Valley Floor Region

The Oasis/Valley Floor Region is bounded on the north by the cities of Coachella and Indio; Avenue 52; on the west by the city of La Quinta, CVWD's Dike No. 4, and the Santa Rosa and San Jacinto Mountains Conservation Area; Coachella Canal and Santa Rosa Mountains; on the south by Travertine Palms area within Imperial County; and on the east by the CVSC. Land use and topography within the Oasis/Valley Floor Region consists mostly of agriculture lands and urban areas sloping southeasterly towards the CVSC and the Salton Sea. The Oasis/Valley Floor area includes the communities of Vista Santa Rosa, Thermal, and Oasis in addition to a portion of the cities of Coachella and La Quinta.



Map revised March 6, 2018. G:\2012\12-0001\GIS\EIR_GP_Landuse.mxd

Sources: RCIP, 2003 (as amended through Oct. 2017); City of La Quinta GP 2035 (approved Dec. 2013); City of Indio, 2010; City of Coachella, 2013; Imperial Co., 2007.

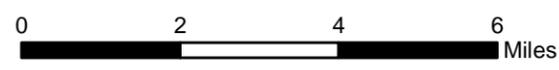
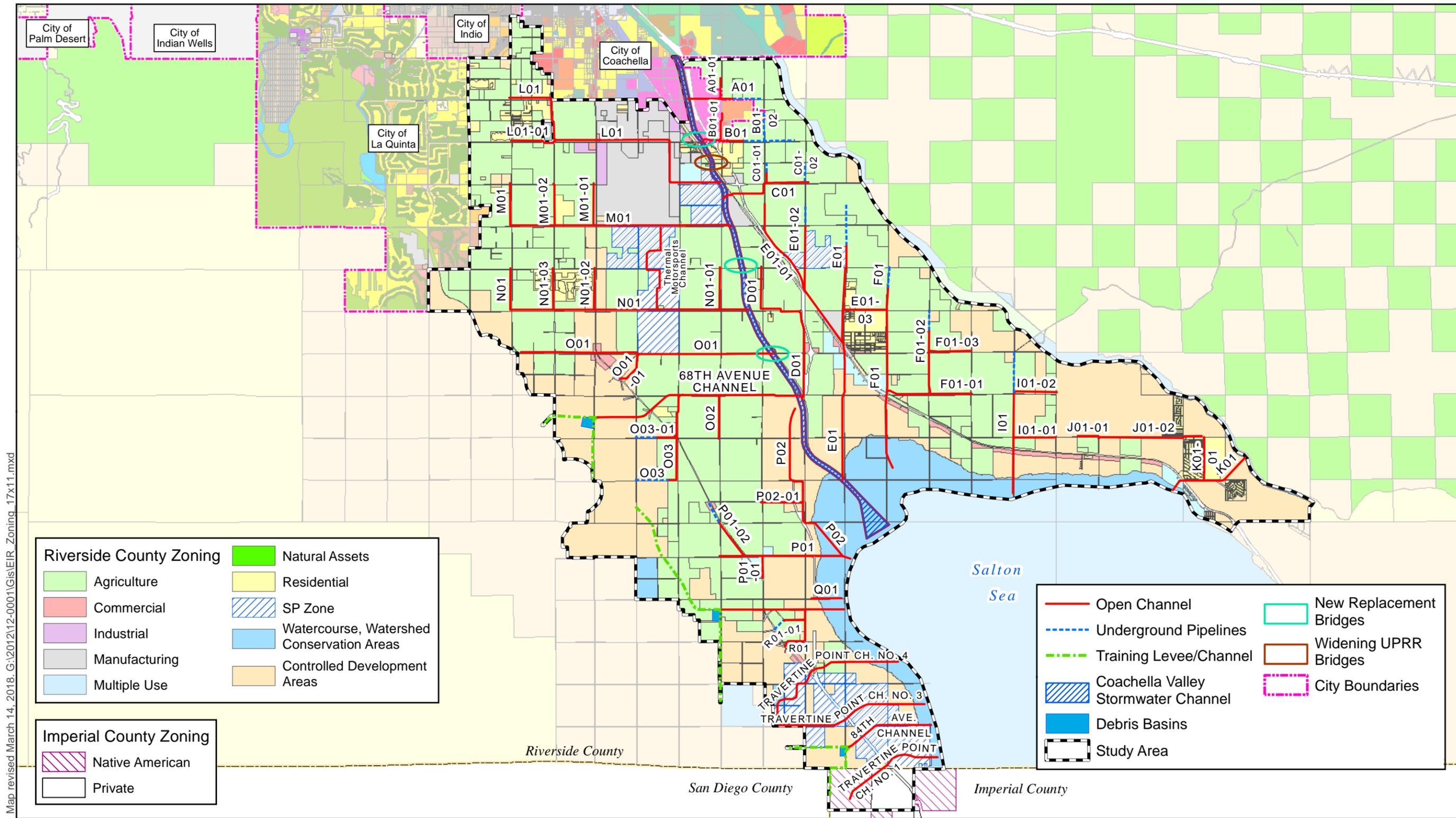


Figure 3-5 - General Plan Land Use
Eastern Coachella Valley Stormwater Master Plan



Map revised March 14, 2018. G:\2012\12-0001\GIS\EIR_Zoning_17x11.mxd

Sources: Riverside County GIS, 2018; Imperial County, 2013; City of La Quinta, 2016; City of Coachella, 2013; City of Indio, 2010.

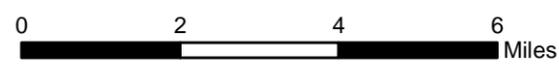


Figure 3-6 Zoning Map

Eastern Coachella Valley Stormwater Master Plan

3.5.3 Mecca/North Shore

The Mecca/North Shore Region is bounded on the north by ~~Wasteway No. 2 Channel; Avenue 52/Detention Channel No. 2;~~ on the northeast by the Coachella Canal/USBR East Side Dike; on the south by the northern shore of the Salton Sea; and on the west by the CVSC. The Mecca portion of the region consists mostly of agriculture areas at the present time, with minor areas of residential and commercial developments concentrated near Highway 111 (the unincorporated community of Mecca). A large part of the North Shore portion of the region is in an undeveloped natural condition, although there are some agricultural areas in the western portion just north of the Salton Sea and some rural residential areas scattered throughout the southeastern area.

3.6 Anticipated Permits and Approvals

Implementation of the Master Plan may require permits or other forms of approval from public agencies or other entities prior to construction of the proposed Facilities.

- **Coachella Valley Water District**

CVWD owns and operates storm drains, channels, and basins within the Master Plan area. To the extent that drainage and flood control improvements are proposed that affect CVWD's existing facilities; coordination and approval from CVWD, would be necessary. Additionally, CVWD owns and operates water and wastewater conveyance systems within the Master Plan Area, and to the extent that construction of Facilities would impact and/or would require the relocation of existing water and wastewater facilities, coordination and approval from CVWD would be necessary.

Moreover, all Facilities constructed by developers, city of Coachella, or Riverside County, that require maintenance by CVWD, would require CVWD's execution of a cooperative agreement and approval of plans and specifications.

- **U.S. Army Corps of Engineers**

A Clean Water Act Section 404 permit would be required if the construction or maintenance of the proposed Facilities involves the discharge of dredged or fill material within "waters of the United States" or adjacent wetlands.

- **Bureau of Reclamation (U.S. Department of the Interior)**

Encroachment permits would be required to construct Facilities within the rights-of-way of the Coachella Canal.

- **Bureau of Land Management (U.S. Department of the Interior)**

Encroachment permits would be required to construct Facilities within the boundaries of land managed by the Bureau of Land Management.



- **Railroads**
Encroachment permits would be required to construct Facilities within the rights-of-way of railroad property.
- **Coachella Valley Conservation Commission, a Joint-Powers Authority**
Permits would be required to construct Facilities located within the Coachella Valley Multiple Species Habitat Conservation Plan.
- **State/Regional Water Quality Control Board, Colorado River Region (RWQCB)**
National Pollutant Discharge Elimination System (NPDES) General Construction Permits would be required for grading activities of one acre or larger.

If a 404 Permit is required by the Army Corps of Engineers, then a Section 401 Water Quality Certification would be required from the RWQCB.

A Waste Discharge Permit would be required if ground dewatering is necessary during tunneling activities or if waste is discharged into “waters of the State” that are not also “waters of the U.S.”
- **California Department of Fish and Wildlife**
A Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement would be required if a jurisdictional streambed or stream banks would be altered.
- **California Department of Transportation**
Encroachment permits, plus Water Pollution Control Plans, as applicable, would be required if any work associated with proposed Facilities is required within the right-of-way of State Routes 86, 86S, 111, or 195.
- **County of Riverside, City of Coachella**
Encroachment permits would be required to construct Facilities within roadway rights-of-way.
- **Imperial Irrigation District**
A cooperative agreement between the Facility proponent and Imperial Irrigation District for electrical transmission utility relocation, where necessary, would be required.
- **Torres Martinez Desert Cahuilla Indians**
Permission to construct Facilities on Tribal Land would be obtained.
- **Augustine Band of Cahuilla Indians**
Permission to construct Facilities on Tribal Land would be obtained.



Section 4 – Environmental Effects Found Not to be Significant

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example text.)

CEQA requires that a Draft PEIR discuss all potentially significant effects a project may have on the environment, and that the discussion's emphasis should be in proportion to an effect's severity and probability of occurrence. Effects dismissed in an Initial Study as insignificant and unlikely to occur need not be discussed further in a Draft PEIR unless information inconsistent with the finding in the Initial Study is subsequently received.

4.1 Effects Found Not to be Significant During the Initial Study

This section provides discussions of those effects that were identified as not significant or less than significant during the Initial Study and preliminary review of the project; and therefore, do not require further analysis in the Recirculated Draft PEIR (*CEQA Guidelines Sections 15063-15064*). 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 (IS) prepared for the Project (included as Appendix A to this Recirculated Draft PEIR) 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 Recirculated Draft PEIR. See Appendix A to this Recirculated Draft PEIR for the IS and Notice of Preparation (NOP), and related documents. A summary of the comments received in response to the NOP is provided in Section 2, **Table 2-A**.

4.1.1 Aesthetics

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to aesthetics. The IS concluded that the following issues related to aesthetics would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; and



- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

4.1.2 Agriculture and Forestry Resources

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to agricultural and forestry resources. The IS concluded that the following issues related to agriculture and forestry resources would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analyses of other agriculture resources issues are presented in Section 5.1, Agriculture and Forestry Resources, of the Recirculated Draft PEIR.

- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)); and
- Result in the loss of forest land or conversion of forest land to non-forest use.

4.1.3 Air Quality

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to air quality. The IS concluded that the following issues related to air quality would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analyses of other air quality issues are presented in Section 5.2, Air Quality and Greenhouse Gas Emissions, of the Recirculated Draft PEIR.

- Conflict with or obstruct implementation of the applicable air quality plan; and
- Create objectionable odors affecting a substantial number of people.

4.1.4 Cultural Resources

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to cultural resources. The IS concluded the following issue related to cultural resources would be less than significant. The supporting analysis discussion for this issue is provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analyses of other cultural resources issues are presented in Section 5.4, Cultural Resources, of the Recirculated Draft PEIR.

- Disturb any human remains, including those interred outside of formal cemeteries.

4.1.5 Geology and Soils

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to geology and soils. The IS concluded that the following issues related to geology and soils would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.



- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
 - Strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; and
 - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; and
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

4.1.6 Hazards and Hazardous Materials

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to hazards and hazardous materials. The IS concluded that the following issues related to hazards and hazardous materials would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- 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, would the project result in a safety hazard for people residing or working in the project area;



- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

4.1.7 Hydrology and Water Quality

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to hydrology and water quality. The IS concluded that the following issues related to hydrology and water quality would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analyses of other hydrology and water quality issues are presented in Section 5.5, Hydrology and Water Quality, of the Recirculated Draft PEIR.

- Violate any water quality standards or waste discharge requirements;
- 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);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of a watercourse or wetland, in a manner which would result in substantial erosion or siltation on- or off-site;
- Otherwise substantially degrade water quality;
- Place 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;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose 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
- Inundation by seiche, tsunami, or mudflow.

4.1.8 Land Use Planning

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to land use planning. The IS concluded that the following issues related to land use planning would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analysis of other land use



planning issue, which is regarding the Project's potential conflict with any applicable habitat conservation plan or natural community conservation plan is presented in Section 5.3 – Biological Resources, of the Recirculated Draft PEIR.

- Physically divide an established community; and
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

4.1.9 Mineral Resources

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to mineral resources. The IS concluded that the following issues related to mineral resources would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; and
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

4.1.10 Noise

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to noise. The IS concluded that the following issues related to noise would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR. The analyses of other noise issues are presented in Section 5.6, Noise, of the Recirculated Draft PEIR.

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- 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, would the project expose people residing or working in the project area to excessive noise levels; and
- 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.

4.1.11 Population and Housing

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to population and housing. The IS concluded that the following issues related to population and housing would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

4.1.12 Public Services

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to public services. The IS concluded that the following issues related to public services would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire protection;
 - Police protection;
 - Schools;
 - Parks; and
 - Other public facilities.

4.1.13 Recreation

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to recreation. The IS concluded that the following issues related to recreation would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

4.1.14 Transportation/Traffic

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to transportation and traffic. The IS concluded that the following issues related to transportation



and traffic would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with applicable congestion management program, 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;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; and
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

4.1.15 Utilities and Service Systems

The IS utilized CEQA Appendix G thresholds for assessment of potential impacts to utilities and service systems. The IS concluded that the following issues related to utilities and service systems would be less than significant. The supporting analysis discussion for these issues are provided in the IS, which is included as Appendix A to this Recirculated Draft PEIR.

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; and
- Comply with federal, state, and local statutes and regulations related to solid waste.

4.2 Effects Found to be Less Than Significant as Part of the Recirculated Draft PEIR Process

4.2.1 Agriculture and Forestry Resources

As discussed in Section 5.1, the following issues related to agriculture resources were determined to be less than significant without the need for mitigation measures as part of the analysis for the Recirculated Draft PEIR.

- Conflict with existing zoning for agricultural use, or a Williamson Act contract.

4.2.2 Air Quality and Greenhouse Gas Emissions

As discussed in Section 5.2, the following issues related to air quality and greenhouse gas emissions were determined to be less than significant without the need for mitigation measures as part of the analysis for the Recirculated Draft PEIR.

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

4.3 Effects Found to be Less Than Significant with Mitigation

4.3.1 Biological Resources

As discussed in Section 5.3, the following issues related to biological resources were determined to be less than significant with incorporation of mitigation measures as part of the analysis for the Recirculated Draft PEIR.

- 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 Wildlife or U.S. Fish and Wildlife Service;
- 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 Wildlife or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on 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;

- 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;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

4.3.2 Cultural Resources

As discussed in Section 5.4, the following issues related to cultural resources were determined to be less than significant with incorporation of mitigation measure(s) as part of the analysis for the Recirculated Draft PEIR.

- Create a substantial adverse change in the significance of a historical resource as defined in Section 15064.5;
- Create a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5; and
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

4.3.3 Hydrology and Water Quality

As discussed in Section 5.5, the following issues related to hydrology and water quality were determine to be less than significant with incorporation of mitigation measure(s) as part of the analysis for the Recirculated Draft PEIR.

- 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; and
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

4.3.4 Noise

As discussed in Section 5.6, the following issues related to noise were determine to be less than significant with incorporation of mitigation measure(s) as part of the analysis for the Recirculated Draft PEIR.



- 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 groundborne vibration or groundborne noise levels; and
- Causing a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.



Section 5 – Environmental Assessment

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example text.)

This section provides a program-level analysis of the physical environmental effects of implementing the Master Plan (*CEQA Guidelines* §15168). This section describes the existing environmental setting, regulatory framework, and identifies potential impacts from Project implementation and mitigation measures for potentially significant environmental impacts (where necessary). Residual and cumulative effects on resource areas are also described.

CEQA requires consideration and discussion of a project’s 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 addresses each environmental effect that was determined to be potentially significant in the analysis provided in the Initial Study (Appendix A). Each effect is organized into an issue area; those that will be analyzed are listed below:

- Section 5.1 Agriculture and Forestry Resources
- Section 5.2 Air Quality and Greenhouse Gas Emissions
- Section 5.3 Biological Resources¹
- Section 5.4 Cultural Resources
- Section 5.5 Hydrology and Water Quality
- Section 5.6 Noise

Analysis Format

The Recirculated Draft PEIR assesses how the proposed Project would impact these issue areas. Each environmental issue addressed in this Recirculated Draft PEIR is presented in terms of the following subsections:

- **Setting:** Provides information describing the existing physical setting on or surrounding the Facilities within the Master Plan Area which may be subject to change as a result of the implementation of the Project. This setting describes the physical environmental conditions that existed at the time the NOP was sent to responsible agencies and the State Clearinghouse.

¹ To avoid duplicative analysis, the Land Use Planning threshold *Conflict with any applicable habitat conservation plan or natural community conservation plan* is evaluated in Section 5.3 biological Resources.



- **Related Regulations:** Provides a discussion of the applicable regulations with respect to each environmental issue.
- **Comments Received in Response to the Notice of Preparation:** Provides a summary of comments that were received in writing during the circulation of the NOP or at the public scoping meeting, and the response to the comment.
- **Thresholds of Significant:** Provides criteria for determining the significance of Project impacts for each environmental issue.
- **Environmental Impacts:** 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.
- **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.

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.” The term, “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.”

- **References:** Provides a listing of referenced materials and/or technical and scientific reports reviewed in support of the discussion and analysis.

5.1 Agriculture and Forestry Resources

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (~~example text~~.)

The focus of this section is to address, at a program level, potential impacts related to conflicts with and conversion of agricultural resources from construction and operational activities of the Facilities identified in the Master Plan.

As discussed in the Initial Study prepared for the Project (Appendix A), the Project's potential to result in a substantial adverse effect, either directly or indirectly, to forestry resources would be less than significant. As discussed below the Project's potential to result in a substantial adverse effect, either directly or indirectly, to agricultural resources would be significant and unavoidable, even with mitigation incorporated.

5.1.1 Setting

Firstly, it should be noted that while there are two Facilities that would be located within Imperial County (Travertine Point Channel No. 1 and a training levee and channel associated with the 84th Avenue Channel),¹ the area where these Facilities are specifically located is not within or near designated Farmland, according to the California Department of Conservation Division of Land Resource Protection's ~~2012~~ 2014 Farmland data for Imperial County.² Moreover, this area is neither designated nor zoned for agriculture as shown on **Figure 3-5 – General Plan Land Use Map** and **Figure 3-6 – Zoning Map**, nor are there active Williamson Act contracts in the area. Therefore, as there would be no impact within Imperial County in regards to agricultural resources, the following discussion is solely focused on potential impacts to agricultural resources within Riverside County.

CEQA defines "agricultural land" as "prime farmland, farmland of statewide importance, or unique farmland, as defined by the United States Department of Agriculture land inventory and monitoring criteria, as modified for California" (Section 21060.1(a)).

Agriculture has long been an integral part of the economy and culture of Riverside County as a whole, and the eastern Coachella Valley is one of California's most important agricultural producing areas (ECVAP, p. 8). Accordingly, agriculture has been the predominant historic use within the boundaries of the Master Plan Area. Crops in this area include date palms, grapes, citrus, and seasonal row crops (ECVAP, p. 8). The Master Plan Area is also interspersed with components of natural land and urban land. Urbanized development in the Master Plan Area is

¹ The Eastern Coachella Valley Stormwater Master Plan is provided in Appendix D.

² Source: <ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2012/imp12.pdf>
<ftp://ftp.consrv.ca.gov/pub/dlrp/FMMP/pdf/2016/imp16.pdf>, accessed December 15, 2014 February 21, 2018.



generally concentrated around and within the city of Coachella and the unincorporated towns of Mecca and Thermal.

Agriculture production is one of the largest industries in terms of dollar value in Riverside County and competes successfully in the global economy (RCGP 2015, p. LU 44). According to the Riverside County Agricultural Commissioner's Office ~~2015~~ 2016 *Agricultural Production Report*, gross valuation for agricultural production within Riverside County represented approximately ~~\$1.30~~ \$1.27 billion in ~~2015~~ 2016, which was a ~~4.4~~ 2.0 percent decrease from ~~last year's total value~~ ~~the record-setting valuation in 2015~~. A key factor in Riverside County's agricultural strength is in the diversity of crops produced. The ~~2015~~ 2016 report includes more than 120 different commodities, 49 of which have a gross value in excess of one million dollars. Most commodities performed well and remained at near record valuations. The top five agricultural valuations in the county, included milk, nursery stock, table grapes, lemons, and ~~bell peppers~~ hay. Moreover, the ~~2015~~ 2016 report concluded that agriculture contributed nearly \$4 billion to the regional economy when indirect and induced economic impacts are considered. (~~2015~~ 2016 APR)

Agricultural statistics are published annually by the Agricultural Commissioner's Office for Riverside County as a whole and for the four primary production districts. These production districts are Riverside/Corona, San Jacinto/Temecula Valley, Coachella Valley, and Palo Verde Valley. Approximately ~~198,569~~ 194,044 acres were used to produce crops in the four production districts during ~~2015~~ 2016, which is an approximately ~~3~~ 2 percent decrease in acreage from ~~2014~~ 2015 (~~2015~~ 2016 APR, p. 12).

The Master Plan Area in Riverside County is located in the Coachella Valley production district, which includes irrigated farmland northwest of the Salton Sea. In ~~2015~~ 2016, the agricultural valuation of crops within the Coachella Valley production district ~~increased~~ decreased ~~four~~ two percent to approximately ~~\$649.7~~ 639.6 million from ~~2014~~ 2015, which is the highest valuation of all the four districts and approximately ~~62~~ 64 percent of the county's total crop valuation (~~2015~~ 2016 APR, p. 12). The Coachella Valley production district included approximately ~~54,924~~ 54,666 harvested acres in ~~2015~~ 2016 with vegetable, melon, and miscellaneous crops, tree and vine crops, and citrus crops accounting for approximately ~~92~~ 91 percent of the district's total crop valuation (~~2015~~ 2016 CVR, p. 6).

The Coachella Valley production district together with the Palo Verde Valley production district, which is adjacent to the Colorado River, accounted for 76 percent of the crop value and ~~70~~ 65 percent of the acreage farmed during the year (2016 APR, 2016 CVR, 2016 PVR). The Riverside/Corona and San Jacinto/Temecula Valley production districts are located in more urbanized/urbanizing areas of Riverside County. The Riverside/Corona production district accounted for 9 percent of the crop value and 6 percent of the acreage farmed during the year, and the San Jacinto/Temecula Valley production district accounted for ~~25~~ 14 percent of the crops and ~~25~~ 27 percent of acreage farmed, which both combined totaled to ~~24~~ 23 percent of



the crop value and ~~30~~ 34 percent of the acreage farmed in ~~2015~~ 2016 (2016 APR, 2016 RCR, 2016 STR).

5.1.1.1 State-Designated Farmland

Farmland throughout California, including Riverside County, is classified and mapped by the California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP). The FMMP uses crop data, aerial photography, water use information and soils surveys to identify and rate the quality of lands used for crops and other purposes. FMMP maps for each county are generally updated every two years. Such maps identify the following categories of Farmland, as defined by the (DOC):

- **Prime Farmland:** Farmland with the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Farmland of Statewide Importance:** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.
- **Unique Farmland:** Farmland of lesser quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.
- **Local Important Farmlands:** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee. In Riverside County, these are farmlands that include the following (RCGP 2015, p. OS-19):
 - Lands with soils that would be classified as Prime or Statewide Important Farmlands but lack available irrigation water.
 - Lands planted in 1980 or 1981 in dry land grain crops such as barley, oats, and wheat.
 - Lands producing major crops for Riverside County but that are not listed as Unique Farmland crops. Such crops are permanent pasture (irrigated), summer squash, okra, eggplant, radishes, and watermelon.
 - Dairylands including corrals, pasture, milking facilities, hay and manure storage areas if accompanied with permanent pasture or hayland of 10 acres or more.



- Lands identified by Riverside County with Agriculture land use designations or contracts.
- Lands planted with jojoba that are under cultivation and are of producing age.

The FMMP maps also identify grazing, urban and built-up land, water, and other lands, including brush and timberlands, wetlands and riparian areas, confined livestock, poultry or aquaculture facilities and mines. The FMMP maps virtually the entire eastern Coachella Valley, from Washington Street to the Salton Sea, as Prime Farmland with the exceptions of Indian lands and the existing urban communities. **Figure 5.1-1 – Important Farmland** shows the above-listed designated Farmland within the Master Plan Area.

Table 5.1-A – 2014 2016-FMMP Farmland Acreage within the Master Plan Area summarizes the acreage of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance identified within the Master Plan Area according to the 2014 2016-FMMP map for Riverside County and the 2014 2016 FMMP map for Imperial County, which are the most recent versions of the maps currently available. The table also compares the existing FMMP Farmland acreage in the Master Plan Area as well as the portion located in the construction footprint of the Facilities.

Table 5.1-A – 2014 2016-FMMP Acreage within the Master Plan Area

FMMP Farmland Categories	FMMP Acreage in Master Plan Area	Project Facilities Construction Footprint (acres) ^a	Percent of FMMP Acreage
Prime Farmland	43,706 <u>43,746</u>	1,337 <u>1,297</u>	3%
Farmland of Statewide Importance	758 <u>762</u>	57 <u>55</u>	8 <u>7</u> %
Unique Farmland	7,379 <u>8,800</u>	240 <u>254</u>	3%
Farmland of Local Importance	20,816 <u>19,358</u>	958 <u>968</u>	5%
Sub-Total (Farmland)	72,659 <u>72,666</u>	2,592 <u>2,574</u>	4%
Urban and Built Up	8,292 <u>2,775</u>	23 <u>40</u>	0.3 <u>1</u> %
Water	2,839 <u>2,839</u>	111	4%
Other	20,640 <u>18,571</u>	1,276 <u>1,278</u>	6 <u>7</u> %
Other (Imperial County)	3,041 <u>1,331</u>	59	2 <u>4</u> %
Sub-Total (Non-Farmland)	34,812 <u>25,490</u>	1,470 <u>1,488</u>	4 <u>6</u>%
Total	107,471 <u>98,182</u>	4,062	3 <u>4</u>%

^a Construction footprint for open channels and training levees buffered 100 feet on either side from centerline and Coachella Valley Storm Drain buffered 30 feet on either side from centerline.

As shown in **Table 5.1-A**, the non-underground Facilities (i.e., open channels, training levees, and CVSC) would affect approximately 3 percent of the existing Prime Farmland, 8-7 percent of



the Farmland of Statewide Importance, 3 percent of the Unique Farmland, and 5 percent of the Farmland of Local Importance, for a combined 4 percent of the total designated Farmland in the ~~107,471~~ 98,182-acre Master Plan Area. The remaining acreage within the Master Plan Area (~~34,812~~ 25,490 acres) includes properties classified by FMMP as non-farmland in portions of the ~~Cities of La Quinta and~~ city of Coachella, which are designated as “Urban and Built Up,” an area classified as “Water” along the Salton Sea shore, as well as land classified by the FMMP as “Other Land.”³

In sum, Facilities that are not underground pipelines (i.e., open channels, training levees, and CVSC) would affect 4 percent of the Master Plan Area. Underground pipelines designed as part of the Master Plan are estimated at a total of 48,627 linear feet or roughly 9.2 miles (36,803 linear feet in Mecca/North Shore SMP and 11,825 linear feet in Oasis/Valley Floor SMP).

5.1.1.2 Soils

The United States Department of Agriculture Soil Conservation Service (now the Natural Resources Conservation Service) identifies the following soil map units as Prime Farmland in the Coachella Valley (SCS):

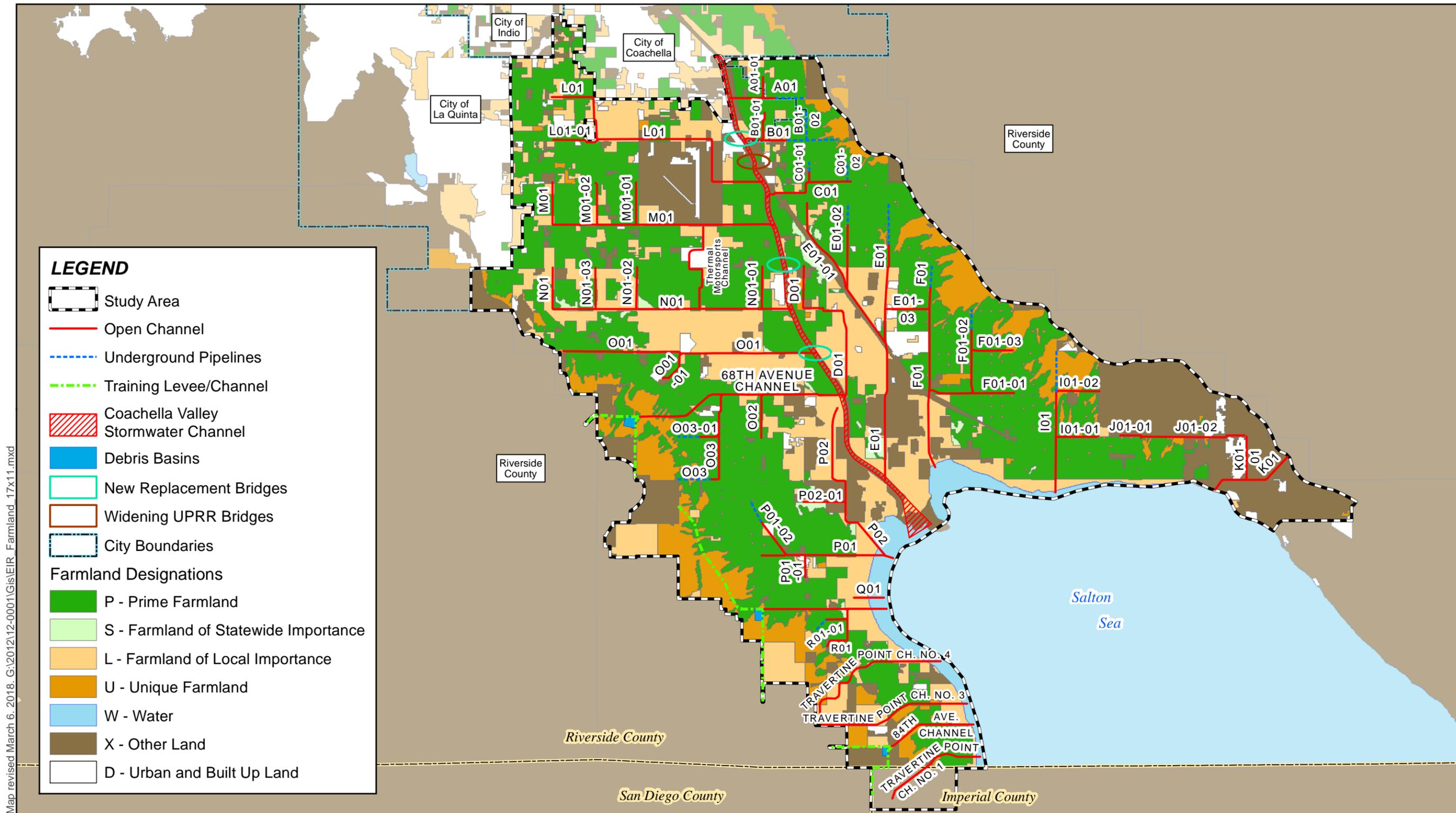
- **Coachella** fine sands and fine sandy loams, 0 to 5 percent slopes, if irrigated, and for some soils, if drained (map unit symbols CpA, CpB, CrA, CsA)
- **Gilman** fine sandy loams, silt loams, 0 to 5 percent slopes, if irrigated, and for some soils, if drained (map unit symbols GaB, GbA, GgcA, GdA, GeA, GfA,)
- **Indio** fine and very fine sandy loams, if irrigated, and for some soils, if drained (map unit symbols Ip, Ir, Is, It)
- **Myoma** fine sand, 0 to 15 percent slopes, if irrigated, and for some soils, if drained (map unit symbols MaB, MaD, McB)
- **Tujunga** loamy fine sand, 0 to 5 percent slopes, if irrigated (map unit symbol TsB)

Likewise, the United States Department of Agriculture Soil Conservation Service (now the Natural Resources Conservation Service) identifies the following soil map units as Farmland of Statewide Importance in the Coachella Valley (SCS):

- **Imperial** silty clay, 0-2 percent slopes (map unit symbols IaA, IfA)
- **Niland** sand 2 to 5 percent slopes (map unit symbols NaB, NbB)
- **Salton** fine sandy loam and silty clay loam (map unit symbols Sa, Sb)
- **Tujunga** fine sand 5 to 30 percent slopes, and gravelly loamy sand 0 to 9 percent slopes (map unit symbols TpE, TrC)

³ The designation of “Other Land” is a catch-all for land not included in any other category, for example, low density rural developments, brush/timber/wetland/riparian areas not suitable for grazing, confined animal facilities, strip mines, borrow pits, and water bodies smaller than forty acres. Vacant and non-agricultural land surrounded on all sides by urban development and greater than 40 acres is also mapped as Other Land.

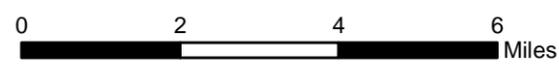




Map revised March 6, 2018. G:\2012\12-0001\GIS\EIR_Farmland_17x11.mxd

Source: CA Dept. of Conservation, FMMP, 2016.

Figure 5.1-1 - Important Farmland
Eastern Coachella Valley Stormwater Master Plan



5.1.1.3 Williamson Act Contracts

As discussed under Related Regulations, below, as set forth by the Williamson Act, landowners can enter into 10-year contracts with local governments to receive lower property tax. Riverside County adopted Ordinance No. 509 allowing the establishment of agricultural preserves pursuant to the Williamson Act on lands to be devoted to agricultural and compatible uses. According to the California Department of Conservation, and as shown on the Riverside County Williamson Act Map, FY 2015/2016 for central Riverside County (sheet 2 of 3): Maps depicting Williamson Act enrollment are produced in cooperation with the participating counties and the California Department of Conservation's Division of Land Resource Protection using Geographic Information Systems. The information used to create these maps is provided by county planning agencies and/or assessor offices. For the most accurate and up to date information regarding the status of specific contracted lands, contact the county assessor or planning agency office as the status of enrolled lands may change throughout the year.⁴

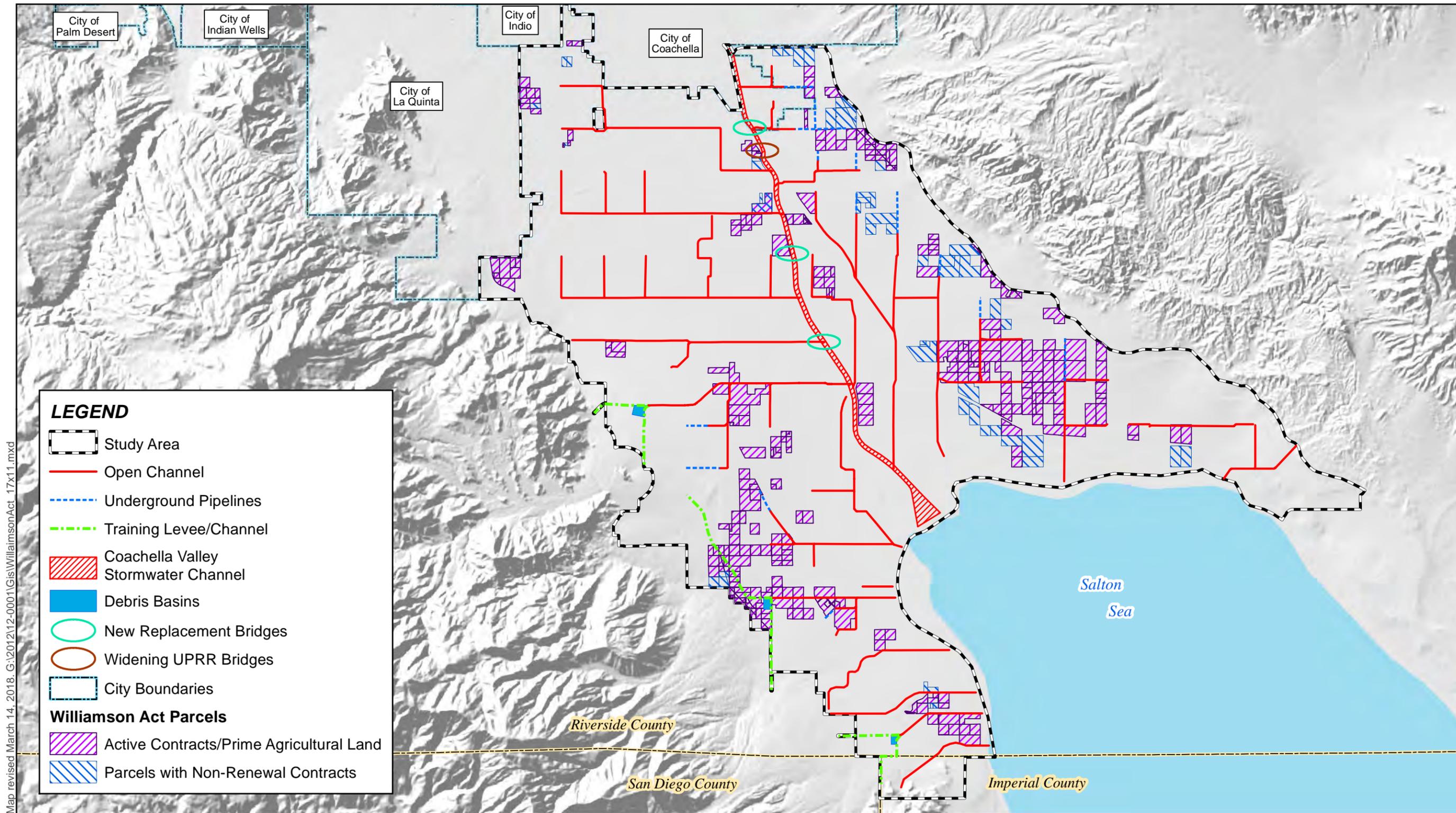
Figure 5.1-2 – Williamson Act Parcels shows the parcels under active Williamson Act contracts and those with non-renewal contracts within the Master Plan Area; these latter contract types indicate that the landowner has identified their interest not to renew their Williamson Act contract after the current contract expires. Within the Master Plan Area, there are a total of approximately ~~13,459~~ 13,091 acres under Williamson Act contracts, and of these ~~13,459~~ 13,091 acres, approximately ~~11,446~~ 10,380 acres are under an active Williamson Act contract and approximately ~~2,013~~ 2,711 acres are under a non-renewal Williamson Act contract.

In relation to the Master Plan Area, these Williamson Act contract lands are generally concentrated in the Mecca/North Shore area and the southwest-central area of Oasis/Valley Floor area with a lesser concentration interspersed throughout.

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⁴ Source: ftp://ftp.consrv.ca.gov/pub/Dlrp/WA/Riverside_c_15_16_WA.pdf , accessed September 15, 2016.





Map revised March 14, 2018. G:\2012\12-0001\Gis\WilliamsonAct_17x11.mxd

Source: CA Dept. of Conservation DLRP, 2016.

Figure 5.1-2 - Williamson Act Parcels
Eastern Coachella Valley Stormwater Master Plan

0 2 4 6 Miles



5.1.1.4 Land Use Designations and Zoning

The Facilities proposed within unincorporated Riverside County are within the General Plan's Eastern Coachella Valley Area Plan. The main land use designation within the Oasis/Valley Floor area is agriculture. Other notable land use designations in the northern portion of this area include: commercial retail, light industrial, heavy industrial, public facilities, and low- and medium-density residential. In the middle portion of the area, other notable land use designations, besides agriculture, include: Indian lands, low- medium- and high-density residential, commercial retail, light industrial, and commercial tourist. In the southern portion of the area, other notable land use designations, besides agriculture include, Indian lands, commercial retail, medium- and medium-high-density residential, conservation habitat, public facilities, open space recreation, mixed-use policy area, and water.

The Facilities proposed within the city of Coachella are located in an area designated for low-density residential with an agriculture-to-urban transition overlay, medium-density residential, light industrial, and general commercial. The Coachella Valley Storm Drain (CVSC) traverses this city in areas designated for open space and light industrial. Existing land use designations per the Riverside County and city of Coachella general plans are shown on **Figure 3-5 – General Plan Land Use.**

Regarding existing zoning in unincorporated Riverside County, land in proximity to Facilities proposed within the Oasis/Valley Floor area is zoned: light agriculture (A-1), heavy agriculture (A-2), general commercial (C-1/C-P), scenic highway commercial (C-P-S), industrial park (I-P), service commercial manufacturing (M-SC), heavy manufacturing (M-H), single-family residential dwellings (R-1), planned residential (R-4), residential incentive (R-6), residential agriculture (R-A), Specific Plan zone (SP Zone), watercourse, watershed and conservation areas (W-1), and controlled-development (W-2). Land in proximity to Facilities proposed in the Mecca/North Shore area is zoned for: light agriculture (A-1), heavy agriculture (A-2), residential agriculture (R-A), general commercial (C-1/CP), scenic highway commercial (C-P-S), service commercial manufacturing (M-SC), heavy manufacturing (M-H), Specific Plan zone (SP Zone), watercourse, watershed, and conservation areas (W-1), and controlled-development areas (W-2).

Additionally, the community of Mecca consists of various residential zonings including single-family residential dwellings (R-1), multifamily residential dwellings (R-2), general residential (R-3), and residential incentive (R-6). Also, the North Shore community consists of various residential zonings including single-family residential dwellings (R-1), multi-family residential dwellings (R-2), general residential (R-3), and mobile home subdivision/mobile home park (R-T).

The Facility proposed within Imperial County (a training levee/channel and Travertine Point Ch. No.1) is located mostly within land zoned as "Native American" and partially within land zoned as "Private."

The Facilities within the City of Coachella are located in an area zoned for: heavy industrial (M-H), residential planned unit development (R-PUD), general commercial (CG), neighborhood commercial (C-N), open space (O-S), residential single family (R-S), and residential multiple



family (R-M). Existing zoning per the Riverside County and city of Coachella general plans are shown on **Figure 3-6 – Zoning Map**. As shown, the majority of land in the Master Plan Area is designated and zoned for agriculture, and this agricultural land is located within unincorporated Riverside County. Some of the proposed Facilities would traverse these lands zoned and/or designated for agricultural use.

~~Although the Master Plan area includes a portion of the city of La Quinta, no Facilities are proposed within the city boundaries.~~

5.1.2 Comments Received in Response to the Notice of Preparation

No comments were received regarding agriculture and forestry resources.

5.1.3 Thresholds of Significance

The significance of potential impacts to agricultural or forestry resources were evaluated based on the State *CEQA Guidelines*, Appendix G criteria. Using these thresholds, the Project would be considered to have a significant impact if it were to affect the following thresholds:

- (Threshold A) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use; and/or
- (Threshold B) Conflict with existing zoning for agricultural use, or a Williamson Act contract.

5.1.4 Related Regulations

5.1.4.1 Federal Regulations

There are no federal regulations which apply to agricultural lands with respect to this Project.

5.1.4.2 State Regulations

California Land Conservation Act of 1965 (Williamson Act)

The California Land Conservation Act (commonly referred to as the Williamson Act) was passed in 1965 to protect specific parcels of land in agricultural and open space use. The Williamson Act is a state policy administered by local governments. Local governments are not mandated to administer the act, and those local governments that do have some leeway to adapt the program to local goals and objectives. Landowners voluntarily enter into 10-year contracts with local governments and in return receive lower property tax assessments. In return, the landowner commits not to develop the land or convert the property into non-agricultural or non-open space use. Contracts are valid for an initial period of 10 years and automatically renew each year to maintain a 10-year life; however, local governments can establish initial contract terms for longer periods of time. In Riverside County, the property

owner may file a Notice of Non-Renewal, stopping the automatic annual renewals and placing the contract in a status in which it runs out over the remaining life of the contract. Alternatively, a property owner may request the cancellation of a contract, which is subject to an approval process and cancellation fees/penalties, to provide an immediate end to the contract. When a Notice of Non-Renewal has matured or a cancellation occurs, removal of the subject land from the affected agricultural preserve requires a separate Board of Supervisors' action to amend the official county agricultural preserves maps by diminishing or disestablishing the agricultural preserve.

5.1.4.3 Local Regulations

Riverside County General Plan

The Riverside County General Plan ("RCGP 2015") contains the following policies in its Land Use Element and Multipurpose Open Space Element related to the preservation of agricultural resources:

Land Use Element:

- **Policy LU 20.1:** Encourage retaining agriculturally designated lands where agricultural activity can be sustained at an operational scale, where it accommodates lifestyle choice, and in locations where impacts to and from potentially incompatible uses, such as residential uses, are minimized, through incentives such as tax credits.
- **Policy LU 20.2:** Protect agricultural uses, including those with industrial characteristics (dairies, poultry, hog farms, etc.) by discouraging inappropriate land division in the immediate proximity and allowing only uses and intensities that are compatible with agricultural uses.
- **Policy 20.4:** Encourage conservation of productive agricultural lands. Preserve prime agricultural lands for high-value crop production.
- **Policy 20.5:** Continue to participate in the California Land Conservation Act (the Williamson Act) of 1965.
- **Policy 20.11:** The County of Riverside shall pursue the creation of new incentive programs, such as tax credits, that encourage the continued viability of agricultural activities.

Multipurpose Open Space Element:

- **Policy OS 7.3:** Encourage conservation of productive agricultural lands and preservation of prime agricultural lands.
- **Policy OS 7.5:** Encourage the combination of agriculture with other compatible open space uses in order to provide an economic advantage to agriculture. Allow by right, in areas designated Agriculture, activities related to the production of food and fiber, and support uses incidental and secondary to the on-site agricultural operation.



Eastern Coachella Valley Area Plan

The 2015 Eastern Coachella Valley Area Plan, contained within and adopted with the 2015 RCGP, contains policies related to the preservation of agricultural resources:

- **Policy ECVAP 5.1:** Retain and protect agricultural lands through adherence to the policies contained in the Agriculture section of the General Plan Land Use Element.

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the Riverside County General Plan and Eastern Coachella Valley Area Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies.

Riverside County Ordinances

In 1965, the Riverside County adopted Ordinance No. 509 (amended in 1988) related to Agricultural Preserves. Ordinance No. 509 indicated that suitable areas of the county may, by resolution of the Board of Supervisors, be established as agricultural preserves pursuant to the California Land Conservation Act of 1965 (Gov. Code Section 51200, *et seq.*), to be devoted to agricultural and compatible uses. Riverside County Ordinance No. 509 indicates that the following uses have been determined to be compatible uses within an agricultural preserve: flood control works, including channel rectification and alteration; public works required for fish and wildlife enhancement and preservation; and improvements for the primary benefit of the lands within the preserve.

Riverside County Ordinance No. 348 contains the county's land use planning and zoning regulations and related functions. According to Section 18.2.a.B(1) of said ordinance, "No federal, state, county or city governmental project shall be subject to the provisions of this ordinance, including such projects operated by any combination of these agencies or by a private person for the benefit of any such government agency, unless the agency provides by contract or otherwise that the project shall be constructed or operated in compliance with any or all provisions of this ordinance." The Project constitutes such an activity and is, therefore, exempt from the zoning regulations for Riverside County.

City of La Quinta General Plan

~~No Facilities are located within the City of La Quinta boundaries, therefore consideration of La Quinta policies are not included.~~

City of Coachella General Plan

The city of Coachella General Plan Update 2035 contains policies in its Land Use & Community Character Element and Sustainability & Natural Environment Element related to the preservation of agricultural resources:



Land Use & Community Character Element:

- **Policy 2.3:** Urban design as identity. Recognize the City can differentiate itself from other Coachella Valley cities through urban design practices such as the development of complete neighborhoods, preservation of agriculture and open space, pedestrian-oriented design and sustainable development practices.
- **Policy 2.4:** Natural context. Retain the City’s natural infrastructure and visual character derived from topography, farmlands and waterway corridors.
- **Policy 2.18:** Open space conservation. Establish mechanisms to provide for the conservation of resource land that is not yet conserved if it falls within one of the following categories:
 - Floodplain, including Special Flood Hazard Areas.
 - Open Space to be acquired.
 - Wildlife corridors.
 - Legacy farmland.
 - Riparian areas.
 - Areas of cultural significance.
 - Seismic or geological hazard areas.
 - Legacy viewsheds.
- **Goal 4:** Rural Areas. A strong, preserved rural and agricultural heritage and character that preserves the natural beauty and context of the City.
- **Policy 4.1:** Agricultural land preservation. Provide for the protection and preservation of agricultural land as a major industry for Coachella and sufficient to maintain the rural character of the City. Explore and allow a variety of methods of preserving land in sizes that are viable economic units for continuing agricultural activities including:
 - Density transfers to allow a greater portion of proposed development on other in order to allow productive sites to remain in agricultural production.
 - Use of Williamson Act.
 - Implementation of a “right-to-farm” ordinance.
 - Adopting a farmland protection program.
- **Policy 4.2:** Agricultural land conversion. Actively discourage the urbanization of agricultural land when other land not in agricultural use within the city limits is available for development.
- **Policy 4.3:** Agricultural elements in urban landscape. Where feasible, incorporate existing agricultural elements, such as date farms, vineyards and citrus trees into the urban landscape as part of development projects. This preservation would enable the



agricultural history of the City to remain visible and provide unique urban landscape features that can distinguish Coachella from other cities in the Coachella Valley.

- **Policy 4.4:** Agricultural land in sphere of influence. Preserve existing agricultural land in the Sphere of Influence and limit the annexation of active agricultural land, unless it is part of a development project.
- **Policy 4.6:** Conservation subdivisions. Provide for, and encourage, conservation subdivisions that cluster development on a site as a way of preserving valuable natural resources such as agricultural lands.
- **Policy 4.7:** City Greenbelt. Strive to create an undeveloped or rural greenbelt around the City comprised of rural residential, preserved parks and open space, and agricultural lands.
- **Policy 12.3:** Agriculture. Recognize and maintain agriculture and related uses as a key component of the City's long-term economic development strategy. Prioritize the preservation of date groves, citrus groves and vineyards.

Sustainability & Natural Environment Element:

- **Goal 5:** Agricultural Preservation. Viable, productive local agricultural lands and industry.
- **Policy 5.1:** Prime agricultural land. Prioritize the conservation of state-designated Important Farmlands and discourage the conversion of these lands to urbanized uses until such time as the land is needed for additional growth.
- **Policy 5.2:** Agricultural economy. Maintain and support a viable agricultural economy within the City that recognizes the community's agricultural heritage.
- **Policy 5.3:** Agriculture preservation. Continue to work with landowners in maintaining and extending existing Williamson Act contracts.
- **Policy 5.4:** Preservation tools. Preserve agriculturally important lands through conservation subdivisions, conservation easements and the transfer of development rights.
- **Policy 5.9:** Right to Farm. Support the right of existing farms to continue operations.
- **Policy 5.13:** Voluntary conservation. Support private conservation organizations that utilize voluntary conservation easements as a tool for agricultural land conservation to accomplish preservation of agricultural lands and continued agricultural operations.

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the city of Coachella General Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies.

5.1.5 Environmental Impacts

This analysis evaluates the potential for implementation of the Master Plan to result in adverse effects related to the conversion of farmland to non-agricultural use and whether these impacts are significant. Agricultural impacts are evaluated by comparing anticipated direct temporary and permanent ground disturbance areas associated with the Facilities to Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and to maps of Williamson Act contracts and zoning maps for the study area. Direct impacts are also evaluated based upon the size, shape and location of the subject agricultural lands, whether they are near or a part of a different planned land use, whether they are a fragment of farmland, and how location and shape affect the viability of long-term cultivation.

Threshold A: *Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.*

Based on the most current FMMP maps of the Master Plan Area (which are the 2016 maps for Riverside County and 2014 Maps for Imperial County), implementation of the above-ground components of the Master Plan would permanently convert the approximate acreage amounts listed below and provided in **Table 5.1-A**:

- ~~1,337~~ 1,297 acres of Prime Farmland (3 percent of the existing Prime Farmland in the Master Plan Area),
- ~~57~~ 55 acres of Farmland of Statewide Importance (~~8~~ 7 percent of the existing acreage in the Master Plan Area), and
- ~~240~~ 253 acres of Unique Farmland (3 percent of the existing acreage in the Master Plan Area) to non-agricultural use from the construction of Facilities.

The Master Plan would also convert approximately ~~958~~ 968 acres of Farmland of Local Importance (5 percent of the existing acreage in the Master Plan Area) to non-agricultural use. However, it should be noted that from a CEQA perspective, impacts to designated Farmland of Local Importance are not considered significant and do not require mitigation (*CEQA Statute* § 21060.1). These quantities include the designated Farmland in unincorporated Riverside County and the city of Coachella that would be impacted by the Master Plan.

The Facilities where underground pipelines are proposed would not permanently impact existing designated Farmland in the Master Plan Area as existing surface conditions would be restored to pre-Master Plan uses upon completion of construction. (Facilities identified for underground pipelines are denoted on **Figure 5.1-1** with dashed blue lines.) Thus, this analysis focuses on open channels, training levees, and the CVWD.

For the most part, as shown on **Figure 3.3 – Oasis Valley Floor Area** and **Figure 3-4 – Mecca North Shore Area**, the Facilities are located near roadways or edge areas of agricultural fields and other properties, and the construction, operation, and maintenance of these Facilities



would not significantly affect any existing or future cultivation of designated Farmland at the parcel(s) as a whole. However, there are certain exceptions where Facilities are not immediately adjacent to existing rights-of-way or include existing drainage features/facilities. These Facilities include: Line O01-01; the western portion of 68th Avenue Channel and its associated debris basin, training levees and channels; western portion of Kings Road Channel and its associated debris basin, training levees and channels; western portion of Travertine Point Channel No. 4; western portion of Travertine Point Channel No. 3; 84th Avenue Channel and its associated debris basin, training levees and channels; and Travertine Point Channel No. 1.

As shown in **Figure 3-5 – General Plan Land Use Map**, the general plan land use designation for the channels, debris basins, training levees, and the CVSC is largely agricultural but also includes significant areas designated for non-agricultural uses.

Comparative to the existing acreages within the Master Plan Area, and the existing acreages within the Coachella Valley production district and Riverside County as a whole, and given the general siting of Facilities within or immediately adjacent to rights-of-way, the Facilities in and of themselves would not convert significant areas of designated Farmland to non-agricultural use nor have a significant material impact on the existing and future economic value of Riverside County's or the Coachella Valley production district's agricultural production.

Moreover, the Master Plan serves as a long-term framework of necessary regional drainage facilities with conceptual locations and sizing (and subject to subsequent environmental impact analysis) as future development is proposed and constructed in the Master Plan Area. As such, the Master Plan would be realized over a span of many years.

In other words, the Master Plan is CVWD's proactive approach to identifying adequate drainage infrastructure predicated on the assumption—consistent with regional growth projections—that agricultural land, including designated Farmland, would be displaced as growth and urbanization occurs in the Master Plan Area. Because, based on the current FMMP maps, construction and operation of the Facilities would convert approximately ~~2,592~~ 2,574 acres of existing designated Farmland the conversion of state-designated Prime Farmland, Farmland of Statewide Importance, and Unique Farmland in the Master Plan Area to a non-agricultural use is considered **significant**. As discussed below, mitigation measure **MM AG 1** provide measures that would reduce the Project's impacts to the conversation of farmland. However, because state-designated farmland would still be lost after implementation of all feasible mitigation, impacts to the conversion of farmland would be **significant and unavoidable**.

Threshold B: *Conflict with existing zoning for agricultural use, or a Williamson Act contract.*

Some of the Facilities would traverse lands that are designated and zoned for agricultural use in the Master Plan Area as shown on **Figure 3-5 – General Plan Land Use Map** and **Figure 3-**

6 – Zoning Map. These affected lands are located within unincorporated Riverside County as the land in proximity to Facilities within the City of Coachella are designated and zoned for commercial, industrial, and residential uses, which reflects the city’s urbanization and intent to continue urbanizing within its boundaries. Therefore, the Master Plan would have no impact in regards to conflicting with existing zoning for agricultural use within the city of Coachella. Moreover, while Facilities would traverse lands currently designated and zoned for agricultural use in unincorporated Riverside County, the construction, operation, and maintenance of the Facilities is an activity that is exempt from Riverside County’s zoning regulations per Ordinance No. 348 Section 18.2.a., regardless whether the entity constructing the Facility(ies) is a public agency or private developer.

Specifically, when the Facility(ies) is constructed by a public agency, the activity constitutes a public project by a governmental agency, and is therefore exempt from the county’s zoning ordinance pursuant to Ordinance No. 348 Section 18.2.a.B(1). When the Facility(ies) is constructed by a private developer as part of a larger development project, pursuant to Ordinance No. 348 Section 18.2.a.A(4), the activity of constructing the Facility(ies) is not considered a private project, which would then be subject to the county’s zoning ordinance, as the Facility(ies) is for governmental purposes and would be under the authority of CVWD upon completion of construction. Therefore, the Master Plan would have no impact in regards to conflicting with existing zoning for agricultural use within unincorporated Riverside County.

Regarding Williamson Act contracts, no land within Imperial County and no lands in the city of Coachella near Facilities are under a Williamson Act contract; however, there are approximately ~~13,459~~ 13,091 acres of Williamson Act contract lands in unincorporated Riverside County (~~11,446~~ 10,380 acres under active Williamson Act contract and ~~2,013~~ 2,711 acres under non-renewal Williamson Act contract). Some of the Facilities are proposed to traverse these parcels under Williamson Act contracts (see **Figure 5.1-2**). As shown on **Table 5.1-B – Impacted Williamson Act Lands in the Master Plan Area**, the Facilities, as currently proposed, would impact approximately ~~281~~ 306 acres of land under active Williamson Act contract and approximately ~~41~~ 21 acres of land under non-renewal Williamson Act contract, which represents approximately ~~2~~ 3 and ~~1~~ percent respectively, of these respective lands.

Table 5.1-B – Impacted Williamson Act Lands in the Master Plan Area

Jurisdiction	Existing Acreage	SMP Facilities Construction Footprint ^a	Percent of Existing Acreage
Active Williamson Act Contract Lands			
City of Coachella	0	N/A	N/A
Unincorporated Riverside County	11,446 <u>10,380</u>	281 <u>306</u>	2 <u>3</u> %



Jurisdiction	Existing Acreage	SMP Facilities Construction Footprint ^a	Percent of Existing Acreage
Non-Renewal Williamson Act Contract Lands			
City of Coachella	0	N/A	N/A
Unincorporated Riverside County	2,013 2,711	41 21	2 1%

^a Construction footprint for open channels and training levees buffered 100 feet on either side from centerline and Coachella Valley Storm Drain buffered 30 feet on either side from centerline. Acreages of Facilities does not include underground pipelines.

As set forth by California Government Code Section 51293(e)(1):

The location or construction of the following types of improvements, which are hereby determined to be compatible with or to enhance land within an agricultural preserve: Flood control works, including channel rectification and alteration.

And as set forth by Riverside County Ordinance No. 509(A)(6): “The following uses are hereby determined to be agricultural and compatible uses within an agricultural preserve [...]: Flood control works, including channel rectification and alteration.” Therefore, the Facilities are determined at the state and local level to be “agricultural” and thereby compatible with Williamson Act contract lands and agricultural preserves.

Similar to the discussion above, construction, operation, and maintenance of the Facilities would convert a portion of land as required for the stormwater conveyance and flood control protection system to perform adequately, which would include land within an active Williamson Act contract; however, the whole of each of the affected Williamson Act contract lands would not be impaired or precluded from current and continued agricultural use and the Project would not indirectly result in or compel owners into non-renewal or cancellation of a Williamson Act contract.

Moreover, the Master Plan serves as a long-term outline of necessary regional drainage facilities with conceptual locations and sizing that would be fine-tuned and finalized at a later date (and subject to subsequent environmental impact analysis) as future development is proposed and constructed in the Master Plan Area. As such, the Master Plan would be realized over a span of many years. In other words, the Master Plan is CVWD’s proactive approach to identifying adequate drainage infrastructure predicated on the assumption—consistent with regional growth projections—that agricultural land, including those under active Williamson Act contracts, would be eventually displaced as growth and urbanization occurs in the Master Plan Area. Therefore, as the Master Plan consists of facilities that are regarding by the state Government Code and by Riverside County Ordinance No. 509 as agricultural and compatible with Williamson Act contract lands (agricultural preserves), and as the Facilities are intended to be constructed along with anticipated future development in the Master Plan Area so as to



provide adequate stormwater conveyance and flood control protection, impacts regarding a conflict with Williamson Act contract lands would be less than significant.

Therefore, as the Project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract in either the city of Coachella or unincorporated Riverside County, impacts in this regard would be **less than significant**.

5.1.6 Mitigation Measures

An EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts (State *CEQA Guidelines* Section 15126.4). The mitigation measures discussed below were identified and evaluated for their ability to mitigate the Master Plan's potentially significant adverse impacts regarding conversion of farmland.

MM AG 1: Because the State reevaluates and changes Farmland designations approximately every two years, to determine the specific impacts to designated Farmland resulting from Master Plan Facilities to be constructed or funded by CVWD, as part of the design process for each CVWD constructed or funded-Facility, CVWD shall use the most current FMMP data available to determine the number of acres of Prime Farmland, Unique Farmland, and Farmland of Statewide Importance that would be permanently converted to a non-agricultural use by such Facility. This number shall be referred to as the "Acres of Converted Farmland."

If the Acres of Converted Farmland for any CVWD constructed or funded Facility is greater than zero, CVWD shall, prior to construction of the Facility, provide mitigation at a ratio equivalent to the Acres of Converted Farmland using at least one of the following:

- a. Placement of an agricultural easement for on property containing soils that meet the physical and chemical criteria for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as determined by the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS). The property need not be contiguous and may be located anywhere within CVWD's boundaries.
- b. Cancellation of a Notice (or Notices) of Non-renewal or an agreement not to file a Notice of Non-renewal for Williamson Act contracts on property (or properties). The property need not be contiguous and may be located anywhere within CVWD's boundaries.
- c. Placement of a new Williamson Act contract on property or properties. The property need not be contiguous and may be located anywhere within CVWD's boundaries.
- d. Any combination of items a, b, or c, above that results in agricultural easements, stopping cancellation of Williamson Act contracts, or new Williamson Act contracts at a ratio equivalent to the Acres of Converted Farmland.



5.1.7 Project-Specific Environmental Effects after Mitigation Measures are Implemented

Direct impacts include the conversion of approximately ~~1,634~~ 1,605 acres of state designated farmland. Because, even after all feasible mitigation, the Master Plan would result in conversion of state-designated farmland, the Master Plan's impact would be significant and unavoidable. Thus, adoption of Statement of Overriding Considerations would be required prior to Project approval.

5.1.8 Cumulative Environmental Effects after Mitigation Measures are Implemented

A cumulatively considerable impact would occur if the Project, in conjunction with other future projects, results in a significant impact to agriculture and forestry impacts. The geographic scope for cumulative impacts to agriculture and forestry resources is the Master Plan Area, which includes portions of unincorporated Riverside and Imperial counties and portions of the ~~Cities of~~ city of Coachella and ~~La Quinta~~.

Because the Master Plan does not propose any changes in land uses within the Plan Area, this Recirculated 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).)

Riverside County

Future development within the unincorporated area of Riverside County consistent with the 2015 Riverside County General Plan build-out, within the Master Plan Area, would contribute non-substantially to incremental impacts to forestry resources and uses in Riverside County.



With regard to agricultural resources, even with mitigation, EIR No. 521 determined that growth within the unincorporated area of Riverside County pursuant to the 2015 Riverside County General Plan would contribute substantially to significant cumulative agricultural impacts. These include direct and indirect conversion of designated Farmlands, as well as encroachment on existing agricultural uses. 2015 Riverside County General Plan build out would also result in the significant conversion of active agricultural land and agricultural soils to non-agricultural uses. Due to the inherently growth-inducing and growth-accommodating nature of a general plan, there is no feasible mitigation to fully reduce these cumulative impacts to below the level of significance. (GPA No. 960 EIR 521, pp. 5-72 – 5-74). Although implementation of the Master Plan and construction of Master Plan Facilities is anticipated to occur in response to development, because the construction and operation of Master Plan Facilities would result in the direct conversion of Farmland, the Master Plan's contribution to cumulative agricultural impacts in unincorporated Riverside County is considered cumulatively considerable.

Imperial County

It should be noted that the impact on forestry resources was not analyzed in the current Imperial County General Plan EIR as it was not an environmental issue on the CEQA checklist at that time. All existing agricultural land would be preserved for irrigation agriculture, livestock production, aquaculture, and other agriculture-related uses, except for non-agricultural uses identified in the General Plan or in previously adopted city general plans. Implementation of the General Plan is intended to prevent the regional cumulative loss of agricultural land in the short-term and to limit future conversion of any agricultural land to urban uses, unless all urban designations within Imperial County have been built-out. Further, the Imperial County General Plan EIR contains measures to mitigate agricultural impacts, which were determined to reduce impacts to less than significant with mitigation. (ICGP EIR, pp. III-55 – III-56; pp. V-4 – V-5.) Because Project implementation would not result in the conversion of Farmland or Williamson Act contracted land in Imperial County, the Project's contribution to cumulative agricultural impacts in unincorporated Imperial County is not cumulative.

City of Coachella

As there is no existing forestland or timberland within the City of Coachella or its Sphere of Influence, no impacts to forestry resources from Coachella General Plan build-out would occur (CGP EIR, Appendix 11.1, pp. 17-18). Future development projects in the City of Coachella and its Sphere of Influence, the Coachella Valley, and Riverside County would result in the further loss of agricultural resources. These regional and countywide trends are long-term trends that may result in cumulatively significant losses of agricultural resources. While the Coachella General Plan provides extensive policy direction that helps minimize the impacts to agricultural resources, the scope of these cumulative impacts extends beyond the jurisdiction of the City of Coachella. These cumulative impacts could possibly be mitigated with region-wide or countywide agricultural preservation programs, such as the greenbelt program established in Ventura County. However, the establishment of such a program is beyond the scope of control



of the City of Coachella as the city's control is limited to its jurisdiction. Such a program would need to be established and managed by Riverside County or Coachella Valley Association of Governments in conjunction with all of the cities in Riverside County or the region. Thus, such mitigation would be infeasible for the City of Coachella to implement. Thus, the General Plan build-out's conversion of agricultural resources would be cumulatively considerable and the cumulative impacts to agricultural resources would be significant and unavoidable. (CGP EIR, p. 4.2-17). Although implementation of the Master Plan and construction of Master Plan Facilities is anticipated to occur in response to development, because the construction and operation of Master Plan Facilities would result in the direct conversion of Farmland, the Master Plan's contribution to cumulative agricultural impacts in the city of Coachella is considered cumulatively considerable.

City of La Quinta

~~It should be noted that the impact on forestry resources was not analyzed in the current City of La Quinta General Plan EIR. Implementation of the General Plan does not require landowners to immediately convert Farmland to new land uses. However, new proposed development would be required to develop according to new land use designations. As a result, agricultural lands would be affected by new development; however, measures are included in the La Quinta General Plan EIR to mitigate indirect impacts to agricultural impacts. There are currently over 545,000 acres of important Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance) in Riverside County. The 7,391 acres of land designated as important Farmland in the City of La Quinta represents 1.3 percent of the total important Farmland in Riverside County. The eventual loss of these lands would not cumulatively impact agriculture in the region. Moreover, land uses in the eastern Sphere of Influence are currently governed by Riverside County's Vista Santa Rosa Community Plan, which allows for both residential and agricultural related uses. La Quinta's master plan for area is anticipated to allow for continued agricultural and ranching uses, and the city's zoning ordinance includes an Agriculture/Equestrian Overlay which applies to all lands in the Sphere of Influence; this overlay was specifically designed to allow for the preservation of agricultural and ranching uses in the Sphere area. Implementation of the General Plan was determined to result in less than significant impacts to the conversion of designated Farmland, conflicts with agricultural zoning, conflicts with Williamson Act lands, and to the conversion of Farmland to non-agriculture use. Therefore, cumulative impacts to agricultural resources from build-out of the La Quinta General Plan were determined to be less than significant with mitigation. (LQGP EIR, pp. III 10—III 12, pp. VIII 4—VIII 5) Although the Master Plan area includes a portion of the city of La Quinta, no Facilities are proposed within the city boundaries; and therefore, implementation of the project would not impact agriculture.~~



Cumulative Environmental Effects

The Project would not impact forestry resources either at the Project-specific or cumulatively considerable levels as the Facilities would not impact areas zoned or utilized as forestland or timberland.

However, as discussed in the preceding paragraphs the conversion of state-designated Farmland to non-agricultural use within the Master Plan area resulting from implementation of the Master Plan would result in a cumulatively considerable impact. Thus cumulative impacts to agricultural resources would be **significant and unavoidable**. Adoption of a Statement of Overriding Considerations would be required prior to Project Approval.

5.1.9 References

The following references were used in the preparation of this section of the Recirculated Draft PEIR:

- 2015 APR Riverside County Agricultural Commissioner's Office, *2015 Agricultural Production Report*. (Available at <http://www.rivcoag.org/Portals/0/Publications/2015%20Reports/2015%20Riverside%20County%20Agricultural%20Production%20Report.pdf?ver=2016-09-01-062011-563>, accessed October 2016.)
- 2016 APR Riverside County Agricultural Commissioner's Office, *2016 Agricultural Production Report*. (Available at <http://www.rivcoawm.org/Portals/0/2016%20crop%20report.pdf?ver=2017-12-05-162552-850>, accessed March 1, 2018)
- 2015 CVR Riverside County Agricultural Commissioner's Office, *Coachella Valley Acreage and Agricultural Crop Report 2013*. (Available at <http://www.rivcoag.org/Portals/0/Publications/2015%20Reports/2015%20CV%20Dist%20Crop%20Report.pdf?ver=2016-09-01-062011-470>, accessed October 28, 2016.)
- 2016 CVR Riverside County Agricultural Commissioner's Office, *Coachella Valley Acreage and Agricultural Crop Report 2016*. (Available at <http://rivcoawm.org/Portals/0/2016%20CV%20Dist%20Crop%20Report.pdf?ver=2018-01-09-141254-700>, accessed March 1, 2018.)
- 2016 PVR Riverside County Agricultural Commissioner's Office, *Palo Verde Valley Acreage and Agricultural Crop Report 2016*. (Available at <http://rivcoawm.org/Portals/0/2016%20PV%20Dist%20Crop%20Report.pdf?ver=2018-01-09-141255-170>, accessed March 1, 2018.)
- 2016 RCR Riverside County Agricultural Commissioner's Office, *Riverside/Corona District Acreage and Agricultural Crop Report 2016*. (Available at <http://rivcoawm.org/Portals/0/2016%20RV%20Dist%20Crop%20Report.pdf?ver=2018-01-09-141255-403>, accessed March 1, 2018.)



- 2016 STR Riverside County Agricultural Commissioner’s Office, San Jacinto/Temecula Valley Acreage and Agricultural Crop Report 2016. (Available at <http://rivcoawm.org/Portals/0/2016%20SJ%20Dist%20Crop%20Report.pdf?ver=2018-01-09-141546-857>, accessed March 1, 2018.)
- 2015 RCGP Riverside County, *General Plan, Multipurpose Open Space Element*, December 8, 2015. (Available at http://planning.rctlma.org/Portals/0/genplan/general_plan_2016/elements/Ch05_MOSE_120815.pdf?ver=2016-04-01-100801-367, accessed December 31, 2015.)
- 2015 RCGP EIR 521 Riverside County, *General Plan Environmental Impact Report No. 521*, Recirculated Public Review Draft, February 2015. (Available at <http://planning.rctlma.org/ZoningInformation/GeneralPlan/GeneralPlanAmendmentNo960EIRNo521CAPFebruary2015/DraftEnvironmentalImpactReportNo521.aspx>, accessed September 2016.)
- CGP City of Coachella, *General Plan 2035*, adopted April 22, 2015. (Available at <http://www.coachella.org/Home/ShowDocument?id=3221>, accessed September 11, 2015.)
- CGP EIR City of Coachella, *General Plan Update Final EIR*, certified April 22, 2015. (Available at <http://cityofcoachellageneralplanupdate.weebly.com/final-eir.html>; accessed September 2016.)
- DOC California Department of Conservation, Division of Land Resources Protection, Farmland Mapping and Monitoring Program, Important Farmland Categories. (Available at http://www.conservation.ca.gov/dlrp/fmmp/mccu/Pages/map_categories.aspx, accessed December 15, 2014, and August 2016.)
- ECVAP Riverside County, *Eastern Coachella Valley Area Plan Public Review Draft*, February 2015, adopted December 8, 2015. (Available at http://planning.rctlma.org/Portals/0/genplan/general_plan_2015/GPA%20960/Area%20Plans/ECVAP_6_2013%202014-01-20.pdf, accessed December 15, 2015.)
- LQGP-EIR City of La Quinta, *Environmental Impact Report for the City of La Quinta General Plan*, February 19, 2013. (Available at City of La Quinta Community Development Department.)
- Ord 438 Riverside County, *Ordinance No. 348 (as amended through 348.4773), Land Use Planning and Zoning Regulations and Related Functions*. (Available at http://planning.rctlma.org/Portals/0/zoning/ordnance/Ord.%20348.4773_cle_an_version.pdf, accessed December 16, 2014.)

- Ord 509 Riverside County, *Ordinance No. 509 (as amended through 509.2), Relating to Agricultural Preserves*. (Available at <http://www.rivcocob.org/ords/500/509.2.pdf>, accessed December 16, 2014.)
- RCGP Riverside County, *General Plan Land Use Element and Multipurpose Open Space Element*, adopted December 15, 2015. (Available at <http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx#top>, accessed December 17, 2015.)
- RCGP 2015 EIR 521 Riverside County, *General Plan Update Project, General Plan Amendment No. 960, Environmental Impact Report No. 521*, Recirculated Public Review Draft, February 2015, adopted December 10, 2015. (Available at <http://planning.rctlma.org/ZoningInformation/GeneralPlan/GeneralPlanAmendmentNo960EIRNo521CAPFebruary2015/DraftEnvironmentalImpactReportNo521.aspx>, accessed September 11, 2015 and December 17, 2015.)
- SCS United States Soil Conservation Service (now Natural Resources Conservation Service), *Soil Survey of Riverside County, California, Coachella Valley Area*, 1980.



5.2 Air Quality and Greenhouse Gas Emissions

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (example-text.)

The focus of this section is to assess, at a program-level, potential impacts related to air quality and greenhouse gas emissions from construction and operation of the Facilities identified in the Master Plan. The discussion in this section is based on the *Air Quality and Greenhouse Gas Impact Analysis for the Eastern Coachella Valley Stormwater Master Plan* (prepared by WEBB, 2015; and available in Appendix B of the EIR). 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 staff, the California Emissions Estimator Model (CalEEMod™) version 2013.2.2 computer program was used to quantify air quality emissions.

As discussed below and in the Initial Study prepared for the Project (Appendix A), the Project's potential to have a substantial adverse effect with regard to air quality during construction of the Master Plan Facilities is significant and unavoidable. The Project's potential to have a substantial adverse effect with regard to greenhouse gas emissions is less than significant.

5.2.1 Setting

5.2.1.1 Physical Setting

The proposed Project lies within the Coachella Valley area of the Salton Sea Air Basin (SSAB or Basin), which is under the jurisdiction of the SCAQMD. The Coachella Valley area consists of an approximately 2,500-square mile portion of central Riverside County. The Coachella Valley is aligned in a northwest-southeast orientation stretching from Banning Pass to the Salton Sea. Geographically, the Coachella Valley is bounded by the San Jacinto Mountains to the west, and the Little San Bernardino Mountains to the east (SCAQMD 1996, p. 1-3). Northwesterly winds dominate throughout the year, with southeasterly winds showing a secondary peak frequency. Stronger winds occur most often in the spring and summer months. High-wind situations, which can produce widespread dust storms, are limited primarily to the spring months of April through June, although these conditions more rarely can occur any time during the year (SCAQMD 1996, p. 1-8.).

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features. Atmospheric conditions such as wind speed, wind direction, and air temperature gradients, along with local topography, influence the movement and dispersal of pollutants and thereby provide the link between air pollutant emissions and air quality (SCAG 2012, p. 3.2-15.).



5.2.1.2 Climate

Climatic conditions in the Salton Sea Air Basin (SSAB) are governed by the large-scale sinking and warming of air in the semi-permanent subtropical high pressure center of the Pacific Ocean. The high-pressure ridge blocks out most mid-latitude storms except in the winter when the high is weakest and farthest south. Similarly, the coastal mountains prevent the intrusion of any cool, damp marine air found near California's coastal areas. Because of the local mountains acting as a natural barrier, the SSAB experiences clear skies, very low humidity, extremely hot summers, mild winters, and little rainfall. The flat terrain of the valley and the strong temperature differentials created by intense solar heating, produce moderate winds and deep thermal convection. (SCAG 2012, p. 3.2-16.)

In the SSAB, the presence of the Pacific high-pressure cell can cause the air mass aloft to sink. As the air descends, compressional heating warms it to a temperature higher than the air below. This highly stable atmospheric condition, termed a subsidence inversion, can act as a nearly impenetrable lid to the vertical mixing of pollutants. The strength of these inversions makes them difficult to disrupt. Consequently, they can persist for one or more days, causing air stagnation and the buildup of pollutants. Highest ozone levels are often associated with the presence of this type of inversion. Due to strong surface heating in the SSAB, these inversions are usually broken, allowing pollutants to more easily disperse. Weak, surface inversions are caused by cooling of air in contact with the cold surface of the earth at night. In valleys and low-lying areas, this condition is intensified by the addition of cold air flowing downslope from the hills and pooling on the valley floor. Subsidence inversions are common from November through June, but appear to be relatively absent July through October (SCAG 2012, p. 3.2-17).

5.2.1.3 Precipitation and Temperature

Precipitation is less than six inches annually and occurs mostly in the winter months from active frontal systems and in the late summer months from thunderstorms. Temperatures exceed 100 degrees Fahrenheit, on the average, for four months each year, with daily highs near 110 degrees Fahrenheit during July and August. During the winter season, daytime highs are quite mild, but the dry air is conducive to nocturnal radiational cooling, with early morning temperatures 40 degrees Fahrenheit and averaging 70-80 degrees Fahrenheit in the daytime (SCAQMD 1996, p. 1-6).

5.2.1.4 Winds

The Coachella Valley is exposed to frequent gusty winds, primarily along the Interstate-10 corridor. The strongest and most persistent winds typically occur immediately east of Banning extending to Indian Avenue (in Palm Springs, western portion of Coachella Valley). This area is referred to as the San Geronio Pass, which is noted as a wind power generation resource area. Aside from this locale, the wind conditions in the remainder of the valley are geographically distinct. Stronger winds tend to occur in the open mid-portion of the valley,



while lighter winds tend to occur closer to the foothills. Less frequently, widespread gusty winds occur over all areas of the valley (SCAQMD 1996, p. 1-7).

There are two primary causes of these widespread wind conditions: (1) strong pressure and air mass density differences between the desert air mass and the marine-modified coastal air mass; and (2) strong downbursts from summertime thunderstorms. In the first condition, surface low pressure in the desert causes cooler and denser ocean-modified air to move through Banning Pass into the Coachella Valley. As synoptic (or very large-scale) weather patterns reinforce the localized regime through wind-inducing surface pressure gradients, strong and widespread winds result that frequently exceed 40 miles per hour (mph). These winds can persist for many hours and generally have a west-through-north wind component (SCAQMD 1996, p. 1-7).

By comparison, winds generated by summer thunderstorms are more localized in nature, but the strong downward rushes of cooler air can produce wind gusts that occasionally exceed 60 mph. These wind gusts and gust "fronts" can pick up large amounts of natural desert soils which, once suspended in the atmosphere, can be transported over large distances, even though the gustiness subsides. Since the necessary weather pattern for producing such thunderstorms is one in which high level tropical moisture is transported into the deserts from areas to the southeast, these storms are typically associated with erratic southeasterly winds (SCAQMD 1996, p. 1-7).

Northwesterly winds dominate throughout the year, with southeasterly winds showing a secondary peak frequency. Stronger winds occur most often in the spring and summer months. High-wind situations, which can produce widespread dust storms, are limited primarily to the spring months of April through June, although these conditions more rarely can occur any time during the year (SCAQMD 1996, p. 1-8).

5.2.1.5 Blowsand

Within the Coachella Valley, there is a natural sand migration process that has direct and indirect effects on air quality. Called "blowsand," this natural sand migration process produces PM-10 in two ways: (1) by direct particle erosion and fragmentation (natural PM-10), and (2) by secondary effects, as sand deposits on road surfaces are ground into PM-10 by moving vehicles and resuspended in the air (man-made PM-10) (SCAQMD 1996, p. 1-8).

Under natural conditions, the overall region of blowsand activity encompasses approximately 130 square miles extending from near Cabazon to Indio, and lying primarily between the San Gorgonio Mountains and the Whitewater River Stormwater Channel on the southwest and San Bernardino Mountains and the Indio Hills on the northeast. Sands supplied by floodwaters to the westerly and northerly portions of the region are transported by strong, essentially unidirectional winds to the southerly portion of the region. Transporting winds emanate from the San Gorgonio Pass and occur most frequently and with the greatest intensity during the spring and early summer months. Once having entered the Coachella Valley, the winds tend to



dissipate rapidly in the southeasterly direction, losing virtually their entire capability of transporting significant quantities of sand before reaching the eastern portion of the Coachella Valley near Indio (SCAQMD 1996, pp. 1-9-1-10).

The blowsand process varies considerably over time, depending on the availability of flood-provided sand, fluctuations in the transporting wind regime, and to a lesser extent, changes in vegetative cover within the Coachella Valley. Sand transport averages 180,000 cubic yards of per year. Mean annual rates of transport, expressed in terms of cubic yards per one-foot-wide path (CYPF) extending in the direction of sand movement, have been determined for the entire region under natural conditions, and range from near zero in the southeasterly portion near Indio to more than 35 CYPF near Palm Springs (SCAQMD 1996, p. 1-10).

5.2.2 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.

5.2.2.1 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.)

5.2.2.2 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.)



5.2.3 Air Pollution Constituents

5.2.3.1 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 (NO₂) and nitric oxide (NO),¹ sulfur dioxide (SO₂), 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_x, 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 (O₃), which is one of the products formed when NO_x 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_x)** that contribute to air pollution, include nitric oxide (NO) and nitrogen dioxide (NO₂), are generally referred to as NO_x. NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO₂ 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_x. NO₂ at atmospheric concentrations is a potential irritant

¹ NO₂ and NO are collectively known as oxides of nitrogen (NO_x).



and can cause 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 2016.)

- **Ozone (O₃)** 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 NO₂ and VOC which results in the formation of O₃. Conditions that lead to high levels of O₃ 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.

- **Sulfur dioxide (SO₂)** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. SO₂ can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO₂ 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 2016.) Although SO₂ concentrations have been reduced to levels well below state and federal standards, further reductions in SO₂ emissions are needed because SO₂ 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 would 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)** ROGs 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.)

Table 5.2-A presents the federal and state attainment status for criteria pollutants within the SSAB.

Table 5.2-A – Salton Sea Air Basin Designation Status

Criteria Pollutant	Federal Designation	State Designation
Ozone – 8 hour	<i>Non-attainment</i>	<i>Non-attainment</i>
Ozone – 1 hour	N/A	<i>Non-attainment</i>
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment/Unclassified	Attainment
PM-10	<i>Non-attainment</i>	<i>Non-attainment</i>
PM-2.5	Attainment/Unclassified	Attainment/Unclassified
Lead	Attainment	Attainment
Sulfates	No Standard	Attainment



Criteria Pollutant	Federal Designation	State Designation
Hydrogen Sulfide	No Standard	Unclassified
Vinyl Chloride	No Standard	Not Sufficient Data

Source: CVWD 2016, Table 4.4-5

5.2.3.2 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.

5.2.3.3 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 climate change 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 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 the 2016 Edition of the California Air Resources Board (CARB) Greenhouse Gas Emission Inventory, in 2014 over 77 percent of the state’s GHG emissions are from transportation (36 percent), industrial (21 percent), and electric power (20 percent). The remaining 23 percent of the GHG emissions are from commercial and residential (9 percent), agricultural (eight percent), high global warming potential (GWP) gases (4 percent) and recycling and waste (2 percent) (CARB 2016, p. 2.). Methane (CH₄), a highly potent GHG,



results from off-gassing associated with agricultural practices, landfills, and wastewater treatment (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 (CO₂)**– 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 (CH₄)** – 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 (NO), Sulfur Hexafluoride (SF₆), Hydrofluorocarbons (HFC), and Perfluorocarbons (PFC)**– 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 (CFC)**– 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 or 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 (HFC)** – 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 would 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 CO₂. CO₂ has a GWP of one. CH₄ has a GWP of 21, meaning that on a molecule by molecule basis, CH₄ has 21 times the global warming potential of CO₂. CO₂ equivalents (CO₂E) are the emissions of a GHG multiplied by the GWP. The CalEEMod program calculates the CO₂E based on the GWPs reported in the IPCC Second Assessment Report (IPCC 1995, p. 22).

Table 5.2-B shows the GWP and atmospheric lifetimes of various GHGs with relatively long atmospheric lifetimes from the IPCC 1995 report.

Table 5.2-B – Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime	Global Warming Potential (100-Year Time Horizon)
Carbon Dioxide (CO ₂)	50-200	1
Methane (CH ₄)	12±3	21
Nitrous Oxide (N ₂ 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 ₄)	50,000	6,500
Perfluoroethane (C ₂ F ₆)	10,000	9,200
Sulfur Hexafluoride (SF ₆)	3,200	23,900

Source: IPCC 1995, Table 4

Greenhouse Gas 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 the location of a particular GHG emission, in contrast to the situation for criteria pollutants, does not change its environmental impact.



Worldwide, California is the 12th to 16th largest emitter of CO₂, and is responsible for approximately two percent of the world's CO₂ emissions (CEC 2006a, p. i). In 2004, the CEC reported that California produced 492 million gross metric tons (one metric ton 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 ton of carbon dioxide equivalent (MMTCO₂E) 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 MMTCO₂E (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.)

In 2014 total GHG emissions within the state were 441.5 MMTCO₂E. This is a decrease of 2.8 MMTCO₂E compared to 2013 and a 9.4 percent decrease in GHG emission levels since peak levels in 2004. Between 2000 to 2014, per capita GHG emissions in California have continued to drop from a peak of 13.9 metric tons in 2001 to 11.4 metric tons in 2018; an 18 percent decrease. Overall trends demonstrate that the carbon intensity of California's economy, that is the amount of carbon pollution per million dollars of gross domestic product (GDP) have declined 28 percent since 2001, while the state's GDP has increased 28 percent during this period. (CARB 2016a, p. 1) **Table 5.2-C** identifies the change in GHG emissions from 2004 to 2014 by sector.



Table 5.2-C – Comparison of GHG Emissions Sources in California 2004 and 2014

Source Category	2004 GHG Emissions (MMTCO2E)	2014 GHG Emissions (MMTCO2E)	Change from 2014 to 2004
Transportation	182.45	159.53	-13%
Industrial Uses	97.6	93.32	-4%
Electricity Generation	115.2	88.24	-23%
Residential and Commercial Uses	43.79	38.34	-12%
Agriculture	33.82	36.11	+7%
High GWP Substances	7.02	17.15	+144%
Recycling and Waste	7.75	8.85	+14%

Source: CARB 2016(b)

5.2.3.4 Monitored Air Quality

The Project area is located within SCAQMD Source Receptor Area (SRA) 30. The most recent published data for the SRA 30 is presented in **Table 5.2-D – Air Quality Monitoring Summary – 2011–2013 (SRA 30)**. This data indicates that the baseline air quality conditions in the Project area include occasional events of very unhealthful air. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area.



Table 5.2-D – Air Quality Monitoring Summary – 2011–2013 (SRA 30)

	Pollutant/Standard	Monitoring Years		
		2011	2012	2013
No. Days Exceeded	Ozone (O₃):			
	Health Advisory - 0.15 ppm	0	0	0
	California Standard:			
	1-Hour - 0.09 ppm	3	2	2
	8-Hour - 0.07 ppm	42	43	38
	Federal Primary Standards:			
	8-Hour - 0.075 ppm	19	24	18
	Max 1-Hour Conc. (ppm)	0.099	0.102	0.105
	Max 8-Hour Conc. (ppm)	0.090	0.089	0.087
No. Days Exceeded	Carbon Monoxide (CO):^a			
	California Standard: ^b			
	1-Hour - 20 ppm	0	0	0
	8-Hour - 9.0 ppm	0	0	0
	Federal Primary Standards: ^b			
	1-Hour - 35 ppm	0	0	0
	8-Hour - 9.0 ppm	0	0	0
	Max 1-Hour Conc. (ppm)	--	--	--
	Max 8-Hour Conc. (ppm)	0.6	0.5	1.5
No. Days Exceeded ^d	Nitrogen Dioxide (NO₂):^a			
	California Standard:			
	1-Hour - 0.18 ppm (180 ppb)	0	0	0
	Federal Standard:			
	Annual Arithmetic Mean (ppb) ^c	8.0	7.8	7.5
	Max. 1-Hour Conc. (ppb)	44.7	45.1	52.3
No. Days Exceeded	Sulfur Dioxide (SO₂):^d			
	California Standards:			
	1-Hour – 0.25 ppm (250 ppb)	0	0	0
	24-Hour – 0.04 ppm (40 ppb)	0	0	0
	Federal Primary Standards: ^e			
	1-Hour – 0.075 ppm (75 ppb)	0	0	0
	Max. 1-Hour Conc. (ppb)	51.3	4.3	8.1
	Max. 24-Hour Conc. (ppb)	--	--	--
No. Days Exceeded	Suspended Particulates (PM-10):			
	California Standards:			
	24-Hour - 50 µg/m ³	3	7	23
	Federal Primary Standards:			
	24-Hour – 150 µg/m ³	0	0	0
	Annual Arithmetic Mean (µg/m ³) ^f	28.5	29.5	38.1
	Max. 24-Hour Conc. (µg/m ³)	106	124	129
No. Days Exceeded	Fine Particulates (PM-2.5):			
	California & Federal Primary Standards:			
	24-Hour – 35µg/m ³	0	0	0
	Annual Arithmetic Mean (µg/m ³) ^f	7.2	7.6	8.4
	Max. 24-Hour Conc. (µg/m ³)	35.4	20	25.8

Notes: -- indicates no data available; ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms/cubic meter

- Data not monitored; data obtained from Coachella Valley 1 in Palm Springs.
- The state and federal 1-hr and 8-hr standards were not exceeded.
- Federal and state AAM for NO₂ is ≥ 53.4 and 30 ppb, respectively.
- Data not monitored; data obtained from Metropolitan Riverside County 1 in SRA 24.
- Federal SO₂ standard for 24-hour and AAM standards revoked; established new 1-hour standard of 0.075 ppm, effective August 2, 2010.



- f. State AAM for PM-10 $\geq 20 \mu\text{g}/\text{m}^3$. Federal and state PM-2.5 AAM is $\geq 15 \mu\text{g}/\text{m}^3$ and $\geq 12 \mu\text{g}/\text{m}^3$, respectively.

5.2.4 Comments Received in Response to the Notice of Preparation

During the NOP public review period, SCAQMD provided a comment letter regarding air quality and GHG emission impacts that may result from Project implementation. SCAQMD's July 23, 2015 letter is available in its entirety in Appendix A to this Recirculated Draft PEIR. SCAQMD made the following comments in response to the NOP:

- SCAQMD requests a copy of the Draft PEIR upon completion, including all appendices and original technical data files related to air quality and GHG analyses and air quality modeling and health risk assessment files
- SCAQMD recommends CVWD use the Air Quality Handbook (1993) and CalEEMod software to assist with the analyses
- PEIR should identify potential adverse direct and indirect impacts that occur from all phases of the Project and all air pollution sources related to the Project (including construction, demolition, and operation)
- SCAQMD requests the PEIR quantify criteria pollutant emissions and compare the results to recommended regional and localized significance thresholds
- If the Project would generate or attract vehicular trips, especially heavy-duty diesel-fueled vehicles, a mobile source health risk assessment is recommended, and should include toxic air contaminant impacts due to the use of equipment potentially generating such pollutants
- Refer to California Air Resources Board's *Air Quality and Land Use Handbook: A Community Perspective* (2005) as a guide for evaluating and reducing air pollution impacts associated with new projects that go through the land use decision-making process
- If the Project would generate significant adverse air quality impacts, all feasible mitigation measures that go beyond what is required by law are to be utilized to minimize or eliminate these impacts, and any impacts resulting from mitigation measures must also be discussed
- SCAQMD rules and air quality data is publicly available, and staff is also available to work with CVWD to ensure Project emissions are accurately evaluated and mitigated where feasible

5.2.5 Thresholds of Significance

The significance of potential air quality and greenhouse gas emission impacts was evaluated based on the State CEQA Guidelines Appendix G criteria, as well as, the methodology set forth by SCAQMD's *CEQA Air Quality Handbook* (1993). CalEEMod version 2013.2.2 was used to



quantify Project-related emissions). The following analysis identifies potential air quality impacts that would result from construction of the Facilities, and includes criteria pollutant emissions and regional and localized significant threshold analyses consistent with SCAQMD methodology. Using these thresholds, the Master Plan would be considered to have a significant impact if it were to affect the thresholds listed below.

- (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
- (Threshold E) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The Initial Study prepared for the Master Plan concluded potential impacts related to:

1. conflicting with or obstructing of implementation of the applicable air quality plan; and
2. objectionable odors affecting a substantial number of people had either “no impact” or “less than significant impact”; and are therefore not discussed within this Recirculated Draft PEIR. The Initial Study is contained within the Appendix of this Recirculated Draft PEIR.

5.2.6 Related Regulations

5.2.6.1 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 5.2-C**. 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 California Air Resources Board (CARB) maintains records as to the attainment status of air basins throughout the state, under both state and federal criteria. The portion of the SSAB within which the proposed Project is located is designated as a non-attainment area for ozone and PM-10 under both state and federal standards. The Air Quality Management Plan (AQMP) for the SCAB establishes a program of rules and regulations directed at attainment of the state and national air quality standards. Accordingly, conformance with the AQMP for development projects is determined by demonstrating compliance with local land use plans.

In addition to the AQMP, the SCAQMD also has approved a Coachella Valley State Implementation Plan (CVSIP) specifically for PM-10 because of the Basin's designation as serious non-attainment. Under the federal Clean Air Act, an area can request an extension of up to five years to attain the NAAQS for PM-10 if certain requirements are met, including creation of a SIP that demonstrates expeditious attainment of the standards. Thus, the SCAQMD established additional strategies for the control of PM-10 in the Coachella Valley PM10 State Implementation Plan (CVSIP), which was most recently updated in 2003. The 2003 CVSIP updates the emission inventories, emission budgets, and attainment modeling for the SSAB.

The Project would 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, 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 mph and establishing a permanent, stabilizing ground cover on finished sites. Compliance with this regulation includes having an approved Fugitive Dust Control Plan, maintenance of a daily dust control log on site, installation of construction project signage with contact information for complaints, and the presence of an environmental observer for construction sites larger than 50 acres.

In addition to Rule 403, the construction, operation, and maintenance of the Facilities must also be in compliance with SCAQMD Rule 403.1. Rule 403.1 is supplemental to the Rule 403 requirements and applies only to fugitive dust sources in the Coachella Valley. Rule 403.1 subdivision E requires preparation of a fugitive dust control plan for any construction project or



earth-moving activity that would disturb more than 5,000 square feet of surface area. The fugitive dust control plan shall be submitted to and approved by the SCAQMD Executive Officer.

5.2.6.2 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.

5.2.6.3 Greenhouse Gas Emissions

Federal Regulations

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 Regulations

Assembly Bill 1493 (Pavley)

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 would apply to 2009 and later model year vehicles. CARB estimates that the regulation, if implemented, would 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.

As discussed in the Scoping Plan (CARB 2008b), the projected total business-as-usual emissions for year 2020 (596 MMTCO₂E) must be reduced approximately 30 percent to achieve CARB’s approved 2020 emission target of 427 MMTCO₂E. 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 would 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 CO₂ 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 Governor's 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 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 would 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 would:

- require the regional transportation plan for each of the state's major metropolitan areas to adopt a "sustainable community strategy" that would 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” would 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 developed and finalized 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 MTCO₂E 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 would emit no more than a “to be determined” limit for MTCO₂E 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 to date, these recommendations are not utilized in the Project’s analysis; they are briefly addressed here for the purpose of full disclosure.

Senate Bill 32

In September 2016, Governor Edmund G. Brown Jr. signed Senate Bill (SB) 32 (Pavley), the California Global Warming Solutions Act of 2006: emissions limit. SB 32 directs the California Air Resources Board (CARB) to adopt rules and regulations to achieve the maximum technologically feasible and cost-effective GHG reductions to ensure that statewide



greenhouse gas emissions are reduced to 40 percent below the 1990 level by no later than December 31, 2030. SB 32 went into effect January 1, 2017.

Regional Regulations

SCAQMD provides 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 MTCO₂E/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 MTCO₂E/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 a CEQA GHG significance threshold of 10,000 MTCO₂E per year for industrial projects where the SCAQMD is the lead agency. (SCAQMD 2010.) 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, 2010² proposed two options lead agencies can select from for GHG screening thresholds of significance in residential and commercial projects and proposed to expand the industrial GHG threshold for use by lead agency. Option 1 proposes a threshold of 3,000 MTCO₂E/year for all residential and commercial projects; Option 2 proposes a threshold value by land use type where the numeric threshold is 3,500 MTCO₂E/year for residential projects; 1,400 MTCO₂E/year for commercial projects; and 3,000 MTCO₂E/year for mixed use projects. (SCAQMD 2010.) Although both

² [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf)



Options are recommended, a lead agency is advised to use only one Option, and to use it consistently (SCAQMD 2010). Because CVWD does not construct residential, commercial, or mixed use projects, CVWD uses the SCAQMD industrial threshold of 10,000 MTCO₂E amortized over 30 years for its GHG threshold. A 30-year amortization period was selected because that is a conservative estimate of the operational life of CVWD's facilities.

Local Regulations

Riverside County Climate Action Plan (CAP)

In conjunction with the 2015 Riverside County General Plan Update, the County released a Climate Action Plan (CAP). Notably, the CAP sets County-wide GHG emissions targets consistent with state reduction goals in AB 32. The CAP is not part of the 2015 Riverside County General Plan per se; rather, it is a separate document that provides another implementation tool of the General Plan to guide development in the County. The CAP was designed under the premise that the County of Riverside, and the community it represents, is uniquely capable of addressing emissions associated with sources under Riverside County's jurisdiction, and that Riverside County's emission reduction efforts should coordinate with the state strategies of reducing emissions in order to accomplish these reductions in an efficient and cost-effective manner. (RCCAP, p. 1-3.) Because the Master Plan and its Facilities are not under the jurisdiction of Riverside County, the CAP is not applicable to the proposed Project.

5.2.7 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 is summarized from the AQ/GHG Analysis Report, refer to Appendix B of this Recirculated 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 5.2-E – SCAQMD CEQA Regional Significance Thresholds**. These regional thresholds were developed based on the SCAQMD's treatment of a major stationary source.



Table 5.2-E – SCAQMD CEQA Regional Significance Thresholds

Emission Threshold	Units	VOC	NO_x	CO	SO_x	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations ¹	lbs/day	75	100	550	150	150	55

Note: ¹ For the Coachella Valley, the daily thresholds for operation are the same as the construction thresholds.

Short-Term, Construction-Related 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 would also include emissions generated during construction as a result of operation of personal vehicles by construction workers, and asphalt degassing.

The Project would 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 mph and establishing a permanent, stabilizing ground cover on finished sites.

In addition, SCAQMD Rule 403.1 requires specific measures for reducing fugitive dust in the Coachella Valley. Compliance with this regulation includes having an approved Fugitive Dust Control Plan for activities disturbing more than 5,000 square feet, maintenance of a daily dust control log on-site, installation of construction project signage with contact information for complaints, and the presence of an environmental observer for construction sites larger than 50 acres.

Short-term emissions from Project construction were evaluated using the CalEEMod version 2013.2.2 program. The Facilities would be constructed over a number of decades and the precise construction timing and phasing of all Facilities are unknown; therefore, a representative year of construction activities was evaluated.

The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that emissions from construction of Facilities are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are shown below for a representative year (2016) of construction activities based on number of working days.



Construction Activity	Total Working Days
Facility Grading & Soil Export	174 days
Concrete Installation	65 days
Paving	22 days

The equipment to be used for each activity is shown below:

Construction Activity	Off-Road Equipment	Unit Amount
Facility Grading & Soil Export	Excavators	3
	Rubber Tired Loaders	4
	Rubber Tired Dozers	4
	Scrapers	3
	Tractors/Loaders/Backhoes	2
Concrete Installation	Tractors/Loaders/Backhoes	2
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2

- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project utilized the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions. Two (2) one-way vendor trips were added to each activity to account for water truck trips.
- Although the amount of exported soil is unknown, this analysis assumed that 120 haul truck trips would occur per day (60 truckloads exported) for SMP Facility construction (including channel excavation, training levee construction, and debris basin excavation). Truck capacity is assumed to be 16 cubic yards. The export site is also currently unknown, but given the amount of vacant land in the area, the export location was assumed to be within 10 miles of any Facility.
- Concrete is assumed to be imported by concrete trucks over the course of the construction period. This analysis assumed that 100 concrete truck trips would occur per day. Typical concrete truck capacity is 8 cubic yards, which results in approximately 50 truckloads of import per day. The concrete plant(s) are unknown, but is assumed to be within 10 miles of any Facility.

Tables 5.2-F, below, summarizes the estimated construction emissions for the Project.



Table 5.2-F – Unmitigated Estimated Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Facility Grading & Soil Export						
On-Site	12.93	153.92	97.45	0.13	18.96	11.68
Off-Site	2.03	16.34	30.99	0.05	1.75	0.70
Total	14.96	170.26	128.44	0.18	20.71	12.38
Concrete Installation						
On-Site	0.68	6.51	4.83	0.01	0.50	0.46
Off-Site	1.82	14.43	27.75	0.04	1.58	0.63
Total	2.50	20.94	32.58	0.05	2.08	1.09
Paving						
On-Site	2.69	22.39	14.82	0.02	1.26	1.16
Off-Site	0.08	0.22	0.98	0.00	0.14	0.04
Total	2.77	22.61	15.80	0.02	1.40	1.20
Maximum¹	20.23	213.81	176.82	0.25	24.19	14.67
Exceeds Threshold?	No	Yes	No	No	No	No

Notes: On-site emissions include off-road construction equipment, fugitive dust, and asphalt paving off-gassing emissions.

Off-site emissions include on-road vehicles from construction worker, vendor, and haul truck trips.

¹ Maximum emissions are the sum of Facility grading & soil export, concrete installation, and paving since these activities could potentially overlap.

As shown in the table above, the emissions from construction of the Facilities are below the SCAQMD daily construction thresholds for all the criteria pollutants, except NO_x. This exceedance is due to the emission from heavy-duty construction equipment usage during Facility grading & soil export when considered alone or with combined emissions from the other construction activities. However, the emissions resulting from concrete installation activities and paving activities do not exceed any thresholds when considered as independent activities or combined with each other.

Long-Term, Operational Analysis

Long-term air quality impacts would occur once the Project is in operation. The majority of operational emissions would be from the infrequent visits by vehicles driven by maintenance personnel and are considered negligible; therefore, long-term impacts are considered less than significant.



Regional Significance Threshold Conclusion

Based on the regional significance threshold analysis for the proposed Project, the short-term construction emissions would exceed the daily regional thresholds set by SCAQMD for NO_x during construction of Facilities and mitigation measures would be required. Long-term impacts from maintenance and operation of SMP Facilities are considered less than significant.

SCAQMD's Localized Significance Threshold 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 2008c) 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 would 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 Project is located within SRA 30.

Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO₂, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables and sample construction scenarios³ 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. Based on the estimated construction equipment, the maximum daily disturbance area is 9.5 acres.⁴ Although the Project disturbance exceeds five acres, per SCAQMD, the LST thresholds can be used as a screening tool to determine if more specific dispersion modeling would be necessary. Therefore, the sample construction scenario for the five-acre site was modified using Project-specific information such as the construction equipment usage information.

The LST thresholds are estimated using the maximum daily disturbance area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The majority of sensitive receptors are primarily existing residences and schools in proximity to proposed SMP Facilities, at varying distances. To ensure a worst-case analysis, the closest receptor distance was evaluated. The closest receptor on the LST look-up tables is 25 meters. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (85 feet) was used. The results are summarized below in **Table 5.2-G– Unmitigated LST Results for Construction Emissions**.

³ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

⁴ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>



Table 5.2-G – Unmitigated LST Results for Daily Construction Emissions

Pollutant	Peak Daily Emissions (lb/day)			
	NO _x	CO	PM-10	PM-2.5
LST Threshold for 5 acre at 25 meters	304	2,292	14	8
Facility Grading & Soil Export Excavation	159.3	86.8	11.1	7.4
Concrete Installation	8.6	6.5	0.5	0.5
Paving	31.8	21.8	2.1	2.0
Exceeds Threshold?	No	No	No	No

Note: Because each activity occurs separately within the same location, the emissions are not summed for the local significance threshold analysis.

Emissions from construction of the Project would be below the LST established by SCAQMD for the Project.

Long-Term Analysis

This Project involves the construction of stormwater facilities. The long-term emissions, as discussed previously, are primarily in the form of mobile source emissions, with no stationary sources of emissions present. According to SCAQMD LST methodology, LSTs would apply to the operational phase of a project, if the project includes stationary sources, or attracts mobile sources that may spend long periods queuing and idling at the site; such as warehouse/transfer facilities. The proposed Project does not include such uses. Therefore, due to the lack of stationary source emissions, no long-term LST analysis is needed.

LST Analysis Conclusion

Based on the LST analysis, the short-term construction of the Project would not result in localized air quality impacts to sensitive receptors within the Project vicinity. Due the lack of stationary source emissions, no long-term LST analysis is needed. Therefore, mitigation measures would not be required.

Threshold Conclusion

Based on the RST analysis provided above, short-term construction emissions would exceed daily regional thresholds set by SCAQMD for NO_x during construction of Facilities and mitigation measures would be required. No long-term impacts are anticipated due to the negligible amount of emissions from maintenance activities. Implementation of mitigation measures MM AQ 1 and MM AQ 2 would reduce short-term construction impacts from NO_x. However, estimated short-term emissions from construction of the Facilities would exceed applicable SCAQMD regional thresholds for NO_x after implementation of mitigation, as shown in **Table 5.2-I**, below. Therefore, the impacts to air quality from construction of this Project are considered regionally **significant and unavoidable after mitigation**.



Based on the LST analysis provided above, short-term construction emissions would not result in localized air quality impacts to sensitive receptors within the Project vicinity and mitigation would not be required. Due the lack of stationary source emissions, no long-term LST analysis is needed. Therefore, the Project's short-term construction emissions are **less than significant** on a localized level without mitigation required.

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 5.2.6.1 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the Project is located is designated as a non-attainment area for ozone and PM-10 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 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 (available in Appendix A to this Recirculated Draft PEIR), the Project would not conflict with or obstruct the implementation of the AQMP. As discussed in the analysis under Threshold A, the Project's short-term construction emissions would exceed the daily regional thresholds set by SCAQMD for NO_x. Because no new long-term uses are proposed, air quality impacts associated with operational air pollutant emissions would be less than significant. Although the proposed Project is in conformance with the AQMP, because the Project's short-term emissions would result in impacts to ozone precursors after implementation of mitigation, the incremental contribution is cumulatively considerable. Therefore, the impact is considered **significant and unavoidable after mitigation**.

Threshold C: *Expose sensitive receptors to substantial pollutant concentrations.*

The majority of sensitive receptors are primarily existing residences and schools in proximity to proposed Facilities, at varying distances. According to the analysis under Threshold A, short-term emissions would 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 would occur as a result of the operation and maintenance of this Project due to the lack of stationary sources. However, emissions of NO_x during construction are above SCAQMD recommended daily regional thresholds after implementation of mitigation measures MM AQ1 and MM AQ 2. Therefore, exposure of



sensitive receptors to substantial pollution concentrations from short-term construction emissions is considered **significant and unavoidable after mitigation**.

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 CO₂ specifically into the atmosphere is not of itself an adverse environmental affect. It is the affect that increased concentrations of GHG including CO₂ 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 CO₂ 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, 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.

The following Project activities were analyzed below for their contribution to global GHG emissions:

Short-Term Analysis – Construction-Related Activities

Construction of the Master Planned Facilities would emit GHGs from upstream emission sources and direct sources from construction activities (combustion of fuels from worker vehicles and construction equipment). An upstream emission source (also known as life cycle emissions) refers to emissions that were generated during the manufacture of products to be used for construction of the Facilities. Upstream emission sources for the Project include but are not limited to the following: emissions from the manufacture of concrete; emissions from the manufacture of steel; and/or emissions from the transportation of materials to the seller. The upstream emissions were not estimated because they are expressly not within the purview of EIRs per CEQA Guidelines Section 15144. Additionally, the California Air Pollution Control Officers Association (CAPCOA) White Paper on CEQA and Climate Change states "The full life-cycle of GHG [greenhouse gas] emissions from construction activities is not accounted for...and the information needed to characterize [life-cycle emissions] would be speculative at the CEQA analysis level" (CAPCOA 2008). Therefore, pursuant to CEQA Guidelines Sections 15144 and 15145, upstream /life cycle emissions are speculative; no further discussion is provided.

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the 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.



Table 5.2-H – Unmitigated Project Construction Equipment GHG Emissions, summarizes the CalEEMod output results and presents the GHG emissions estimates for the Project in metric tons per year (MT/yr) for CO₂, CH₄, N₂O, and CO₂E.⁵

Table 5.2-H – Unmitigated Project Construction Equipment GHG Emissions

Metric Tons per year (MT/yr)			
Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
1,579.80	0.33	0.00	1,586.75

Evaluation of the table above indicates that an estimated 1,586.75 MTCO₂E would occur from Project construction equipment during a worst-case representative year of construction.

The proposed Project and construction of the Master Plan Facilities do not fit into the categories provided (industrial, commercial, and residential) in the draft screening thresholds from SCAQMD. Because CVWD does not construct commercial, residential, or mixed use facilities, CVWD adopted SCAQMD’s industrial screening threshold of 10,000 MTCO₂E amortized over a 30-year period. A 30-year amortization period was selected because that is a conservative estimate of the operational life of CVWD’s facilities. As shown in Table 5.2-H, the Project’s emissions are below CVWD’s adopted GHG threshold of 10,000 MTCO₂E amortized over 30 years. Due to the estimated amount of emissions from Project construction, and negligible operational emissions from infrequent maintenance vehicles, the proposed Project would not generate a significant amount of GHG emissions and the impact is considered to be **less than significant** without mitigation required.

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 stormwater control project such as this. As discussed under the Local Regulations subheading in Section 5.2.6.3, the Riverside County CAP is not applicable to the Master Plan because the Master Plan is not under the jurisdiction of the County of Riverside. Additionally, as discussed under Threshold D, the Project would not generate GHG that would cause a significant impact on the environment. Further, the Project would not obstruct implementation of any plan, policy, or regulation adopted for the purpose of reducing GHG emissions and would be subject to future applicable regulations once adopted. Therefore, impacts are considered **less than significant** without mitigation required.

⁵ CO₂E is the sum of CO₂ emissions estimated plus the sum of CH₄ and N₂O emissions estimated multiplied by their respective GWP.



5.2.8 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.

In order to reduce NO_x emissions from Project construction, the following mitigation measure shall be implemented:

MM AQ 1: To reduce construction NO_x emissions, the contractor's specification packages for each Facility construction project shall require construction equipment to meet or exceed: Tier 3 CARB/U.S. EPA standards

- Tier 3 CARB/U.S. EPA standards for construction starting prior to 2027 and
- Tier 4 Final CARB/U.S. EPA standards for construction starting in 2027.

The contracting company's fleet of off-road diesel-powered construction equipment shall meet or exceed ~~Tier 3~~ the above off-road emissions standards. A copy of the fleet's tier compliance documentation, and CARB or AQMD operating permit shall be provided to the Lead Agency (i.e., City of Coachella, Riverside County, or CVWD) at the time of mobilization of each applicable unit of equipment.

An exemption from these requirements may be granted by CVWD in the event that the Lead Agency (i.e. City of Coachella, Riverside County, or CVWD, documents that (1) equipment with the required tier is not reasonably available (e.g., reasonability factors to be considered include those available within Riverside County within the scheduled construction period), and (2) corresponding reductions in criteria pollutant emissions are achieved from other construction equipment.

MM AQ 2: To reduce construction NO_x emissions, the contractor's specification packages for each Facility construction project shall require all dump trucks used for soil hauling during Project construction comply with either 2007 or 2010 engine emission standards pursuant to Title 13, Section 2025(d).

5.2.9 Project-Specific Environmental Effects after Mitigation Measures are Implemented

In an effort to reduce emissions on NO_x, **MM AQ 1** and MM AQ 2 would be implemented to reduce NO_x emissions from off-road equipment and haul trucks, respectively, and reduces emissions by approximately 24 percent. The results are shown in **Table 5.2-H**, below.

Table 5.2-I– Mitigated Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Facility Grading & Soil Export						
On-Site	3.48	105.18	72.42	0.13	14.75	8.01
Off-Site	2.03	16.34	30.99	0.05	1.75	0.70
Total	5.51	121.52	103.41	0.18	16.50	8.71
Concrete Installation						
On-Site	0.29	6.01	4.68	0.01	0.24	0.24
Off-Site	1.82	14.43	27.75	0.04	1.58	0.63
Total	2.11	20.44	32.43	0.05	1.82	0.87
Paving						
On-Site	1.51	19.70	16.93	0.02	0.65	0.65
Off-Site	0.08	0.22	0.98	0.00	0.14	0.04
Total	1.59	19.92	17.91	0.02	0.79	0.69
Maximum¹	9.21	161.88	153.75	0.25	19.11	10.27
Exceeds Threshold?	No	Yes	No	No	No	No

Notes: On-site emissions include off-road construction equipment, fugitive dust, and asphalt paving off-gassing emissions. Off-site emissions include on-road vehicles from construction worker, vendor, and haul truck trips.

¹ Maximum emissions are the sum of Facility grading & soil export, concrete installation, and paving since these activities could potentially overlap.

The above evaluation demonstrates that even with mitigation, projected short-term emissions from construction of the Facilities are above applicable SCAQMD regional thresholds for NO_x. Therefore, impacts from construction remain **significant and unavoidable after mitigation**.

Implementation of the Master Plan (i.e., construction of the Master Plan Facilities) is considered to have a cumulatively considerable net increase on ozone precursors (NO_x), which are non-attainment in the region under both state and federal standards, and the impact is considered **significant and unavoidable after mitigation**.

Implementation of the Master Plan would not generate GHG, either directly or indirectly, that would cause a significant impact on the environment nor would it conflict with or obstruct implementation of any future plan, policy, or regulation adopted for the purpose of reducing



GHG emissions. Therefore, the GHG emissions resulting from implementation of the Master Plan are considered **less than significant** without mitigation required.

5.2.10 Cumulative Environmental Effects after Mitigation Measures are Implemented

Criteria Pollutants

Due to the defining geographic and meteorological characteristics of the SSAB, the cumulative area for air quality impacts is the SSAB itself. Project emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts within the SSAB. That is, if a project's emissions are below SCAQMD thresholds, then such project's incremental contribution to criteria pollutant emissions is not cumulatively considerable. Conversely, if a project's emissions exceed SCAQMD thresholds after implementation of mitigation, such project's incremental contribution is cumulatively considerable. Cumulative localized impacts for pollutants are also considered, and reflect Project air pollutant emissions in the context of ambient conditions in the vicinity of the Master Plan area. As previously stated in Section 5.2.6.1 (Related Regulations, Criteria Air Pollutants), the portion of the Basin within which the Project is located is designated as a non-attainment area for ozone and PM-10 under both state and federal standards.

As discussed in Section 5.2.7 (Environmental Impacts before Mitigation) and Section 5.2.10 (Project-Specific Environmental Effects after Mitigation Measures are Implemented), the Project's 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 incremental contribution to criteria pollutant emissions from construction of the Master Plan Facilities is **cumulatively considerable**.

GHG Emissions

GHG are those gases that would contribute to global climate change; therefore, the cumulative impact area for GHG emissions is the earth's atmosphere. Implementation of the proposed Project along with the cumulative development projects would contribute GHG emissions to the atmosphere.

The Project's annual GHG emissions for a representative year of construction are below the draft GHG screening threshold developed by SCAQMD for residential and commercial projects; thus construction and operation of the Facilities would not generate a significant amount of GHG emissions. Considering the Project's small contribution to GHG emissions, the implementation of the Master Plan would not incrementally contribute to a cumulatively significant effect and cumulative impacts related to GHG emissions are considered **less than significant** without mitigation required.



5.2.11 References

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- USEPA 2016 U.S. Environmental Protection Agency, *Criteria Air Pollutants*. (Available at <https://www.epa.gov/criteria-air-pollutants>, accessed November 6, 2016.)



5.3 Biological Resources

Note to reader: Text added to this Recirculated Draft PEIR is shown in double underline (example text) and deleted text is shown in strikethrough (~~example text~~.)

The focus of this section is to address, at a program level, potential impacts related to biological resources; thus, the discussion is largely based on information in the Coachella Valley Multiple Species Habitat Conservation Plan EIR and the 2015 Riverside County General Plan EIR 521. This section also discusses land use and planning impacts with regard to conflicts with any applicable habitat conservation plan or natural community conservation plan.

As discussed below and in the Initial Study prepared for the Project (Appendix A), the Project's potential to have a substantial adverse effect, either directly or indirectly to biological resources and land use and planning would be less than significant with mitigation incorporated.

5.3.1 Setting

The Master Plan Area is located within eastern Coachella Valley. The Coachella Valley is located in the central portion of Riverside County and extends from Cabazon in the northwest to the ridgeline of the Little San Bernardino Mountains and San Bernardino County boundary to the northeast. At the southern end of the valley, the ridgeline of the San Jacinto and Santa Rosa mountains to about the boundary line with San Diego and Imperial counties define its extent in Riverside County.

Coachella Valley is a broad, low elevation, northwest-southeast trending valley located along the westernmost edge of the Sonoran desert. The desert floor of the Coachella Valley ranges in elevation from more than 150 feet below sea level at the southeast end to nearly 2,000 feet at the northwest end of the valley on the alluvial fans. The mountains surrounding the Coachella Valley range in elevation up to 10,800 feet at Mount San Jacinto, with elevations on the southern side of the valley substantially higher than those on the north. This range of elevations and accompanying differences in temperature, precipitation and other environmental variables are significant factors contributing to the area's high biological diversity. (GPA No. 960 EIR 521, p. 4.8-13) Specifically, these mountain ranges effectively isolate the valley from much cooler and wetter maritime conditions that occur to the west and results in a subtropical desert environment characterized by low rainfall, low relative humidity, and high level of direct sunshine with very hot summers and mild winters. (CVMSHCP EIR, pp. 3-78 – 3-79.)

Many canyons in the mountains support riparian areas not typical of a desert environment. Streams and seeps also support many desert fan palm oases, especially in the Santa Rosa Mountains. Desert dry wash woodlands occur where the water drains into the sands. The alluvial fans associated with the canyon mouths provide still another major land form and distinctive biological community. (2015 RCGP EIR 521, p. 4.8-13.)



Wind is also a significant contributor to the region's biological diversity. As the desert floor heats up and warm air rises, cool, ocean-modified air masses from the west are drawn into the valley and are funneled and concentrated through the narrow San Geronio Pass. This Venturi effect generates strong winds that pass over the most erosive portions of the valley floor, transporting large quantities of sand and dust throughout the region. While this natural sand migration and transport process can pose a significant risk to health and property, it is also responsible for creating desert sand fields and dunes, which are an important habitat for unique native desert plants and wildlife. (CVMSHCP EIR, p. 3-79.) Historically, this dune system occupied much of the center of the valley. (2015 RCGP EIR 521, p. 4.8-13.)

The San Andreas Fault zone has created a unique corridor of desert fan palm oases stretching along the southern side of the Indio Hills where water is forced to or near the surface by the damming action of the fault. Mesquite hummocks and mesquite bosques are also associated with the fault in some areas. The Salton Sea also contributes to biological diversity through the creation of marsh, mudflat and other wetland habitats. The low elevation of the Salton Sea trough creates a hot arid environment which combines with the salinity of the soils to produce an uncommon desert sink scrub community. (2015 RCGP EIR 521, p. 4.8-13)

Overall, the Facilities have been sited and designed to coincide with existing drainage courses to the Whitewater River/Coachella Valley Stormwater Channel (CVSC) and Salton Sea. (The CVSC is an unlined, engineered extension of Whitewater River, which serves agricultural irrigation return water and conveys treated wastewater, urban runoff, and stormwater runoff to the Salton Sea.)

As the Coachella Valley supports a wide variety of plant and animal species habitats, biological resources for the Coachella Valley, which encompasses the vast majority of the Master Plan Area, are addressed by the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). However, there are portions of two Facilities (the training levee and channel associated with the 84th Avenue Channel and the Travertine Point Channel No. 1) that traverse into Imperial County, and thus, are not covered by the CVMSHCP. The CVMSHCP serves as a comprehensive species and natural community conservation plan for the Coachella Valley and is discussed in greater detail in Section 5.3.4.3, below. The following discussion of vegetation and wildlife in the Coachella Valley is based on information provided in the CVMSHCP. Moreover, the setting around the portions of the Facilities within Imperial County is discussed later under this subheading.

5.3.1.1 Vegetation within Riverside County Portion of the Master Plan Area

Figure 5.3-1 – CVMSHCP Corridors and Linkages with Natural Communities shows the vegetation communities, also referred to as natural communities, specifically within the Master Plan Area. The CVMSHCP identifies seven vegetation communities that occur within the Master Plan Area. Also included on **Figure 5.3-1** are the CVMSHCP-modeled corridors and linkages; however, none are located within the Master Plan Area.

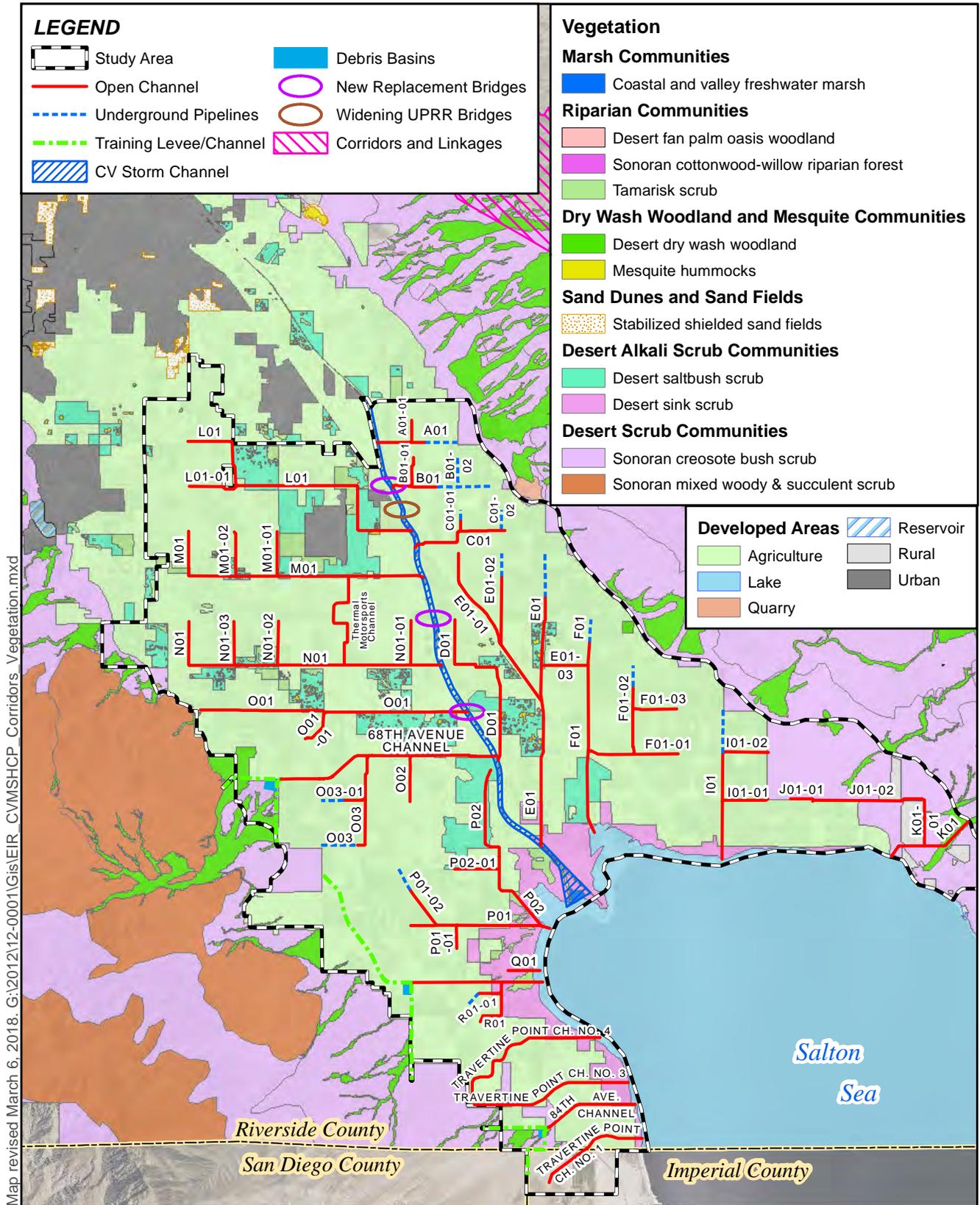


Figure 5.3-1 - CVMSHCP Corridors and Linkages with Natural Communities

Eastern Coachella Valley Stormwater Master Plan



Table 5.3-A – CVMSHCP Vegetation Traversed by Facilities (commencing on the following page) summarizes the vegetation communities and types based on CVMSHCP mapping data and the specific Facilities that would traverse the vegetation communities and types. It should be noted that desert fan palm oasis woodland, quarry, reservoir, stabilized shielded sand fields, and urban, which are listed on **Figure 5.3-1**, are not presented in **Table 5.3-A** as no Facilities would traverse such communities. Following **Table 5.3-A** is a brief description of these vegetation communities within the Master Plan Area.

Desert Alkali Scrub Communities: Coachella Valley supports desert and alkali scrub communities composed of desert saltbush scrub and desert sink scrub. These communities occur in the Willow Hole area, the Thousand Palms Preserve and in the higher-salinity soils in the area around the northern end of the Salton Sea and in the Dos Palmas/Salt Creek area east of the Sea. (2015 RCGP EIR 521, p. 4.8-15.)

One or more species of saltbush (*Atriplex spp.*) are found in these communities, including alkali salt-bush (*Atriplex polycarpa*) and four-winged saltbush (*A. canescens var. linearis*). Screwbean mesquite (*Prosopis glandulosa var. torreyana*) is a common associate. Alkali goldenbush (*Isocoma acradenia*) is common in areas where *P. glandulosa* is dominant. Pickleweed (*Salicornia virginica*), iodine bush, is also common. (2015 RCGP EIR 521, p. 4.8-15.)

Desert Scrub Communities: Coachella Valley supports various Mojavean and Sonoran desert scrub communities. Mojavean desert scrub is composed of blackbrush scrub, Mojave mixed steppe and Mojave mixed woody scrub communities. Sonoran desert scrub encompasses Sonoran creosote bush scrub, Sonoran mixed woody and succulent scrub communities. These communities are found in the alluvial plains that extend out toward the valley floor from the mouth of canyons emerging from the surrounding mountains. These alluvial habitats are formed by a variety of mountain drainages from large and small canyons including: Chino Canyon and Palm Canyon draining the San Jacinto Mountains; Big Morongo Canyon, Thousand Palms Canyon, Long Canyon, East Wide Canyon, West Wide Canyon and East Deception Canyon, which all drain to the Little San Bernardino Mountains; Mission Creek, Whitewater River and the San Gorgonio River draining the San Bernardino Mountains; and Dead Indian Canyon, Deep Canyon, Bear Creek and Martinez Canyon draining the Santa Rosas Mountains. (2015 RCGP EIR 521, p. 4.8-15.)

Desert scrub communities may include plant species such as creosote bush, burrobush (*Ambrosia dumosa*), Joshua tree (*Yucca brevifolia herbortii*), California buckwheat and bladderpod (*Isomeris arborea*), plus a variety of woody and herbaceous plants, including indigo bush, catclaw acacia, desert lavender, rock daisy and palo verde. Several species of cacti are also present, including fishhook cactus, hedgehog cactus, silver cholla (*Opuntia echinocarpa*), buckhorn cholla (*O. acanthocarpa*), pencil cholla (*O. ramosissima*), prickly pear (*O. engelmannii*), beavertail cactus (*O. basilaris*), barrel cactus (*Ferocactus acanthodes*) and ocotillo (*Fouquieria splendens*). Species of note known from this community include California ditaxis and glandular ditaxis. (2015 RCGP EIR 521, p. 4.8-16.)



Table 5.3-A – CVMSHCP Vegetation Traversed by Facilities

Facility	Agriculture	Coastal & valley freshwater marsh ^a	Desert dry wash woodland ^a	Desert saltbrush scrub ^a	Desert sink scrub ^a	Lake	Mesquite hummocks ^a	Rural	Sonoran cottonwood-willow riparian forest	Sonoran creosote bush scrub ^a	Sonoran mixed woody & succulent scrub ^a	Tamarisk scrub
Lines												
68 th Ave Channel	✓	✓		✓			✓					
84 th Ave Channel	✓		✓		✓	✓				✓		
A01	✓	✓										
A01-01	✓											
B01	✓	✓										
B01-01	✓											
C01	✓								✓			✓
C01-01	✓											
D01	✓	✓		✓			✓					
E01	✓	✓		✓	✓		✓					
E01-01	✓						✓					
E01-02	✓						✓					
E01-03	✓			✓			✓					
F01	✓			✓	✓	✓						
F01-01	✓											
F01-02	✓											
F01-03	✓											
I01	✓				✓	✓						
I01-01	✓									✓		
I01-02	✓									✓		
J01-01	✓									✓		
J01-02	✓							✓		✓		
K01			✓			✓		✓		✓		
K01-01			✓							✓		
Kings Rd Channel	✓				✓	✓						✓
L01	✓			✓			✓		✓			✓
L01-01	✓											
M01	✓			✓			✓		✓			✓



Facility	Agriculture	Coastal & valley freshwater marsh ^a	Desert dry wash woodland ^a	Desert saltbrush scrub ^a	Desert sink scrub ^a	Lake	Mesquite hummocks ^a	Rural	Sonoran cottonwood-willow riparian forest	Sonoran creosote bush scrub ^a	Sonoran mixed woody & succulent scrub ^a	Tamarisk scrub
M01-01	✓											
M01-02	✓			✓			✓					
N01	✓			✓				✓				✓
N01-01	✓											
N01-02	✓											✓
N01-03	✓											
O01	✓			✓			✓		✓			✓
O01-01	✓											
O02	✓			✓								
O03	✓											
O03-01	✓											
P01	✓				✓	✓						✓
P01-01	✓											
P01-02	✓			✓								
P02	✓			✓	✓	✓						✓
P02-01	✓											
Q01					✓	✓						✓
R01	✓				✓							
R01-01	✓				✓							
Thermal Channel	✓											
Thermal Motorsports Channel	✓											
Training Levee & Channel (associated with 68 th Ave Channel)	✓		✓							✓	✓	
Training Levee & Channel (associated with 84 th Ave Channel)	✓		✓							✓		



Facility	Agriculture	Coastal & valley freshwater marsh ^a	Desert dry wash woodland ^a	Desert saltbrush scrub ^a	Desert sink scrub ^a	Lake	Mesquite hummocks ^a	Rural	Sonoran cottonwood-willow riparian forest	Sonoran creosote bush scrub ^a	Sonoran mixed woody & succulent scrub ^a	Tamarisk scrub
Training Levee & Channel (associated with Kings Rd Channel)	✓		✓							✓		
Travertine Point Channel No. 3	✓		✓		✓	✓				✓		
Travertine Point Channel No. 4	✓				✓	✓						
Travertine Point Channel No.1	✓				✓	✓						
Basins												
68 th Ave Basin	✓		✓							✓		
Kings Rd Basin	✓											
84 th Ave Basin	✓		✓							✓		
Coachella Valley Stormwater Channel												
CVSC	✓	✓		✓	✓	✓			✓			✓

^a Considered a “sensitive community” per the California Natural Diversity Database (CNDDDB). See the “Special Status Communities/Habitats” heading, below, for further discussion.



Dry Wash Woodland and Mesquite Communities: This community includes desert washes which form a distinct habitat connection that links the mountains to the valley floor. Washes emerge from canyon mouths as high-banked watercourses that cut through to the alluvial plain. Vegetation consists of a low-growing, loosely formed woodland with a number of distinctive plants including Little San Bernardino Mountains linanthus (*Linanthus maculatus*), Mecca aster (*Xylorhiza cognata*) and Orocopia sage (*Salvia greatae*), as well as common shrubs such as desert lavender (*Hyptis emoryi*), sandpaper plant (*Petalonyx thurberi*) and bladderpod (*Lesquerella spp.*). These drainages can also support vegetation specialized to capitalize on a level of underground water that is closer to the surface. (2015 RCGP EIR 521, p. 4.8-16.)

As these washes descend down onto the plains, they broaden and the watercourses branch out. Farther from the canyons, washes become broader, shallower and less defined so that the physical differences between the washes and the alluvial plain are diminished. These washes are often used by wildlife as corridors through both the wash and the alluvial plain habitats. The washes are favored habitats of the desert tortoise (*Gopherus agassizii*), Peninsular bighorn sheep (*Ovis canadensis nelsoni*), Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), Le Conte's thrasher (*Toxostoma lecontei*) and a variety of migratory riparian birds. The largest and most notable desert washes in the Coachella Valley include those associated with the San Gorgonio and Whitewater Rivers, Palm Canyon, Mission Creek, Big Morongo Creek, Deep Canyon, Thousand Palms and Bear Creek Wash, among others. (GPA No. EIR 521, p. 4.8-16)

Marsh Communities: Coachella Valley supports a small amount of cismontane alkali marsh and coastal and valley freshwater marshes. These communities occur at the mouth of the CVSC along the Salton Sea and at Los Dos Palmas, on the edge of some of the palm oases (e.g., Andreas Oasis) and along the margins of recently restored man-made ponds. Dominant species include cattail (*Typha latifolia* and *T. domingensis*), alkali bulrush (*Scirpus americanus*), tules (*Scirpus spp.*), rushes (*Juncus spp.*) and saw-grass (*Cladium californicum*). Iodine bush (*Allenrolfea occidentalis*) is also associated with these communities. (2015 RCGP EIR 521, p. 4.8-16.)

Sand Dunes and Sand Fields Communities: These communities are characterized by relatively flat and low-lying terrain with regions of shifting and blowing sands generally supporting only sparse vegetation. Within the Coachella Valley, blow sand communities can be divided into three sub-communities: active sand dunes, active sand fields, and stabilized and partially-stabilized desert sand fields. These blowsand habitats are characterized by low perennial plant diversity, very high annual ephemeral plant diversity and a very diverse array of invertebrates. (2015 RCGP EIR 521, p. 4.8-16.)

Active sand dunes are located in exposed areas on the valley floor where high winds convey sand and persistently shift the sand dunes, allowing for little or no vegetation to be supported on them. The term 'active' refers to the fact that windbreaks have not impaired the aeolian (wind-borne) processes that contribute to sand transport, accumulation and depletion in the



sand fields. Because the dunes are continually shifting and accumulating sand, perennial plant cover is very low with much of the surface exposed or barren for most of the year. However, dunes do become covered with native annual plants (most visibly sand verbena and dune primrose) in years of high rainfall. (2015 RCGP EIR 521, p. 4.8-16.)

The second sand community subtype, active desert sand fields, is located within the Coachella Valley Preserve next to the dunes. While not in dune formation, sand within these fields is actively being deposited and depleted to form sheets of desert sand. Similar to the dunes, active desert sand fields are generally unable to support extensive vegetation due to the active aeolian processes (from the Venturi effect). Sand may also pile up against creosote bush, mesquite and other perennials to create hummocks or mounds that can support other plants and wildlife. (2015 RCGP EIR 521, p. 4.8-17.)

The last community subtype, stabilized dunes and sand fields, is generally found on the valley floor where it is cut off from fresh sources of sand due to windbreaks, upwind development and construction of roads. The result is stabilized or partially-stabilized sand fields not undergoing active sand deposition or movement occurring just north of the Whitewater River and north of Interstate 10. (2015 RCGP EIR 521, p. 4.8-17.)

Riparian Communities: Coachella Valley supports riparian communities that include arrowweed scrub, desert fan palm oasis woodland, southern arroyo willow riparian forest and tamarisk scrub. These communities occur in canyon mouths and alluvial fans in the northwest portion of the region, south of Fingal, near Snow Canyon, southeast of Snow Canyon, in Wood Stubbe, Cottonwood, Whitewater, Mission, Big Morongo and Chino Canyons. The community also includes portions of Dry Morongo Creek, scattered locations in the Whitewater River channel east of Monroe Avenue, the Thousand Palms Preserve, Millard Canyon, Lion Canyon, Blaisdell Canyon and the Dos Palmas Preserve and washes along the San Andreas Fault. (2015 RCGP EIR 521, p. 4.8-17.)

These riparian communities consist of streamside vegetation, such as arroyo willow (*S. lasiolepis*), Fremont cottonwood, willow, sycamore, white alder, arrowweed, cattails, tule, rushes, saltgrass, fan palm (*Washingtonia filifera*), screwbean mesquite, saltbush, palo verde, ironwood, smoketree (*Psoralea spinosus*), desert lavender (*Hyptis emoryi*), cheesebush (*Hymenoclea salsola*), catclaw acacia (*Acacia greggii*) and desert willow. (2015 RCGP EIR 521, p. 4.8-17.)

Developed, Urban, and Disturbed: This category includes areas where natural vegetation has been largely destroyed or substantially modified by human activity. Developed lands may include roadways, existing buildings and structures as well as landscaped or groomed areas, such as parks, golf courses, common areas and detention basins. For purposes of the CVMSHCP, this category includes lakes, landfills, quarries, reservoirs, rural disturbed lands, urban land uses and lands devoted to wind energy. The largest areas of developed, urban and disturbed land occur on the valley floor itself. (2015 RCGP EIR 521, p. 4.8-18.)



While not categorized separately, Coachella Valley also supports areas of open water. Open water was mapped at the Salton Sea and portions of the Whitewater River as well as various small ponds, private reservoirs and portions of stream channels. Open water typically is unvegetated due to a lack of light penetration. However, open water may contain suspended organisms such as filamentous green algae, phytoplankton (including diatoms) and desmids. Floating plants such as duckweed, water buttercup and mosquito fern (*Azolla filiculoides*) also may be present. Open water includes inland depressions, ponds, lakes, reservoirs and stream channels containing standing water and often occur in conjunction with riparian and upland communities. Depths may vary from hundreds of feet to a few inches. (2015 RCGP EIR 521, p. 4.8-18.)

Special Status Plant Species

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 Wildlife) 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.

Table 5.3-B – Special Status Plants in Coachella Valley lists the five special status plant species in the Coachella Valley, which are also covered by the CVMSHCP, and their occurrence in the Master Plan Area, and if such habitat would be traversed by a Facility. Additionally, **Figure 5.3-2 – CVMSHCP Plant Species Models** (which follows **Table 5.3-B**) shows the location of the area’s special status plant species in and around the Master Plan Area.

Table 5.3-B – Special Status Plants in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Coachella Valley milkvetch <i>Astragalus lentiginosus</i> var. <i>cochellae</i>	Fed: E State: None CNPS: 1B.2	Sand Dune/Sand Field; Desert Scrub; Riparian; Mojavean and Sonoran Desert Scrub; Desert Dune	No	N/A
Triple-ribbed milkvetch <i>Astragalus tricarinatus</i>	Fed: E State: None CNPS: 1B.2	Desert Scrub; Riparian; Mojavean and Sonoran Desert Scrub	No	N/A
Little San Bernardino Mountains linanthus <i>Linanthus maculatus</i>	Fed: None State: None CNPS: 1B.2	Dry Wash Woodland and Mesquite	No	N/A



Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Orocopia sage <i>Salvia greatae</i>	Fed: None State: None CNPS: 1B.3	Marsh; Dry Wash Woodland and Mesquite	Yes	Yes, Line K01
Mecca aster <i>Xylorhiza cognate</i>	Fed: None State: None CNPS: 1B.2	Dry Wash Woodland and Mesquite; Riparian and Bottomland	Yes	Yes, Line K01

Notes:

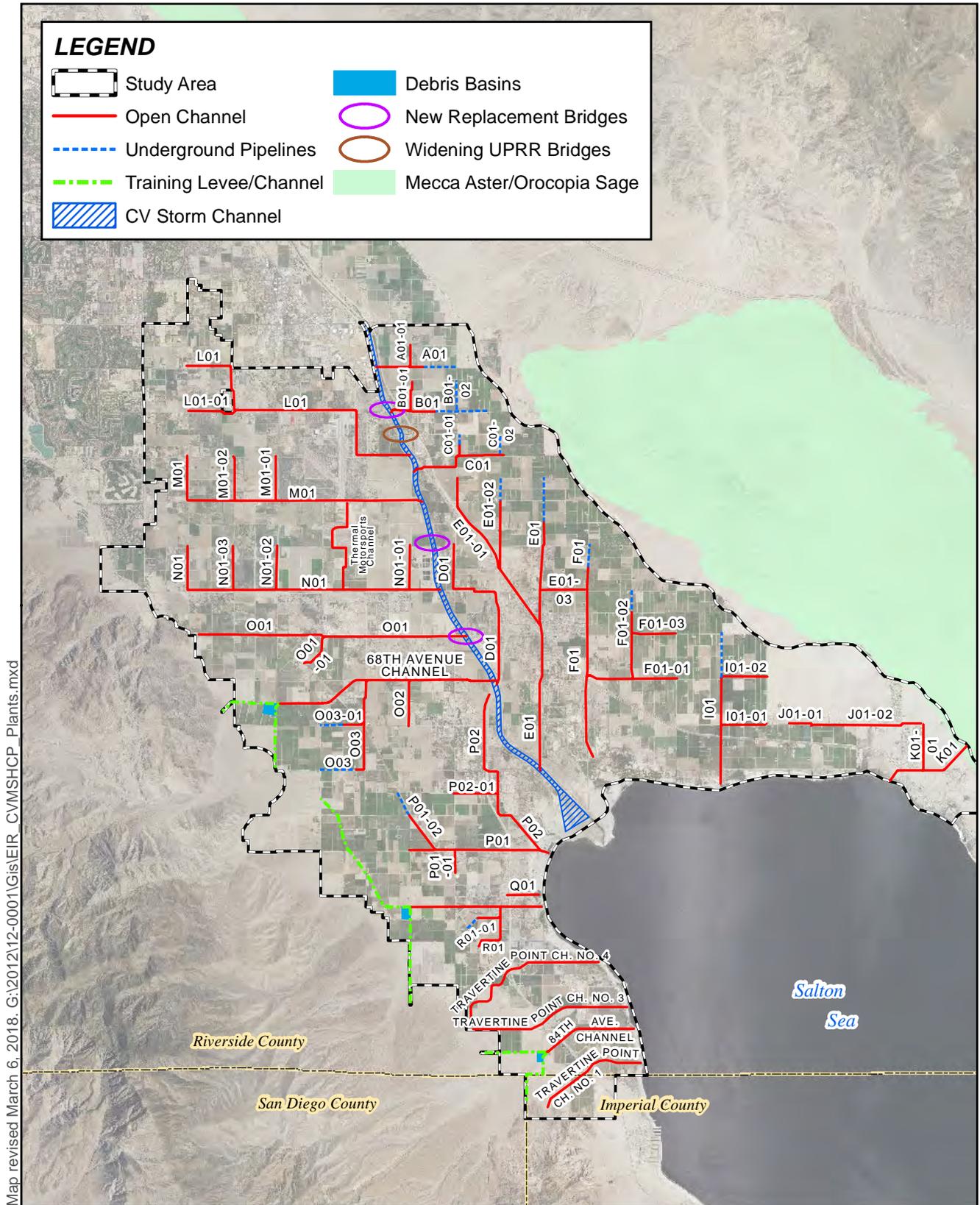
Fed E = Federally Endangered

CNPS 1B.2 – Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California

1B.3 – Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California

Source: Table data derived from 2015 RCGP, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, pp. 4.8-32 – 4.8-34. Location of plant species relative to the Master Plan Area and Facilities is derived from **Figure 5.3-2 – CVMSHCP Plant Species Models**.

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Map revised March 6, 2018. G:\2012\12-0001\GIS\IIR_CVMShCP_Plants.mxd

Sources: CVMShCP, 2014;
USDA NAIP, 2016.

Figure 5.3-2 - CVMShCP Plant Species Models
Eastern Coachella Valley Stormwater Master Plan



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. California Department of Fish and Wildlife (CDFW), through the California Natural Diversity Database (CNDDDB), tracks the occurrence of natural communities which it considers to be the most sensitive in the state. (2015 RCGP EIR 521, p. 4.8-20.) There are 53 natural community classifications within Coachella Valley, and according to CNDDDB, 25 of these communities are considered sensitive. (2015 RCGP EIR 521, p. 4.8-27.) Further, 9 of these 25 sensitive communities are located within the Master Plan Area and the Facilities would traverse 7 sensitive communities (see vegetation types marked with a table footnote in **Table 5.3-A – CVMSHCP Vegetation Traversed by Facilities**).

The seven sensitive communities that would be traversed by Facilities are described in more detail below:

Coastal and Valley Freshwater Marsh: This community is dominated by perennial, emergent monocots (reed-like plants), including cattails, bulrush, tules and rushes, often forming completely closed canopies. Sites lack significant currents and are permanently flooded with freshwater rather than brackish water. About 61 acres occurs in 1 location at the mouth of the CVSC to the Salton Sea. Small stands of freshwater marsh also occur at Dos Palmas, on the edge of some of the palm oases (e.g., Andreas Oasis) and along the margins of the recently restored man-made ponds. This community type is also subject to invasion from tamarisk. (2015 RCGP EIR 521, pp. 4.8-27 – 4.8-28.)

Desert Dry Wash Woodland: The desert dry wash woodland community is open to dense, drought-deciduous, small-leaved thorn scrub woodland to 30 to 60 feet tall, dominated by any of several members of the bean family including palo verde (*Cercidium floridum*), ironwood (*Olneya tesota*) and smoketree (*Psoralea argemone*). Associated species include desert lavender (*Hyptis emoryi*), cheesebush, catclaw acacia (*Acacia greggii*) and desert willow. It occurs in washes subject to intermittent flooding, but without perennial water. These washes are associated with canyon mouths and alluvial fans in the Santa Rosa, San Bernardino, Little San Bernardino, Cottonwood, Eagle and Orocopia mountains. The Mecca Hills Arroyo margins in the Colorado Desert also support a relatively dense growth of trees. (2015 RCGP EIR 521, p. 4.8-28.)

Desert Saltbush Scrub: The desert saltbush scrub community can include various species of saltbush in a nearly uniform stand of shrubs forming a more complete cover than in creosote bush scrub. This community occurs in areas with fine-textured, poorly-drained soils with high salinity and/or alkalinity or habitats that are generally moist with a sandy loam soil and a total salinity in the range of 0.2-0.7 percent. The community is often composed of a nearly uniform stand of shrubs about three feet tall forming a more complete cover than in creosote bush scrub. One or more species of atriplex are dominant in this community, including alkali saltbush (*Atriplex polycarpa*) and four-winged saltbush (*A. canescens* var. *linearis*). Screwbean



mesquite (*Prosopis glandulosa var. torreyana*) is a common associate. Four-wing saltbush shows greater dominance in dryer, coarser soils and occurs throughout the desert saltbush scrub community. Screwbean mesquite reaches greater development in lower-elevation areas with a shallow water table or capillary fringe. Alkali goldenbush (*Isocoma acradenia*) is common in areas where *P. glandulosa* is dominant. Once common in the Coachella Valley, this community now occurs only in small patches in the Willow Hole area, the Thousand Palms Preserve and in the higher salinity soils in the area around the northern portion of the Salton Sea. (2015 RCGP EIR 521, p. 4.8-28.)

Desert Sink Scrub: This community is similar to desert saltbush scrub, but plants are often more widely spaced and most species are succulent chenopods. Saltbush (*Atriplex spp.*) is a minor component. Pickleweed, iodine bush and bush seepweed (*Suaeda moquinii*) are characteristic of this community. It occurs at lower elevations on poorly-drained moist to wet soils with high alkalinity and/or salinity. Desert sink scrub appears to displace desert saltbush scrub in areas of a high water table with a salt crust at the surface. Some of the species, in particular iodine bush, can endure more alkaline or salty soils than most other desert plants. In some areas, such as at Dos Palmas, the plant cover is extremely low and this natural community grades into alkaline flats devoid of vegetation. Desert sink scrub is found in the vicinity of the Salton Sea, partially on Torres Martinez Reservation land and private land, and in the Dos Palmas/Salt Creek area east of the Salton Sea. (2015 RCGP EIR 521, p. 4.8-28.)

Mesquite Hummocks: This community is composed of large clumps of low-growing honey mesquite (*Prosopis glandulosa*) shrubs. The mesquite shrubs form hummocks over sand dunes, such as at Willow Hole and the Thousand Palms Preserve. Hummocks also occur on level terrain, at the margins of palm oases or in the area south and east of Indio to the north end of the Salton Sea. Mesquite hummocks are typically associated with high soil moisture near fault areas or springs. This community occurs in the Coachella Valley at one location south of Cabazon, in the vicinity of Willow Hole, on the Thousand Palms Preserve and along the southern base of the Indio Hills in areas associated with the San Andreas Fault. They also occur around the northern end of the Salton Sea and at Dos Palmas. Mesquite hummocks were formerly widespread from the dune areas of Indian Wells, La Quinta and Indio south to the Salton Sea, but are now restricted to undeveloped lots amid urban or agricultural lands. Changes in soil moisture and water table declines may have reduced the occurrence of these hummocks. Unfortunately, remaining mesquite hummocks are highly fragmented and often senescent (dead or dying), perhaps due to lack of groundwater. (2015 RCGP EIR 521, p. 4.8-29)

Sonoran Creosote Bush Scrub: Sonoran creosote bush scrub is the most widespread vegetation type in the Colorado Desert. It is dominated by creosote bush (*Larrea tridentata*). It characterizes the vast intermountain bajadas, reaching greatest development on coarse, well-drained soil with a total salinity of less than 0.02 percent. Sonoran creosote bush scrub occurs in areas surrounding the Salton basin between the higher rocky hillsides and the lower-lying desert saltbush community. The transition to desert saltbush occurs as the soil becomes



heavier and the salt content increases to approximately 0.2 percent. The physiognomy of the Sonoran creosote bush scrub community is simple because of low species diversity and the broad spacing of the shrubs, 1-10 feet tall, usually with bare ground between. The codominant species in the community is burrobrush (*Ambrosia dumosa*), a much shorter shrub. Many species of ephemeral herbs may flower in late winter/early spring if winter rains are sufficient. It is widespread on the valley floor and in the northeastern portion of the Coachella Valley. (2015 RCGP EIR 521, p. 4.8-30.)

Sonoran Mixed Woody and Succulent Scrub: This is the only Sonoran desert community in the Coachella Valley with substantial dominance of cacti and other stem succulents. It is similar to creosote bush scrub, but more varied and usually with a higher plant density. In addition to creosote bush and other associated perennial shrubs, typical species include silver cholla (*Opuntia echinocarpa*), buckhorn cholla, pencil cholla, prickly pear, beavertail cactus, barrel cactus and ocotillo (*Fouquieria splendens*). This community occurs on alluvial fans and slopes of the Santa Rosa Mountains, in the Little San Bernardino Mountains and on the valley floor north of Interstate 10 to just east of the Thousand Palms Preserve. (2015 RCGP EIR 521, p. 4.8-30.)

The two sensitive communities that would not be traversed by Facilities, but are located within the Master Plan Area, are described in more detail below:

Desert Fan Palm Oasis Woodland: This community is composed of open to dense groves dominated by fan palm (*Washingtonia filifera*) of up to 75 to 100 feet tall. The understory is sparse, especially in alkaline areas or in dense groves, where the ground is mulched by fallen palm fronds. *Washingtonia* is a relict species and this community is restricted to areas with available water in and around the Salton Basin and south into Baja California. Washes along the San Andreas Fault are the site of emergence of underground water and, therefore, the location of many oases. Other oases are present in washes and on hillsides, where exposed strata or other geological structures produce permanent water. (2015 RCGP EIR 521, p. 4.8-28.)

Stabilized Shielded Sand Fields: This community is essentially similar to the stabilized and partially stabilized desert sand fields community, except that sand source and sand transport systems, which would supply sand to the sand fields, have been interrupted or shielded. This natural community occurs west of the existing Whitewater Floodplain Preserve, adjacent to the recharge ponds, which shield this dune area. It also includes most of the remaining sand fields that make up the Big Dune south of Interstate 10 and portions of the sand fields south of the Indio Hills and east of the Thousand Palms Preserve. The long-term persistence of stabilized shielded desert sand fields is compromised by the interruption of the sand source and sand transport system. (2015 RCGP EIR 521, p. 4.8-31.)

5.3.1.2 Animals within Riverside County Portion of the Master Plan Area

Also covered in the CVMSHCP are special status animals including insects, reptiles, birds, fish, amphibians and mammals. Each of these animal types is discussed in the following paragraphs.

Special Status Insects

Table 5.3-C – Special Status Insects in Coachella Valley lists the two special status insect species in the Coachella Valley, which are also covered by the CVMSHCP, and their occurrence in the Master Plan Area and if such habitat would be traversed by a Facility. Additionally, **Figure 5.3-3 – CVMSHCP Insect Species Model** shows the covered insect species in the Master Plan area.

Table 5.3-C – Special Status Insects in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Coachella Valley giant sand-treader cricket <i>Macrobaenetes valgum</i>	Fed: None State: None	Sand Dune/Sand Fields	No	N/A
Coachella Valley Jerusalem cricket <i>Stenopelmatus cahuilensis</i>	Fed: None State: None	Dry Wash Woodland and Mesquite	No	N/A

Source: Table data derived from 2015 RCGP, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, p. 4.8-34. Location of insect species relative to the Master Plan Area and Facilities is derived from **Figure 5.3-3 – CVMSHCP Insect Species Model**.

As shown on **Figure 5.3-3**, while the Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*) occurs in areas north and west of the Master Plan Area, no covered insects occur within the Master Plan Area, and thus, no such covered insect habitat would be traversed by the Facilities. It should be noted that the other CVMSHCP-covered insect, the Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilensis*), occurs in areas outside of the viewable area of the figure, and thus, is not shown on **Figure 5.3-3**.

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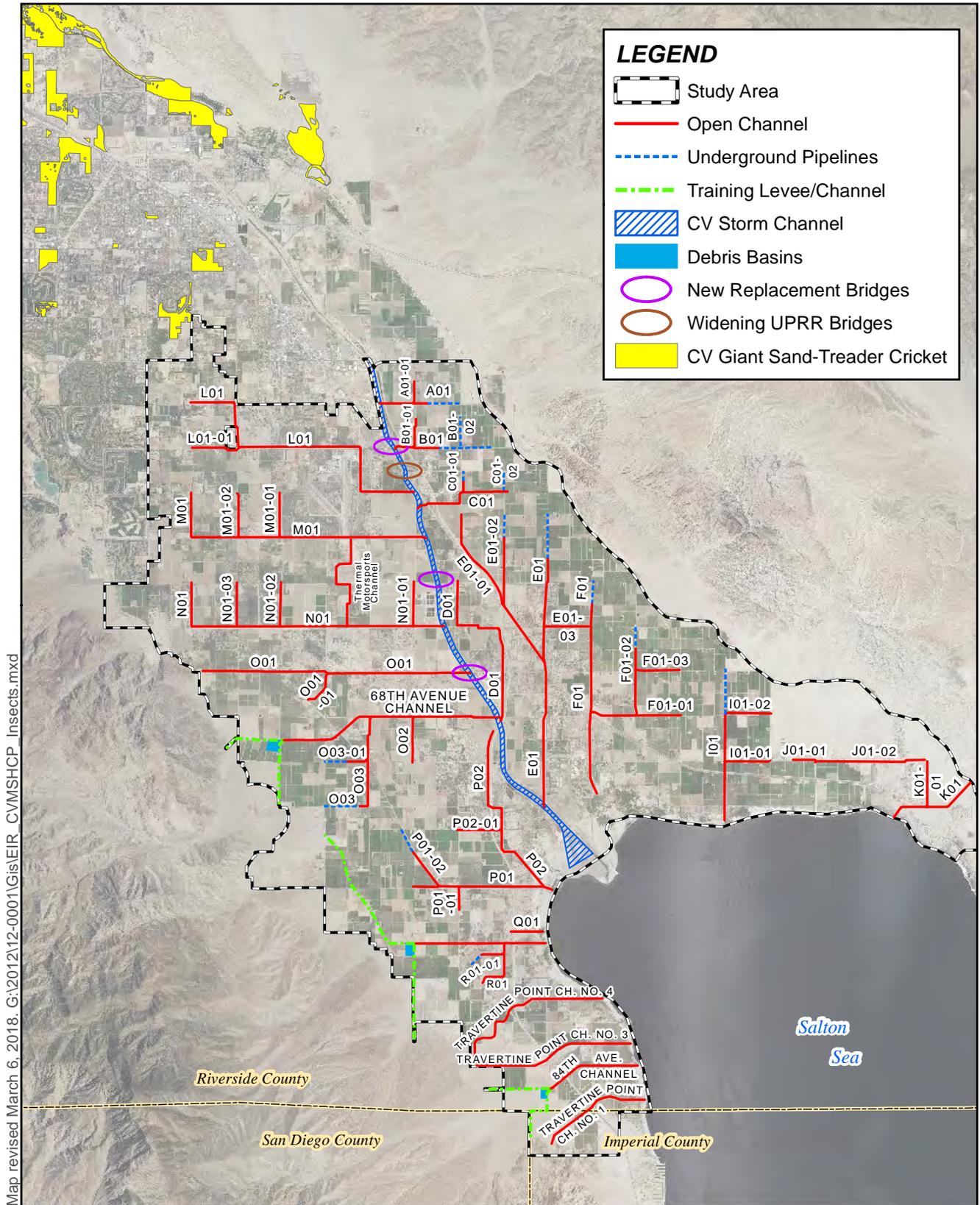
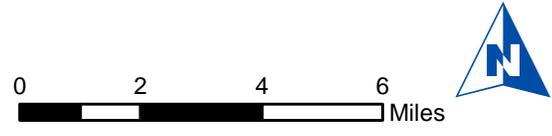


Figure 5.3-3 - CVMSHCP Insect Species Models
Eastern Coachella Valley Stormwater Master Plan



Special Status Amphibian and Fish Species in Coachella Valley

One species of fish and one species of amphibian maintain special protection status at federal and state levels, as described in **Table 5.3-D – Special Status Amphibian and Fish Species in Coachella Valley**. In addition, both are covered by the CVMSHCP, however only the desert pupfish is known to occur within the Area, as listed in **Table 5.3-E CVMSHCP Fish Species Traversed by Facilities**. Facilities that do not traverse desert pup fish habitat have been omitted from the table. The arroyo toad is not found within the Master Plan Area, but farther north in the Whitewater Canyon Conservation Area, Snow Creek/Windy Point Conservation Area and the Upper Mission Creek/Big Morongo Canyon Conservation Area. Conservation measures specific to the arroyo toad are found in Section 9.5 of the CVMSHCP.

Table 5.3-D – Special Status Amphibian and Fish Species in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
FISH				
Desert pupfish <i>Cyprinodont macularius</i>	Fed: E State: E	Water	Yes	Yes (see Table 5.3-E)
AMPHIBIAN				
(Southwestern) arroyo toad <i>Bufo microscaphus californicus</i>	Fed: E State: SSC	Riparian scrub; woodland and forest; water	No	N/A

Notes:

Fed E = Federally Endangered
T = Federally Threatened

State E = State Endangered
T = State Threatened

SSC = Species of Special Concern¹

Source: 2015 RCGP, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, p. 4.8-35. Location of species relative to Plan Area and Facilities is derived from **Figure 5.3-4 – Desert Pupfish Habitat**.

¹ A Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal (fish, amphibian, reptile, bird, or mammal) native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: (i) is extirpated from the State or, in the case of birds, is extirpated in its primary season or breeding role; (ii) is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; (iii) is experiencing, or formerly experienced, serious (nonsynclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; (iv) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status. Criteria for fishes are similar except that Federally listed taxa are not defined as SSCs.



The CVMSHCP considers the Whitewater River/CVSC and the surrounding agricultural drains where they enter the Salton Sea as Core Habitat for the desert pupfish, as shown on **Figure 5.3-4 – Desert Pupfish Habitat**. Conservation measures specific to the desert pupfish are identified in Section 9.4 of the CVMSHCP.

Table 5.3-E – CVMSHCP Fish Species Traversed by Facilities

Facility	Desert pupfish
I01	✓
F01	✓
E01	✓
CVSC	✓
P02	✓
P01	✓
Q01	✓
R01	✓
Travertine Point Channel No. 4	✓
Travertine Point Channel No. 3	✓
84 th Avenue Channel	✓
Travertine Point Channel No. 1	✓

Source: **Figure 5.3-4 – Desert Pupfish Habitat**.

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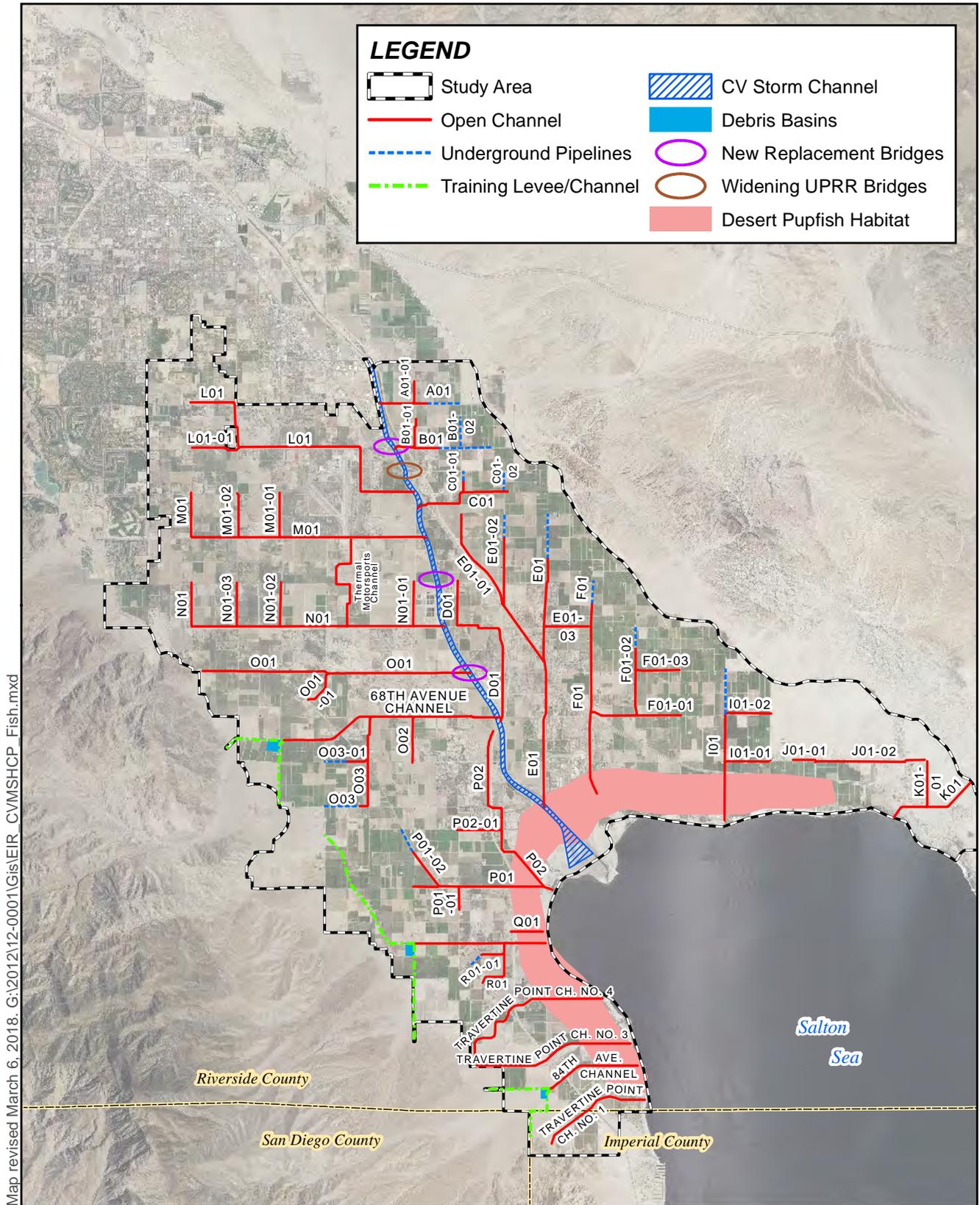


Figure 5.3-4 - Desert Pupfish Habitat

Eastern Coachella Valley Stormwater Master Plan



Special Status Reptiles in Coachella Valley

Table 5.3-F – Special Status Reptiles lists the three special status reptile species in Coachella Valley, which are also covered by the CVMSHCP, and their occurrence in the Master Plan Area and if such habitat would be traversed by a Facility. Additionally, **Figure 5.3-5 – CVMSHCP Reptile Species Models** shows the covered reptile species in the Master Plan area.

Table 5.3-F – Special Status Reptiles in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Desert tortoise (<i>Gopherus agassizi</i>)	Fed: T State: T	Sand Dune/Sand Fields; Desert Scrub; Riparian; Mojavean and Sonoran Desert Scrub	Yes	Yes (see Table 5.3-E)
Flat-tailed horned lizard (<i>Phrynosoma mcallii</i>)	Fed: None State: SSC	Sand Dune/Sand Fields; Desert Dune	Yes	Yes (see Table 5.3-E)
Coachella Valley fringe-toed lizard (<i>Uma inornata</i>)	Fed: T State: E	Sand Dune/Sand Fields; Sand Dune	No	N/A

Notes:

Fed T = Federally Threatened

State E = State Endangered

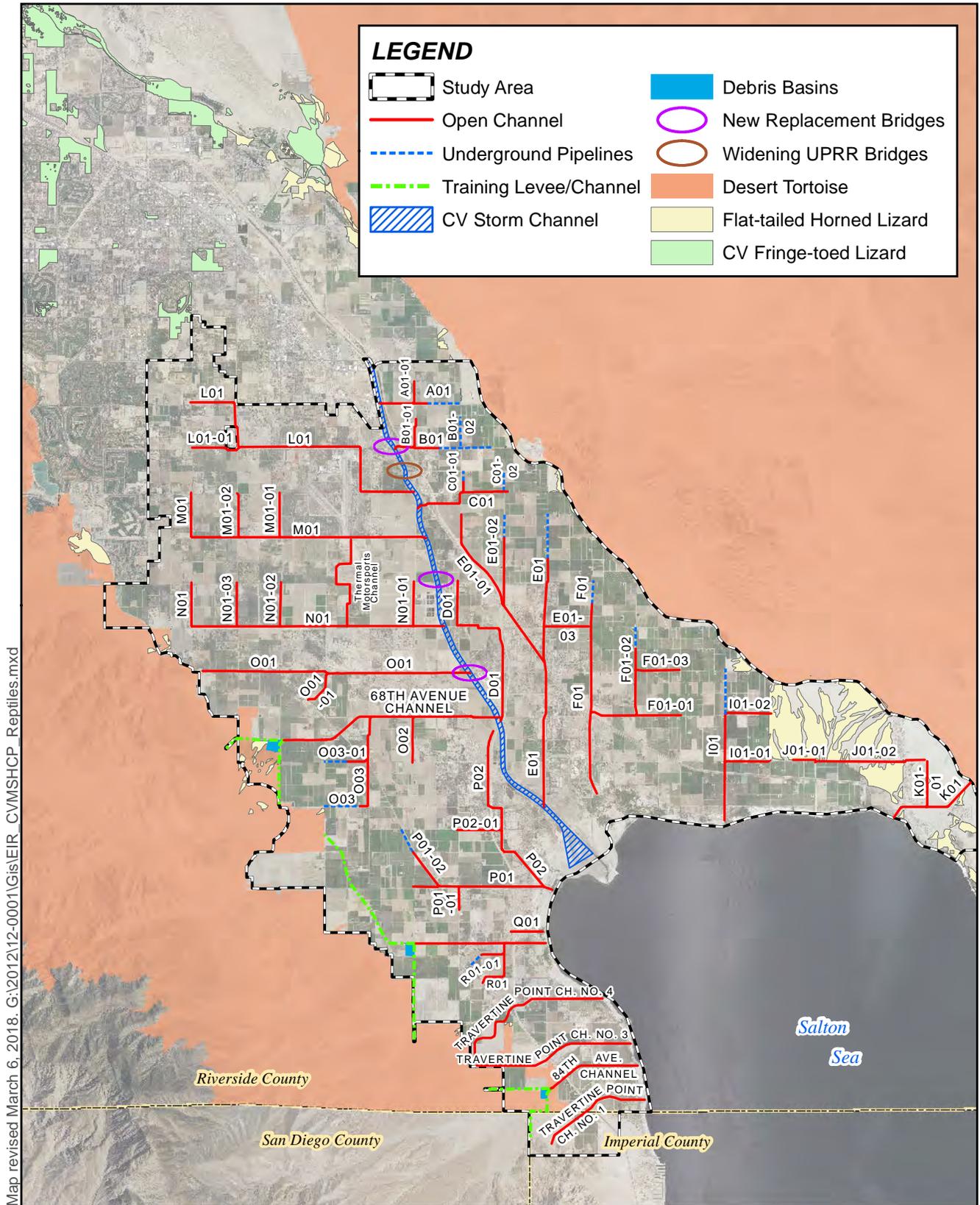
T = State Threatened

SSC = Species of Special Concern

Source: Table data derived from 2015 RCGP 2015, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, p. 4.8-35. Location of reptile species relative to Plan Area and Facilities is derived from **Figure 5.3-5**.

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Map revised March 6, 2018. G:\2012\12-0001\GIS\IIR_CVMSHCP_Reptiles.mxd

Sources: CVMSHCP, 2014; USDA NAIP, 2016.

Figure 5.3-5 - CVMSHCP Reptile Species Models
Eastern Coachella Valley Stormwater Master Plan



As shown on **Figure 5.3-5**, the desert tortoise (*Gopherus agassizi*) and flat-tailed horned lizard (*Phrynosoma mcallii*) are located within the Master Plan Area and Facilities would traverse habitat associated with these species. **Table 5.3-G – CVMSHCP Reptile Species Traversed by Facilities** lists which Facility traverses which reptile habitat. It should be noted that Facilities that do not traverse either the desert tortoise or flat-tailed horned lizard habitat have been omitted from the table.

Table 5.3-G – CVMSHCP Reptile Species Traversed by Facilities

Facility	Desert tortoise	Flat-tailed horned lizard
Lines		
84 th Ave Channel	✓	
I01-02		✓
J01-01		✓
J01-02		✓
K01		✓
K01-01		✓
Training Levee & Channel (associated with 68 th Ave Channel)	✓	✓
Training Levee & Channel (associated with 84 th Ave Channel)	✓	
Training Levee & Channel (associated with Kings Rd Channel)	✓	
Travertine Point Channel No. 3	✓	
Basins		
68 th Ave Basin		✓

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Special Status Birds in Coachella Valley

Table 5.3-H – Special Status Birds in Coachella Valley lists the 11 special status bird species in the Coachella Valley, which are also covered by the CVMSHCP, and their occurrence in the Master Plan Area and if such habitat would be traversed by a Facility. Additionally, **Figures 5.3-6a and 5.3-6b – CVMSHCP Bird Species Models** (on the pages following **Table 5.3-H**) show the potential locations of habitat for the covered bird species in the Master Plan area.

Table 5.3-H – Special Status Birds in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Burrowing owl (<i>Athene cunicularia hypugea</i>)	Fed: SMC State: SSC	Agriculture; Developed/Disturbed; Grassland; Desert Scrub; Mojavean and Sonoran Desert Scrub; Urban/Disturbed; Developed Areas	Yes ^a	Yes CVSC
Yellow warble (<i>Dendroica petechia brewster</i>)	Fed: None State: SSC	Riparian Scrub, Woodland and Forest; Woodland/Forest; Coniferous Woodland/Forest	Yes	Yes (see Table 5.3-G)
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	Fed: E State: E	Riparian Scrub, Woodland and Forest; Riparian	No	N/A
Yellow-breasted chat (<i>Icteria virens</i>)	Fed: None State: SSC	Riparian Scrub, Woodland and Forest; Riparian and Bottomland	Yes	Yes (see Table 5.3-G)
California black rail (<i>Laterallus jamaicensis</i>)	Fed: None State: T	Cismontane Alkali Marsh; Water; Marsh	Yes	Yes (see Table 5.3-G)
Summer tanager (<i>Piranga rubra</i>)	Fed: None State: SSC	Riparian	Yes	Yes (see Table 5.3-G)
Ridgway's rail (<i>Rallus obsoletus</i>)	Fed: E State: T, FP	Cismontane Alkali Marsh; Marsh; Riparian; Water	Yes	Yes (see Table 5.3-G)

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Crissal thrasher (<i>Toxostoma crissal</i>)	Fed: None State: SSC	Riparian	Yes	Yes (see Table 5.3-G)
Le Conte's thrasher (<i>Toxostoma leconte</i>)	Fed: None State: SSC	Mojavean and Sonoran Desert Scrub	Yes	Yes (see Table 5.3-G)
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	Fed: E, SMC State: E	Water; Woodland/Forest; Riparian Scrub, Woodland and Forest	Yes	Yes (see Table 5.3-G)
Gray vireo (<i>Vireo vicinior</i>)	Fed: None State: SSC	Chaparral; Woodland and Forest; Desert Scrub; Coniferous Woodland/Forest; Mojave and Sonora Desert Scrub	No	N/A

Notes:

Fed E = Federally Endangered

SMC = Species of Management Concern (non-game migratory bird species of concern identified by the U.S. Fish and Wildlife Service due to documented or apparent decline, small or restricted populations, or dependence on restricted or vulnerable habitats)

State E = State Endangered

T = State Threatened

SSC = Species of Special Concern

FP = Fully Protected

^a Given the limited knowledge of burrowing owl distribution and abundance in the area covered by the CVMSHCP (which includes the Master Plan Area) and their ability to relocate when established nesting sites are lost, which are often in agricultural and urban areas, no species model was prepared for the CVMSHCP because sufficiently precise habitat parameters could not be defined. However, implementation of the CVMSHCP, including its Avoidance, Minimization, and Mitigation Measures and implementation of its Reserve System, was determined to be adequate for CEQA analysis purposes in regards to impacting burrowing owls. (CVMSHCP EIR, p. 4.7-41)

Source: Table data derived from 2015 RCGP, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, pp. 4.8-36 – 4.8-38. Location of bird species relative to Plan Area and Facilities is derived from **Figures 5.3-6a and 6b – CVMSP Bird Species Models.**

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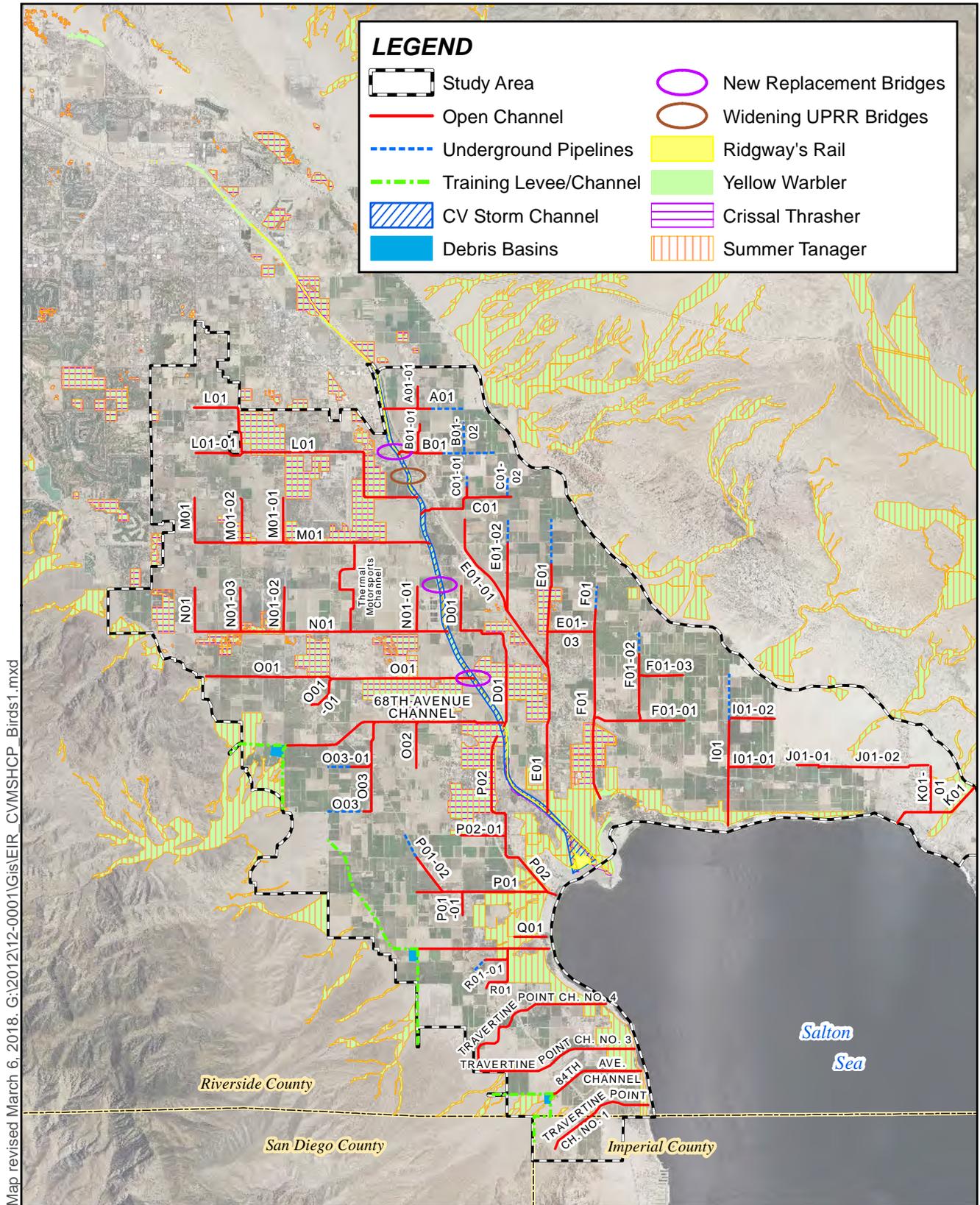
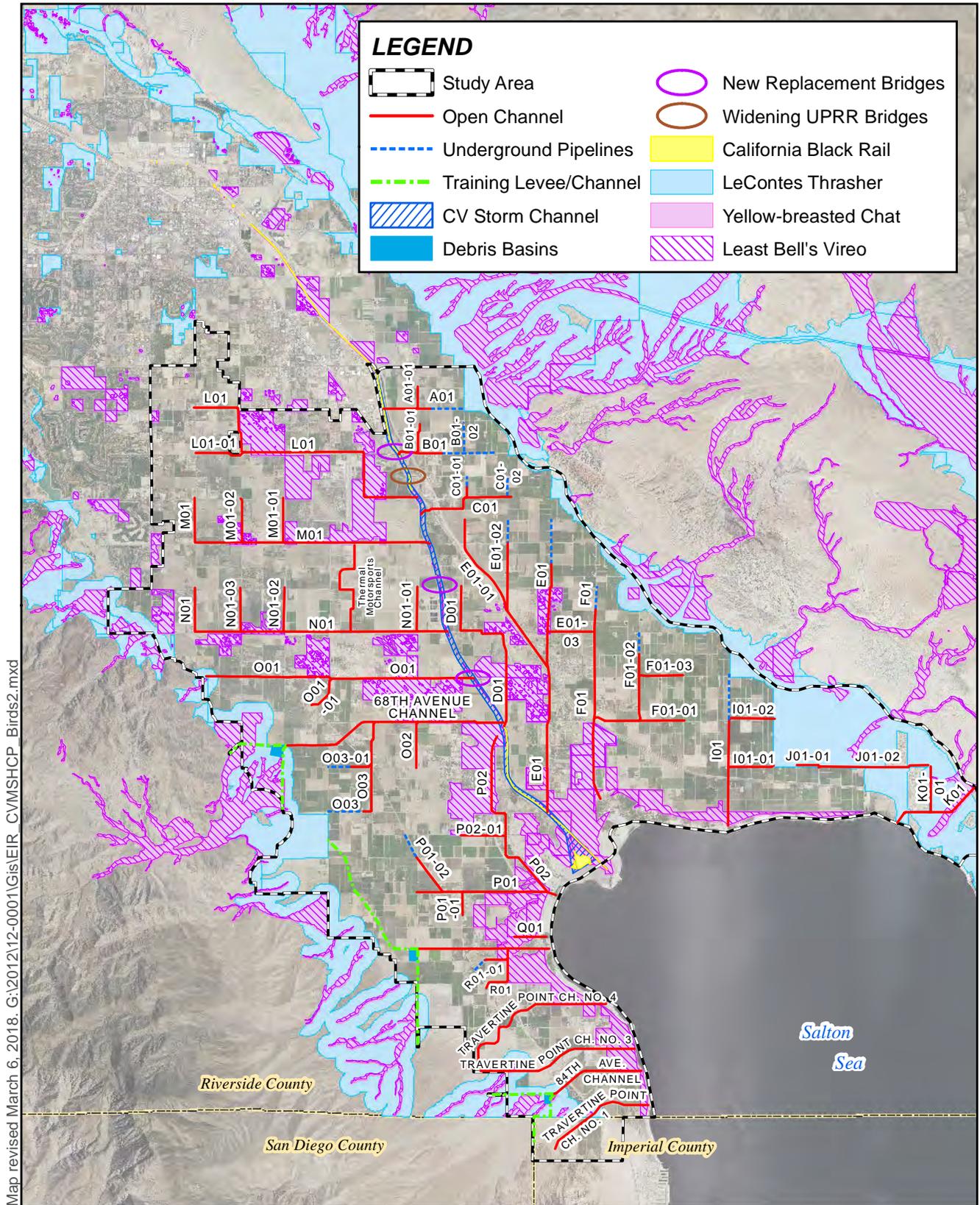


Figure 5.3-6a - CVMShCP Bird Species Models
Eastern Coachella Valley Stormwater Master Plan

0 2 4 6 Miles





Map revised March 6, 2018. G:\2012\12-0001\GIS\EIR_CVMShCP_Birds2.mxd

Sources: CVMShCP, 2014;
USDA NAIP, 2016.

Figure 5.3-6b - CVMShCP Bird Species Models
Eastern Coachella Valley Stormwater Master Plan



As shown on **Figures 5.3-6a and 5.3-6b**, Facilities would traverse habitat associated with eight bird species. CVMSHCP does not map burrowing owl habitat due to the difficulty of defining precise habitat parameters. **Table 5.3-I – CVMSHCP Bird Species Traversed by Facilities** lists which Facility traverses which bird habitat. Facilities that do not traverse bird habitat have been omitted from the following table.

Table 5.3-I – CVMSHCP Bird Species Traversed by Facilities

Facility	California Black Rail	Crissal Thrasher	Least Bell's Vireo	Le Conte's Thrasher	Summer Tanager	Yellow-breasted Chat	Yellow Warbler	Ridgway's Rail
Lines								
68 th Ave Channel	✓	✓	✓	✓	✓	✓	✓	✓
84 th Ave Channel			✓	✓	✓	✓	✓	
A01	✓		✓		✓	✓		✓
A01-01								
B01	✓		✓		✓	✓		✓
C01			✓		✓	✓	✓	
D01	✓	✓	✓	✓	✓	✓	✓	✓
E01	✓	✓	✓	✓	✓	✓	✓	✓
E01-01		✓	✓	✓	✓	✓	✓	
E01-02		✓	✓	✓	✓	✓	✓	
E01-03		✓	✓	✓	✓	✓	✓	
F01		✓	✓	✓	✓	✓	✓	
I01			✓		✓	✓	✓	
I01-01				✓				
I01-02				✓				
J01-01				✓				
J01-02				✓				
K01			✓	✓	✓	✓		
K01-01			✓	✓	✓	✓		

Facility	California Black Rail	Crissal Thrasher	Least Bell's Vireo	Le Conte's Thrasher	Summer Tanager	Yellow-breasted Chat	Yellow Warbler	Ridgway's Rail
Kings Rd Channel			✓		✓	✓		
L01		✓	✓	✓	✓	✓		
M01		✓	✓	✓	✓	✓	✓	
M01-02		✓	✓	✓	✓	✓	✓	
N01		✓	✓	✓	✓	✓	✓	
N01-03		✓	✓	✓	✓	✓	✓	
O01		✓	✓	✓	✓	✓	✓	
O02		✓	✓	✓	✓	✓	✓	
P01			✓		✓	✓	✓	
P02		✓	✓	✓	✓	✓	✓	
P02-01		✓	✓	✓	✓	✓	✓	
Q01			✓		✓	✓	✓	
R01			✓		✓	✓	✓	
R01-01			✓		✓	✓	✓	
Training Levee & Channel (associated with 68 th Ave Channel)			✓	✓	✓	✓	✓	
Training Levee & Channel (associated with 84 th Ave Channel)			✓	✓	✓	✓	✓	
Training Levee & Channel (associated with Kings Rd Channel)			✓	✓	✓	✓	✓	



Facility	California Black Rail	Crissal Thrasher	Least Bell's Vireo	Le Conte's Thrasher	Summer Tanager	Yellow-breasted Chat	Yellow Warbler	Ridgway's Rail
Travertine Point Channel No. 3			✓	✓	✓	✓	✓	
Travertine Point Channel No. 4			✓		✓	✓	✓	
Travertine Point Channel No.1			✓	✓	✓	✓	✓	
Basins								
68 th Ave Basin			✓	✓	✓	✓	✓	
84 th Ave Basin			✓	✓	✓	✓	✓	
Coachella Valley Stormwater Channel								
CVSC	✓	✓	✓	✓	✓	✓	✓	✓

Source: Location of bird species relative to Plan Area and Facilities is derived from **Figures 5.3-6a and 6b – CVMSB Bird Species Models**

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Special Status Mammals in Coachella Valley

Table 5.3-J – Special Status Mammals in Coachella Valley lists the four special status mammal species in the Coachella Valley that are also covered by the CVMSHCP, their occurrence in the Master Plan Area, and if their habitat would be traversed by a Facility. Additionally, **Figure 5.3-7 – CVMSHCP Mammal Species Models** shows the covered mammal species in the area.

Table 5.3-J – Special Status Mammals in Coachella Valley

Species Name	Status	Natural Community Association	Occurs in Plan Area?	Habitat Traversed by Facilities?
Southern yellow bat <i>(Lasiurus ega (or xanthinus))</i>	Fed: None State: SSC	Marsh; Water, palm oases. Roost sites often found in the fronds of desert fan palms.	No	N/A
Peninsular bighorn sheep <i>(Ovis canadensis nelsoni)</i>	Fed: E State: T	Riparian; Urban and Disturbed; Desert Scrub; Developed Areas; Mojave and Sonoran Desert Scrub	Yes	Yes (see Table 5.3-I)
Palm Springs pocket mouse <i>(Perognathus longimembris bangsi)</i>	Fed: None State: SSC	Sand Dunes/Sand Fields; Desert Scrub; Desert Dune; Mojave and Sonoran Desert Scrub	Yes	Yes (see Table 5.3-I)
Coachella Valley round-tailed ground squirrel <i>(Spermophilus tereticaudus chlorus)</i>	Fed: None State: SSC	Desert Scrub; Dry Wash Woodland and Mesquite; Desert Dune; Mojave and Sonoran Desert Scrub; Riparian and Bottomland; Sand Dune/Sand Fields	Yes	Yes (see Table 5.3-I)

Notes:

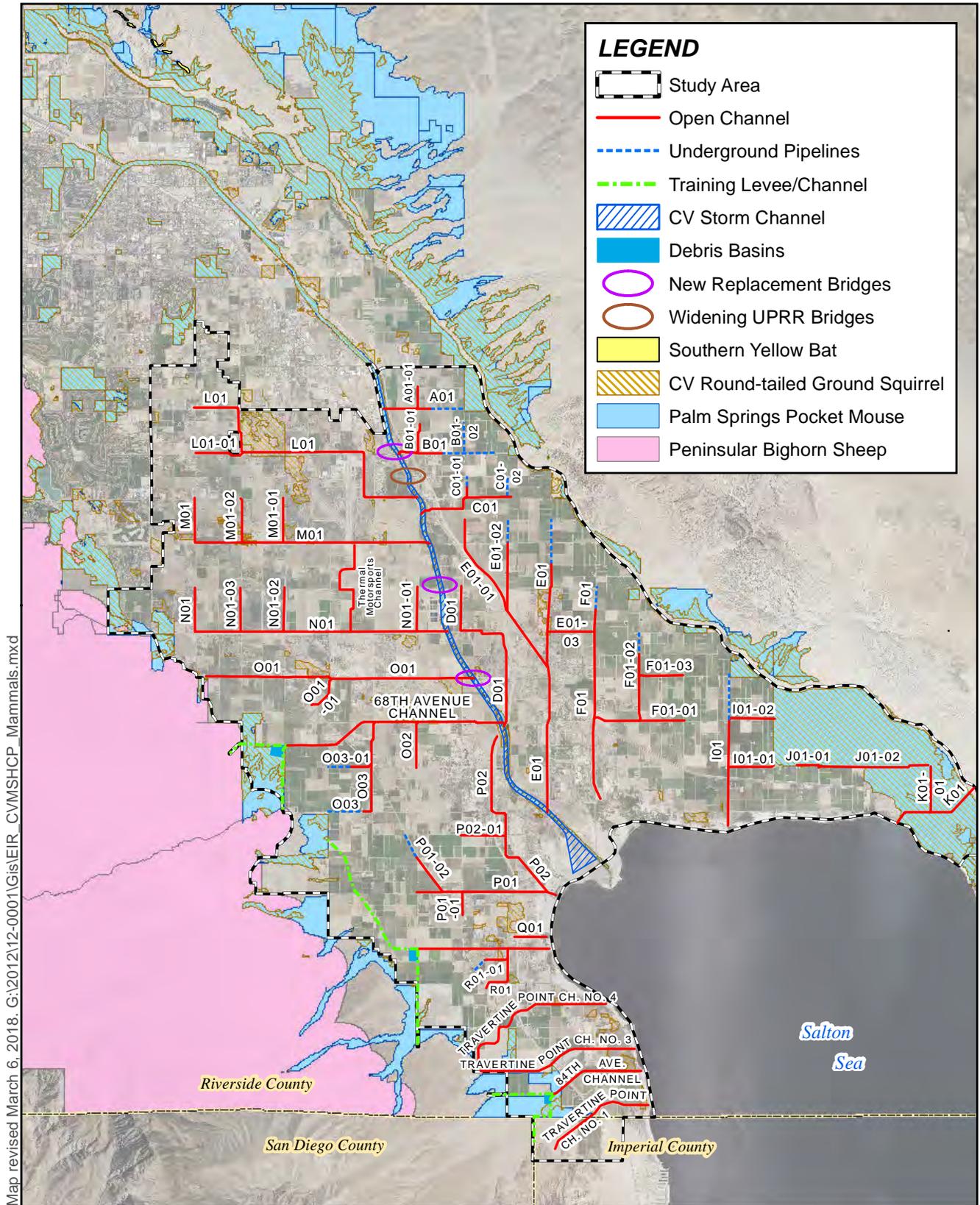
Fed E = Federally Endangered

State T = State Threatened

SSC = Species of Special Concern (species considered by the CDFW as possibly facing extirpation in California due to declining populations or loss of habitat)

Source: Table data derived from 2015 RCGP, Recirculated Draft Environmental Impact Report No. 521, February 2015, Table 4.8-D, pp. 4.8-38 – 4.8-39. Location of mammal species relative to Plan Area and Facilities is derived from **Figure 5.3-7**.





Map revised March 6, 2018. G:\2012\12-0001\GIS\IIR_CVMSHCP_Mammals.mxd

Sources: CVMSHCP, 2014;
USDA NAIP, 2016.

Figure 5.3-7 - CVMSHCP Mammals Species Models

Eastern Coachella Valley Stormwater Master Plan



As shown on **Figure 5.3-7**, Facilities would traverse habitat associated with three mammal species. **Table 5.3-K – CVMSHCP Mammal Species Traversed by Facilities** lists which Facility may traverse which mammal habitat. It should be noted that Facilities that would not traverse habitat of these covered mammal species have been omitted from the following table.

Table 5.3-K – CVMSHCP Mammal Species Traversed by Facilities

Facility	Coachella Valley Round-tailed Ground Squirrel	Palm Springs Pocket Mouse	Peninsular Bighorn Sheep
Lines			
68 th Ave Channel	✓	✓	
84 th Ave Channel	✓	✓	
A01	✓	✓	
B01	✓	✓	
C01	✓	✓	
D01	✓	✓	
E01	✓	✓	
E01-03	✓		
I01-02	✓	✓	
J01-01	✓	✓	
J01-02	✓	✓	
K01	✓	✓	
K01-01	✓	✓	
Kings Rd Channel	✓		
L01	✓	✓	
M01	✓	✓	
M01-02	✓		
N01	✓	✓	
O01	✓	✓	
O02	✓		
R01	✓		
R01-01	✓		
Training Levee & Channel (associated with 68 th Ave)	✓	✓	✓



Facility	Coachella Valley Round-tailed Ground Squirrel	Palm Springs Pocket Mouse	Peninsular Bighorn Sheep
Channel)			
Training Levee & Channel (associated with 84 th Ave Channel)	✓	✓	
Training Levee & Channel (associated with Kings Rd Channel)	✓	✓	
Travertine Point Channel No. 3	✓	✓	
Travertine Point Channel No. 4	✓		
Travertine Point Channel No.1	✓		
Basins			
68 th Ave Basin	✓	✓	
84 th Ave Basin	✓	✓	
Coachella Valley Stormwater Channel			
CVSC	✓	✓	

Source: Location of mammal species relative to Plan Area and Facilities is derived from **Figure 5.3-7**.

5.3.1.3 Vegetation within Imperial County Portion of the Master Plan Area

As mentioned above, portions of two Facilities would traverse into Imperial County. These portions include a training levee and channel associated with 84th Avenue Channel and an open channel identified as Travertine Point Channel No. 1 (see **Figure 3-3**). As Imperial County is not signatory to, nor a Permittee of, the CVMSHCP, this area in Imperial County is not covered by the CVMSHCP. Even so, it is reasonably anticipated that the type of vegetation in this area of Imperial County is similar to that shown by the CVMSHCP just north of the Riverside and Imperial County line. Nonetheless, as the portion of the Master Plan Area that is within Imperial County is generally coterminous with the Imperial County portion of the Travertine Point Specific Plan, relevant environmental data from that project's EIR (State Clearinghouse Number 2007101145) is incorporated here, and that EIR is hereby incorporated by reference.²

² Travertine Point Specific Plan was approved and its EIR certified by the lead agency, Riverside County, on February 7, 2012, and by the responsible agency, Imperial County, on January 15, 2013.



Table 5.3-L – Vegetation Traversed by Facilities in Imperial County lists the vegetation types within the Imperial County portion of the Master Plan Area and Facilities that would traverse such vegetation types. Following this table is a brief description of the vegetation.

Table 5.3-L – Vegetation Traversed by Facilities in Imperial County

Facility ^a	Agriculture	Blue palo verde wash woodland ^b	Sonoran creosote bush scrub ^c	Rocky hillside vegetated with Sonoran creosote bush scrub
Training Levee & Channel (associated with 84 th Ave Channel)		✓	✓	
Travertine Point Channel No. 1	✓	✓	✓	✓

Notes:

- ^a These Facilities originate in Riverside County, and only a portion of these Facilities extend to Imperial County.
- ^b Considered sensitive by California Department of Fish and Wildlife.
- ^c Considered a sensitive community per the California Natural Diversity Database (CNDDB).

Source: Travertine Point Revised Draft EIR, May 2011, derived from Table 6.4-1 and Figure 6.4-1.

Blue palo verde wash woodland: This plant community occurs primarily in natural drainages running through Sonoran creosote bush scrub in this area of Imperial County. This woodland is dominated by palo verde (*Cercidium floridum*) and also contains catclaw acacia (*Acacia greggii*), smoke tree (*Psoralea spinosus*), and scattered shrubs similar to those found in the surrounding Sonoran creosote bush scrub (including creosote bush, white bursage, and cheesebush). This plant community occurs in areas of greater topographic complexity, relative to the surrounding areas of Sonoran creosote scrub, with current and historic flood channels and banks in a braided mosaic with elevated areas of greater Sonoran creosote scrub affinity. This community intergrades with the Sonoran creosote scrub community throughout the upland portions in highly complicated mosaic, and with a largely overlapping suite of species in each community. (TPEIR, p. 6.4-16.)

Sonoran creosote bush scrub: As this vegetation type also occurs within Riverside County, see the description for this vegetation in Section 5.3.1.1, above.

Rocky hillside vegetated with Sonoran creosote bush scrub: The southernmost portion of the Master Plan Area within Imperial County contains rocky hillside vegetated with Sonoran creosote bush scrub vegetation. This area is made up of steeply sloping, rocky hillsides, on which plant species similar to those found with Sonoran creosote bush scrub (described in Section 5.3.1.1). Creosote bush was the dominant plant species within this area, and ocotillo is also within this area. (TPEIR, p. 6.4-16.)



Special Status Plant Species in Imperial County

According to the CNDDDB and CNPS, 16 special status plant species have been recorded in the area. However, only two of these species are known to occur within the Master Plan Area, and only five of these species have the potential to occur. The five other special status plant species with the potential to occur were not observed during multiple surveys associated with the Travertine Point Specific Plan EIR (TPEIR, Table 6.4-2). **Table 5.3-M – Special Status Plant Species in Imperial County Portion of the Master Plan Area** identifies the two species known to occur or that have the potential to occur, along with their regulatory status, and habitat requirements. (TPEIR, p. 6.4-31.)

**Table 5.3-M – Special Status Plant Species
Known to Occur in Imperial County Portion of the Master Plan Area**

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Chaparral sand-verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	Fed: None State: None CNPS: 1B.1	Sandy soils in chaparral, coastal scrub, and desert dune plant communities. Specific to the Master Plan Area, the chaparral sand-verbena occurs in sandy roadside areas, and in sandy sites with Sonoran creosote bush scrub and blue palo verde wash woodland.	Yes	Potentially
Pierson's pebble pincushion (<i>Chaenactis carphoclinia</i> var. <i>peirsonii</i>)	Fed: None State: None CNPS: 1B.3	Open rocky or sandy sites within Sonoran desert scrub. Specific to the Master Plan Area, Pierson's pebble pincushion occurs in undisturbed Sonoran creosote bush scrub and blue palo verde wash woodland.	Yes	Potentially
Sand evening primrose (<i>Camissonia arenaria</i>)	Fed: None State: None CNPS: 2.2	Sandy or rocky habitats in Sonoran desert scrub communities	Potentially	Potentially
California ditaxis (<i>Ditaxis serrata</i> var. <i>californica</i>)	Fed: None State: None CNPS: 3.2	Sandy washes and alluvial fans of the foothills and lower desert slopes, within Sonoran desert scrub.	Potentially	Potentially

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Slender cotton heads (<i>Nemacaulis denudata</i> var. <i>gracilis</i>)	Fed: None State: None CNPS: 2.2	Coastal dunes, desert dunes, or Sonoran desert scrub, within dunes or sand	<i>Potentially</i>	<i>Potentially</i>
Mecca aster (<i>Xylorhiza cognate</i>)	Fed: None State: None CNPS: 1B.2	Steep canyon slopes, in sandstone and clay, within Sonoran desert scrub	<i>Potentially</i>	<i>Potentially</i>
Orcutt's woodyaster (<i>Xylorhiza orcuttii</i>)	Fed: None State: None CNPS: 1B.2	Arid canyons, often in washes, within Sonoran desert scrub	<i>Potentially</i>	<i>Potentially</i>

Notes:

- CNPS** 1B.1 – Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California
 1B.2 – Plant rare, threatened or endangered in California and elsewhere; fairly threatened in California
 1B.3 – Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California
 2.2 – Plants rare, threatened or endangered in California, but more common elsewhere; fairly threatened in California
 3.2 – Plants about which we need more information; fairly threatened in California

Source: Travertine Point Revised Draft EIR, May 2011, derived from Table 6.4-2.

Special Status Communities/Habitats in Imperial County

As mentioned above, 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. CDFW, through the California CNDDDB, tracks the occurrence of natural communities which it considers to be the most sensitive in the state.

The blue palo verde wash woodland is considered sensitive by the CDFW. The woodland is dominated by palo verde (*Cercidium floridum*), and is found in natural drainage in the Imperial County portion of the Master Plan Area.

5.3.1.4 Animals within Imperial County Portion of the Master Plan Area

The plant communities present in this area of Imperial County provide habitat for a variety of common wildlife species, including insects, fish, amphibians, reptiles, birds, and mammals. These common species were either observed during surveys associated with the Travertine Point Specific Plan EIR or have the potential to occur based on the quality and extent of available habitat based on known habitat requirements and home ranges of species occurring



in the region. (TPEIR, p. 6.4-23) Due to the vast diversity of common wildlife, only those with special status listing and that are known to occur or could potentially occur are listed in **Table 5.3-N – Special Status Animals Known to Occur in Imperial County Portion of the Master Plan Area.**

**Table 5.3-N – Special Status Animals
Known to Occur in Imperial County Portion of the Master Plan Area**

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Insects				
Cheeseweed owlfly (<i>Oliarces clara</i>)	Fed: None State: None Other: CNDDDB Special Animal	Inhabits the lower Colorado River Drainage. Found under rocks or in flight over streams. Creosote bush is the suspected larval host.	<i>Potentially</i>	<i>Potentially</i>
Fish				
Desert pupfish (<i>Cyprinodon macularius</i>)	Fed: E State: E	Desert ponds, springs, marshes, and streams in Southern California. This species can live in salinities from fresh water to 68 parts per thousand (ppt), can withstand temperatures from 48.2 to 113 degrees Fahrenheit (°F), and dissolved oxygen levels down to 0.1 parts per million (ppm).	<i>Potentially</i>	<i>Unlikely</i>
Amphibians				
Couch's spadefoot (<i>Scaphiopus couchii</i>)	Fed: BLM State: CSC	Temporary desert rainpools that last at least 7 days, with water temperatures greater than 15 degrees Celsius (°C) and with subterranean refuge sites close by. An insect food base (especially termites) must be available.	<i>Potentially</i>	<i>Potentially</i>

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Reptiles				
Rosy boa (<i>Charina trivirgata</i>)	Fed: BLM, FSS State: None	Desert and chaparral, from the coast to the Mojave and Colorado Deserts. Prefers moderate to dense vegetation and rocky cover, including habitats with a mix of brushy cover and rocky soil, such as coastal canyons and hillsides, desert canyons, washes, and mountains. Where found in desert scrub, prefers rocky areas.	<i>Potentially</i>	<i>Potentially</i>
Flat-tailed horned lizard (<i>Phrynosoma mcallii</i>)	Fed: FPT, BLM, FSS State: CSC	Restricted to desert washes and desert flats in central Riverside, Eastern San Diego, and Imperial counties. Critical habitat element is fine sand, into which lizards burrow to avoid temperature extremes. This species requires vegetative cover and ants.	<i>Potentially</i>	<i>Potentially</i>
Common chuckwalla (<i>Sauromalus ater</i>)	Fed: None State: None Other: CNDDDB Special Animal	Desert species, often occurs in or near creosote scrub habitat. Rocky hillsides and outcroppings, as well as lava flow rocks, provide shelter and basking sites.	Yes	No
Birds				
Cooper's hawk (nesting) (<i>Accipiter cooperii</i>)	Fed: None State: CSC	Nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>
Sharp-shinned hawk (nesting) (<i>Accipiter striatus</i>)	Fed: None State: CSC	Forages over chaparral and other scrublands. Nests in woodlands or sometimes in groves of trees in more open country; prefers thick cover and conifers when available.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>
Golden eagle (nesting and wintering) (<i>Aquila chrysaetos</i>)	Fed: BCC, BLM State: CSC, DFW, CDF	Open terrain in deserts, mountains, slopes, and valleys. Nest mainly on cliffs, also in large trees (such as oaks), and rarely on artificial structures, or the ground.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>



Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Great egret (rookery) (<i>Ardea alba</i>)	Fed: None State: CDF	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. This species normally builds its nests in woodlands or trees at 15 – 40 ft. in height, but would less commonly nest in waterside thickets or scrub.	Potentially (Rookery not expected)	Potentially
Great blue heron (rookery) (<i>Ardea herodias</i>)	Fed: None State: CDF	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites located in close proximity to foraging areas, including marshes, lake margins, tide-flats, rivers and streams, and wet meadows. Nests are usually built in tall trees, but sometimes would be found in bushes, on ledges of cliffs or rock outcrops, or on the ground in tule beds or elsewhere.	Potentially (Rookery not expected)	Potentially
Burrowing owl (burrow sites) (<i>Athene cunicularia</i>)	Fed: BCC, BLM State: CSC	Open, dry annual or perennial grassland and desert habitats throughout California, as well as scrublands characterized by low growing, widely spaced vegetation. Subterranean nester. Dependent upon burrowing mammals, especially California ground squirrel.	Yes	Potentially
Ferruginous hawk (wintering) (<i>Buteo regalis</i>)	Fed: BCC, BLM State: CSC Other: AWL	Forages in agricultural and urban habitats, as well as creosote bush and saltbush scrub. Breeds in isolated trees, small groves of trees, on rocky ledges, or occasionally on the ground. Nests are adjacent to open areas such as grasslands or shrublands. Prefers open country, where it often hunts from low perches on fence posts, utility poles, or small trees.	Potentially	Potentially
Northern harrier (nesting) (<i>Circus cyaneus</i>)	Fed: None State: CSC	Coastal salt marshes, freshwater marshes, grasslands, and agricultural fields, including desert habitats. Nests on the ground in meadows and open marshlands (salt or fresh). Usually found nesting in the shelter of tall grass or shrubs.	Yes (But not expected to nest)	Potentially



Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Mountain plover (wintering) (<i>Charadrius montanus</i>)	Fed: BCC State: CSC Other: USBC, AWL, ABC	Breeds at moderate elevations on open plains, especially shortgrass prairie. Nests on flats between hummocks, occasionally amid cacti or scattered shrubs. Winters on dry, barren ground, smooth dirt fields, and shortgrass prairies in central California and inland Southern California, south to Baja.	Potentially	Potentially
Snowy egret (rookery) (<i>Egretta thula</i>)	Fed: None State: None Other: USBC	Colonial nester, with nest sites situated in protected beds of dense tules. Rookery sites situated close to foraging areas, including marshes, tidal-flats, streams, wet meadows, and borders of lakes. This species often creates nests in trees between 5 and 10 ft. high; however, it would nest among shrubs in more open habitats.	Potentially	Potentially
Prairie falcon (nesting) (<i>Falco mexicanus</i>)	Fed: BCC State: CSC	Breeds on cliffs in dry, open terrain and forages far afield, even to marshlands and ocean shores.	Potentially	Potentially
American peregrine falcon (nesting) (<i>Falco peregrinus anatum</i>)	Fed: BCC, FSS State: E, CDF, DFW	Occurs near wetlands, lakes, rivers, or other water. Utilizes cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Yes (But not expected to nest)	Potentially
Gull-billed tern (nesting colony) (<i>Gelochelidon nilotica</i>)	Fed: BCC State: CSC Other: ABC	Only known breeding colonies in Imperial and Riverside counties. Nests on low, sandy islets. Known to feed on fish at mouth of Colorado River and on grasshoppers in alfalfa fields.	No	N/A
Loggerhead shrike (nesting) (<i>Lanius ludovicianus</i>)	Fed: BCC State: CSC	Open, brushy habitats, such as fields with scattered shrubs, hedgerows, trees, fences, or utility lines—also, the edge of woods. Nests in thick shrubs or trees.	Potentially	Potentially



Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Long-billed curlew (nesting) (<i>Numenius americanus</i>)	Fed: BCC State: CSC Other: USBC, AWL, ABC	Nests on relatively dry grasslands. Winters in marshes and fields and on lawns and beaches.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>
Black-crowned night heron (rookery) (<i>Nycticorax nycticorax</i>)	Fed: BLM State: None	Colonial nester, usually in trees, occasionally in tule patches. Rookery sites located adjacent to foraging areas, which include lake margins, mud-bordered bays, and marshy spots.	No	N/A
Osprey (nesting) (<i>Pandion haliaetus</i>)	Fed: None State: CSC	Known to winter in the Salton Sea area, but not spending breeding season there.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>
American white pelican (nesting colony) (<i>Pelecanus erythrorhynchos</i>)	Fed: None State: CSC	Colonial nester on large interior lakes. Nests on large lakes that provide safe roosting and breeding places in the form of well-sequestered islets.	<i>Potentially (But not expected to nest)</i>	<i>Potentially</i>
Double-crested cormorant (rookery site) (<i>Phalacrocorax auritus</i>)	Fed: None State: CSC	Occurs on clear, open waters from ponds and rivers to open ocean. Dives for fish. Roosts in trees and on posts, rocks, and sandbars at water's edge. May form large flocks.	No	N/A
White-faced ibis (rookery) (<i>Plegadis chihi</i>)	Fed: None State: CSC	Shallow, fresh water marsh. Habitat consists of dense tule thickets for nesting, interspersed with areas of shallow water for foraging.	No	N/A
Black-tailed gnatcatcher (<i>Polioptila melanura</i>)	Fed: None State: None Other: CNDDDB Special Animal	Primarily inhabits wooded desert wash habitats, and also occurs in desert scrub habitat, especially during the winter. Nests in desert washes containing mesquite, palo verde, ironwood, and acacia. Is absent from areas where salt cedar (tamarisk) is introduced.	Yes	<i>Potentially</i>

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Ridgway's Rail (<i>Rallus Obsoletus</i>)	Fed: E State: T, DFW Other: USBC	Nests in fresh water marshes along the Colorado River and along the south and east ends of the Salton Sea. Prefers stands of cattails and tules dissected by narrow channels of flowing water. Principle food is crayfish. The clapper rail nests on the ground, hidden in growing or dead herbage, under a small bush, or raised above ground in a grass tuft or clump of rushes.	No	N/A
Black skimmer (nesting colony) (<i>Rynchops niger</i>)	Fed: BCC State: CSC Other: USBC, ABC	Nests on gravel bars, low islets, and sandy beaches, in unvegetated sites. Nesting colonies usually are less than 200 pairs.	No	N/A
Crissal thrasher (<i>Toxostoma crissale</i>)	Fed: BCC State: CSC	Resident of southeastern desert riparian and desert wash habitats. Nests in dense vegetation along streams and washes with mesquite, screwbean mesquite, ironwood, catclaw acacia, and arrowweed plants.	Potentially	Potentially
Le Conte's thrasher (<i>Toxostoma lecontei</i>)	Fed: BCC, BLM State: CSC Other: USBC, AWL, ABC	Desert wash, desert scrub, desert alkali scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2–8 ft. above the ground.	Potentially	Potentially
Mammals				
Pallid bat (<i>Antrozous pallidus</i>)	Fed: FSS, BLM State: CSC Other: WBWG: High Priority	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in small colonies of 12 – 100 bats within rock crevices, caves, mine shafts, under bridges, in buildings, and tree hollows. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Potentially	Potentially



Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Pallid San Diego pocket mouse (<i>Chaetodipus fallax pallidus</i>)	Fed: None State: CSC	This species occurs in desert border areas in eastern San Diego County in desert wash, desert scrub, desert succulent scrub, pinyon-juniper woodland, and other habitat types. Found in sandy herbaceous areas, usually in association with rocks or coarse gravel.	<i>Potentially</i>	<i>Potentially</i>
Spotted bat (<i>Euderma maculatum</i>)	Fed: BLM State: CSC Other: WBWG: High Priority	Forests, pinyon-juniper habitat, and desert scrub. Cliff-dweller that roosts in cracks and crevices of canyon walls.	<i>Potentially</i>	<i>Potentially</i>
Western mastiff bat (<i>Eumops perotis californicus</i>)	Fed: BLM State: CSC Other: WBWG: High Priority	Many open semi-arid to arid habitats. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. Roosts are usually 10–15 ft. or higher off the ground. Forms small colonies of up to 100 bats.	<i>Potentially</i>	<i>Potentially</i>
Western yellow bat (<i>Lasiurus xanthinus</i>)	Fed: None State: None Other: WBWG: High Priority	Found in valley foothill riparian, desert riparian, desert wash, and desert palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	<i>Potentially</i>	<i>Potentially</i>
Colorado Valley woodrat (<i>Neotoma albigula venusta</i>)	Fed: None State: None Other: CNDDDB Special Animal	Low-lying desert areas in southeastern California closely associated with beavertail cactus and mesquite. Intolerant of cold temperatures. Eats mainly succulent plants. Its distribution is influenced by the abundance of nest building material.	<i>Potentially</i>	<i>Potentially</i>
Pocketed free-tailed bat (<i>Nyctinomops femorosaccus</i>)	Fed: None State: CSC Other: WBWG: Medium Priority	Variety of arid areas in Southern California, including pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian habitats. Roosts in rocky areas with high cliffs.	<i>Potentially</i>	<i>Potentially</i>

Species Name	Status	Habitat Requirements	Occurs in Plan Area?	Habitat Traversed by Facilities?
Peninsular bighorn sheep (<i>Ovis canadensis nelsoni</i> , DPS)	Fed: E State: T, DFW	Open desert slopes below 4,000 ft. (1,220 m), from San Gorgonio Pass south into Mexico. Optimal habitat includes steep walled canyons and ridges bisected by rocky or sandy washes with available water.	Potentially	Potentially
Palm Springs round-tailed ground squirrel (<i>Spermophilus tereticaudus chlorus</i>)	Fed: C State: CSC	Restricted to the Coachella Valley. Prefers desert succulent scrub, desert wash, desert scrub, alkali scrub, and levees. Prefers open, flat, grassy areas in fine-textured, sandy soil. Density is correlated with winter rainfall.	Potentially	Potentially
American badger (<i>Taxidea taxus</i>)	Fed: None State: CSC	Most abundant in drier, open stages of most shrub, forest, and herbaceous habitats with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Potentially	Potentially

Notes:

Federal E = Federally Endangered
 T = Federally Threatened
 FPT = Proposed for federal listing as Threatened
 C = Federal Candidate for listing
 BCC = Federal Bird of Conservation Concern (a watch list)
 BLM = Sensitive per Bureau of Land Management
 FSS = Sensitive per USDA Forest Service

State E = State Endangered
 T = State Threatened
 SSC = Species of Concern
 DFW = CDFW Fully Protected
 CDF = Sensitive per California Department of Forestry

Other ABC = American Bird Conservancy Green List
 AWL = Audubon Watch List
 CNDDDB Special Animal = Species that do not have a formal designation by any resource agency, but that are considered sensitive resources by the CDFW due to declines known in population
 USBC = United States Bird Conservation Watch List
 WBWG = Western Bat Working Group (a watch list)

^a Desert pupfish habitat is known to occur along the Salton Sea shoreline. ECV facilities within Imperial County are located roughly 2 miles inland from shoreline and therefore considered unlikely to occur within Imperial County. Source: Travertine Point Revised Draft EIR, May 2011, derived from Table 6.4-3.

5.3.1.5 Jurisdictional Resources

Drainages, streambeds, wetlands, and creeks that meet the definition of “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, vernal pools, playas, and prairie potholes. Waters of the U.S., as defined by the ordinary high water mark, typically include streams, rivers, lakes, and tributaries thereof. However, isolated waters and manmade waterways are usually not regulated under Section 404; they would likely be within the purview of the RWQCB and CDFW.

The Regional Water Quality Control Board (RWQCB) regulates “waters of the United States” through Section 401 of the federal Clean Water Act. If a Section 404 permit from ACOE is needed, then a 401 permit from the RWQCB will also be needed. The RWQCB also regulates the discharge of waste to “waters of the state” through the state’s Porter-Cologne Water Quality Control Act, which includes isolated waters. A 401 Water Quality Certification may be needed if a project proposes fill/excavation or dredged material to be discharged into waters of the U.S. RWQCB authority includes protecting both surface water and groundwater resources.

All perennial, intermittent, and ephemeral rivers, streams, and lakes including their associated riparian vegetation fall under the jurisdiction of CDFW. CDFW typically has the greatest jurisdictional authority by examining impacts from “bank to bank,” and thus will overlap with ACOE/RWQCB jurisdiction. Under Section 1602 of the Fish and Game Code, the CDFW is authorized to issue conditions for substantial impacts to fish and wildlife resources if a person, state, public utility, or local governmental agency propose an activity that would do one or more of the following: 1) substantially divert or obstruct the natural flow of any river, stream or lake; 2) substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

Figure 5.3-8 – Potential Jurisdictional Features Map identifies the locations of drainage features potentially under the jurisdiction of the resource agencies. The Master Plan Area also contains numerous roadside ditches, some of which may be regulated by one or more of the resource agencies. Some of these roadside ditches are part of the natural or historic drainage patterns in the Master Plan Area that have been identified for the siting of Facilities to convey stormwater to the CVSC and Salton Sea.

The ACOE also regulates the alteration or occupation or use of ACOE-constructed public works projects (e.g., dams, basins, levees, channels, navigational channels) for temporary or permanent alterations, if the activity will not be injurious to the public interest, and will not impair the usefulness of the project. Authority is granted by Section 14 of the Rivers and Harbors Act of 1899 and codified in 33 USC 408 (“Section 408”). Most federally-constructed public works projects are turned over to a Non-Federal project sponsor for operation and maintenance (e.g., local flood control district). Anyone wishing to modify one of these facilities should first contact the Non-Federal Sponsor and work with them to prepare the Section 408 Permit application for submission to the ACOE for review and approval. Once the ACOE approves the modification / alteration, a permit will be issued to that Non-Federal Sponsor,



who in turn would issue their own permit to the Applicant. On the other hand, permission to perform new construction affecting flood-control reservoirs and channels for which the Federal Government holds rights-of-way and Operations and Maintenance responsibility, are referred directly to the Corps of Engineers. The permit would then be issued directly to the Applicant.

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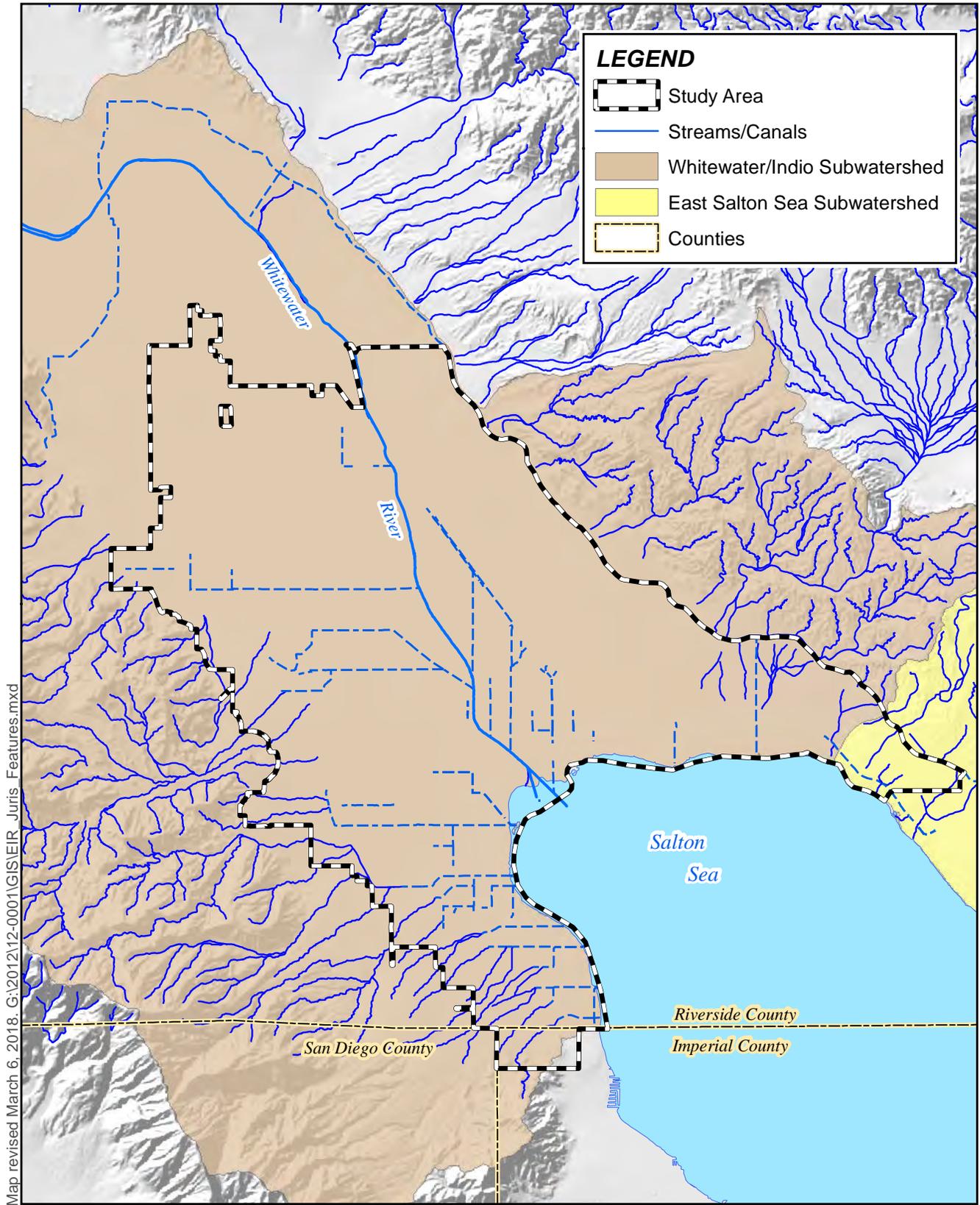


Figure 5.3-8 - Potential Jurisdictional Features Map

Eastern Coachella Valley Stormwater Master Plan



5.3.2 Comments Received in Response to the Notice of Preparation

No comments were received regarding biological resources.

5.3.3 Thresholds of Significance

The significance of potential impacts to biological resources were evaluated based on the State *CEQA Guidelines*, Appendix G criteria. Using these thresholds, the Project would be considered to have a significant impact if it were to affect the following thresholds:

- (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 Wildlife 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 Wildlife or U.S. Fish and Wildlife Service;
- (Threshold C) Have a substantial adverse effect on 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 D) 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 E) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- (Threshold F) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.³

5.3.4 Related Regulations

5.3.4.1 Federal Regulations

Federal Endangered Species Act of 1973

The Federal Endangered Species Act of 1973 (16 U.S.C. 1531–1543) (FESA) and subsequent amendments provide for the conservation of endangered and threatened species and the

³ The land use and planning threshold *Conflict with any applicable habitat conservation plan or natural community conservation plan* is also evaluated in this section of the Recirculated Draft PEIR.



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 FESA 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 ECV is not expected to result in “Take” of a listed species as the Project would conform to the CVMSHCP, as discussed below.

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. Certain common bird species may utilize the landscaped areas, especially existing trees for breeding and/or seasonal foraging.

The proposed ECV would comply with the MBTA and California Fish and Game Code by for MBTA-listed migratory birds not covered by the CVMSHCP as is discussed in the analysis below.

5.3.4.2 State Regulations

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 would 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 as the Project would conform to the CVMSHCP, as discussed below.



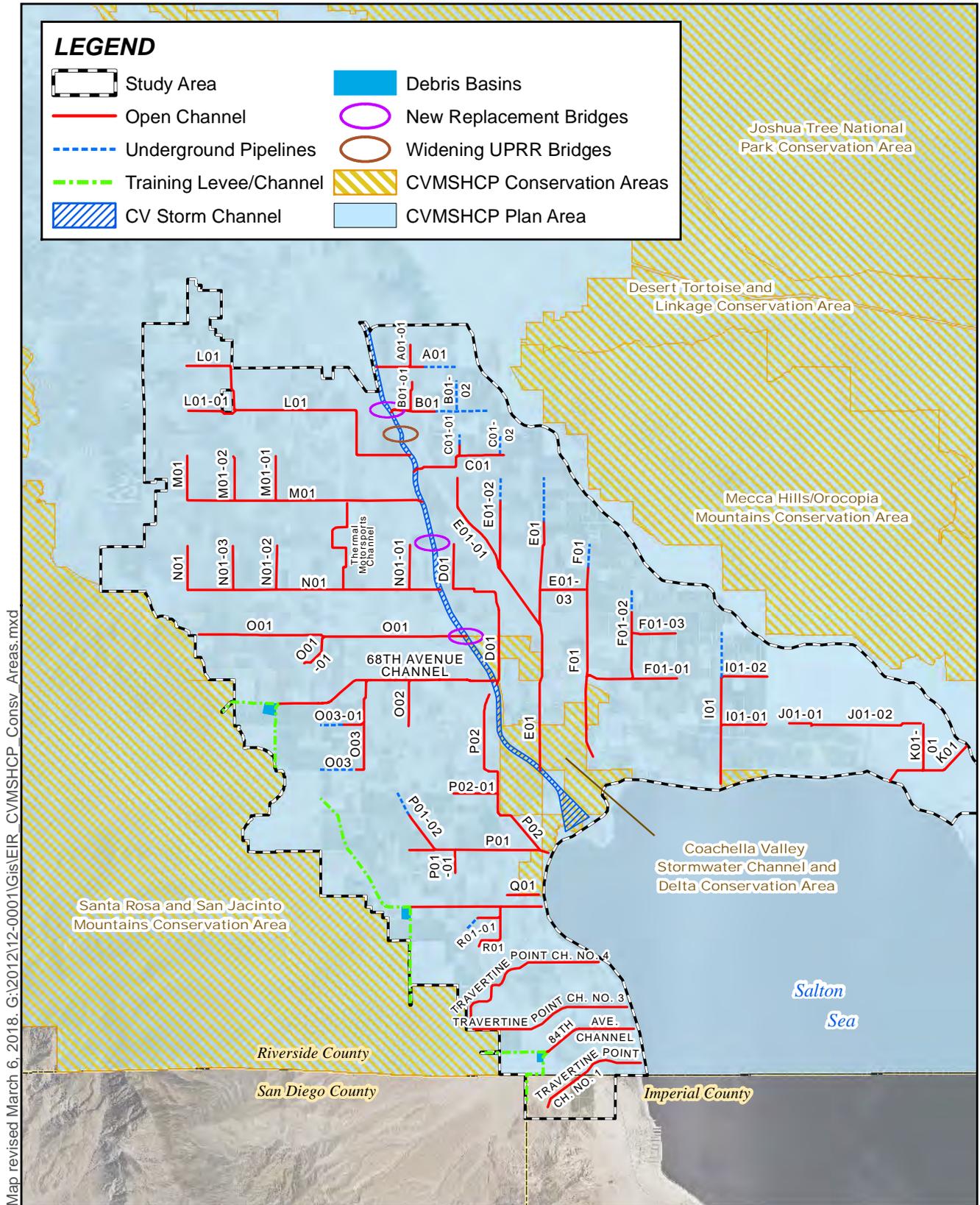
5.3.4.3 Regional Regulations

Coachella Valley Multiple Species Habitat Conservation Plan

Approved in October 2008, the CVMSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on conservation of species and their associated habitats in the Coachella Valley region of Riverside County. The MSHCP program was undertaken by the Coachella Valley Association of Governments, a joint-powers authority, with eight participating cities (Cathedral City, Coachella, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, and Rancho Mirage) along with Riverside County, CVWD, and Imperial Irrigation District. The overall goal of the CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth. The CVMSHCP covers 27 sensitive plant and wildlife species, as well as 27 natural communities. The overall provisions for the CVMSHCP are subdivided according to specific resource conservation goals and organized according to geographic areas, i.e., Conservation Areas. Section 4.3 of the CVMSHCP describes a “Conservation Area” as Core, Essential or Other Conserved Habitat for sensitive plant, invertebrate, amphibian, reptile, bird, and mammal species plus “Essential Ecological Process Areas” and “Biological Corridors and Linkages.” Each Conservation Area has specific Conservation Objectives that must be satisfied. **Figure 5.3-9 – CVMSHCP Conservation Areas** shows the Conservation Areas within the Master Plan Area.

The CVMSHCP is intended to satisfy the legal requirements for the issuance of Permits that would allow the Take of species covered by the CVMSHCP in the course of otherwise lawful activities.⁴ In other words, the issuance of the Section 10(a) Permit by the United States Fish and Wildlife Service (USFWS) acknowledges the adequacy of the conservation programs as full mitigation. Specifically, the CVMSHCP covers 27 sensitive plant and wildlife species (“Covered Species”) as well as 27 natural communities.

⁴The term “Permits” collectively refers to the Section 10(a)(1)(B) Permit and Natural Community Conservation Planning (NCCP) Permit issued by the United States Fish and Wildlife Services and California Department of Fish and Wildlife, collectively (Wildlife Agencies) to Permittees for Take of Covered Species pursuant to FESA and the NCCP Act and in conformance with the CVMSHCP and the Implementing Agreement, a contractual obligation between the individual Permittees and the Wildlife Agencies. The term of the Permits is 75 years, which is the length of time required to fully fund CVMSHCP implementation.



Map revised March 6, 2018. G:\2012\12-0001\GIS\IIR_CVMSHCP_Consv_Areas.mxd

Sources: CVMSHCP, 2014;
USDA NAIP, 2016.

Figure 5.3-9 - CVMSHCP Conservation Areas
Eastern Coachella Valley Stormwater Master Plan



Covered Activities, as described in the CVMSHCP, include public and private development within the Master Plan area that require discretionary actions by any Permittees, making them subject to consistency with CVMSHCP, regional transportation facilities, maintenance of and safety improvements on existing roads, the Circulation Elements of the Permittees, maintenance and construction of flood control facilities, and compatible uses in the reserve. The CVMSHCP makes provision for the inclusion of special districts and other non-Permittees entities in the permit with a certificate of inclusion.

Each city or local jurisdiction participating in the IA imposes a “development mitigation fee” for projects within its jurisdiction. The CVMSHCP is also funded through open space trust funds and funding from some Permittees for infrastructure projects. These funds are applied toward direct and indirect costs associated with land acquisition, the CVMSHCP’s monitoring and management programs. With payment of the mitigation fee and compliance with the requirements of the CVMSHCP, a project may be deemed compliant with CEQA, the National Environmental Policy Act (NEPA), CESA and FESA, and impacts to covered species and their habitat would be deemed less than significant. A range of biological studies may also be required as part of the CVMSHCP environmental review process to identify the need for specific measures to avoid, minimize, and reduce impacts to covered species and their habitat. Further, the CVMSHCP would ultimately conserve approximately 240,000 acres of habitat. To date, over 85,000 acres, or 35 percent, have been acquired and conserved.

It should be noted that a Proposed Major Amendment to the CVMSHCP is in progress. Subsequent to the originally approved CVMSHCP, the city of Desert Hot Springs and Mission Springs Water District (whose service area includes the city of Desert Hot Springs and surrounding area in northwestern Coachella Valley) have sought to become Permittees through a Major Amendment to the CVMSHCP. Final adoption and permit amendment for the Proposed Major Amendment is expected to occur in 2015.

CVWD Obligations under CVMSHCP

CVWD has the following obligations under the CVMSHCP and its IA:

- A. Implement the necessary requirements to fulfill the purposes of the Permits, the CVMSHCP and this Agreement, for its Covered Activities. Such requirements include:
 - 1) compliance with relevant processes and measures to ensure application of the Conservation Area requirements set forth in Section 4.0 of the CVMSHCP; 2) compliance with the applicable Land Use Adjacency Guidelines as set forth in Section 4.5 of the CVMSHCP; 3) compliance with the Avoidance, Minimization and Mitigation Measures in Section 4.4 of the CVMSHCP; 4) ensure implementation consistent with the Species Conservation Goals and Objectives in Section 9 of the CVMSHCP; and 5) permanently protect and manage Mitigation Land within the reserve system legally owned and/or controlled by the entity unless conveyed to the Coachella Valley Conservation Commission (CVCC).



- B. As set forth in Section 6.6.1 of the CVMSHCP, cooperate with CVCC towards Conservation of a portion of the 7,000 acres CVWD owns in the Conservation Area.
- C. Contribute \$3,583,400 towards the Endowment Fund for the Monitoring Program, the Management Program and Adaptive Management.
- D. Additional contributions as set forth in the CVMSHCP.
- E. Participate as a member of the CVCC as set forth in Section 6.1.1 of the CVMSHCP.
- F. Participate in the Joint Project Review Process for its projects within the Conservation Areas as described in Section 6.6.1.1 of the CVMSHCP.
- G. Carry out all other applicable requirements of the CVMSHCP, the IA, and the Permits. Notwithstanding the foregoing, nothing within the IA shall be construed to require CVWD to provide funding, or any other form of compensation, beyond the requirements of the Permits, the IA and the CVMSHCP.

5.3.4.4 Local Regulations

Riverside County General Plan

The Riverside County General Plan (2015 RCGP) contains policies in its Land Use Element and Multipurpose Open Space Element that are intended to ensure protection of biological resources in the county.

Land Use Element:

- **Policy LU 9.1:** Provide for permanent preservation of open space lands that contain important natural resources, cultural resources, hazards, water features, watercourses, including arroyos and canyons, and scenic and recreational values.
- **Policy LU 9.2:** Require that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and Federal and State regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act.

Multipurpose Open Space Element:

- **Policy OS 5.6:** Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.
- **Policy OS 17.2:** Enforce the provisions of applicable MSHCPs when conducting review of development applications.



- **Policy OS 17.3:** Enforce the provisions of applicable MSHCPs when developing transportation or other infrastructure projects that have been designated as covered activities in the applicable MSHCP.
- **Policy OS 18.1:** Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs.

Eastern Coachella Valley Area Plan

The 2015 Eastern Coachella Valley Area Plan contained within and adopted with the 2015 RCGP, contains policies related to the preservation of biological resources:

- **Policy ECVAP 15.1:** Protect visual and biological resources in the Eastern Coachella Valley Area Plan through adherence to General Plan policies found in the Fish and Wildlife Habitat section of the Multipurpose Open Space Element, as well as policies contained in the Coachella Valley Multiple Species Habitat Conservation Plan, upon its adoption.

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the Riverside County General Plan and Eastern Coachella Valley Area Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies.

Riverside County Ordinance

Riverside Ordinance No. 559 (Ord. 559) regulates the removal of living native trees on parcels of property greater than one-half acre, located above 5,000 feet within the unincorporated area of Riverside County without first obtaining a permit to do so. The purpose of the ordinance is to ensure that the timberlands of Riverside County are protected and the ecological balance of such timberlands is preserved.

Riverside County Oak Tree Management Guidelines

In March 1993, Riverside County issued the Oak Tree Management Guidelines (OTMG) to address the treatment of oak woodlands in areas where zoning and/or General Plan density restrictions allow the effective use of clustering. The guidelines are generally considered to be the most effective where minimum lot sizes are 2.5 acres or larger, or where oak woodlands are concentrated in a relatively small portion of a project site. The guidelines include recommendations for oak inventories, land use designs to cluster home sites in order to reduce impacts to oaks and mitigation measures for oak conservation.



Imperial County General Plan (ICGP)

The Imperial County General Plan contains objectives in its Land Use Element and Conservation and Open Space Element that are intended to ensure protection of biological resources in the county.

Land Use Element:

- **Objective 9.1:** Preserve as open space those lands containing watersheds, aquifer recharge areas, floodplains, important natural resources, sensitive vegetation, wildlife habitats, historic and prehistoric sites, or lands which are subject to seismic hazards and establish compatible minimum lot sizes.

Conservation and Open Space Element:

- **Objective 2.1:** Conserve wetlands, fresh water marshes, and riparian vegetation.
- **Objective 2.2:** Protect significant fish, wildlife, plant species, and their habitats.
- **Objective 2.3:** Protect unique, rare, and endangered plants and animals and their habitats.

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the Imperial County General Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies.

City of La Quinta General Plan

~~No facilities are located within the City of La Quinta boundaries, therefore consideration of La Quinta policies are not included.~~

City of Coachella General Plan

The city of Coachella General Plan Update 2035 contains policies in its Land Use & Community Character Element and its Sustainability & Natural Environment Element related to the preservation of biological resources:

Land Use & Community Character Element:

- **Policy 11.13:** Natural environment. Maintain and enhance the natural environment as critical to the attraction of tourists and ensure that new development does not adversely affect the natural environment as a tourist draw.

Sustainability & Natural Environment Element:

- **Goal 9:** Plant and Wildlife Habitat Areas. Protected plant and wildlife habitat areas that are protected, productive, viable natural resources and exist harmoniously with adjacent development.



- **Policy 9.1:** Buffers from new development. Require new developments adjacent to identified plant and wildlife habitat areas to maintain a protective buffer.
- **Policy 9.2:** Agriculture and natural habitat. Promote the creation and maintenance of natural habitat and wildlife corridors on agricultural lands through wildlife-compatible farm management practices.
- **Policy 9.3:** Wildlife corridors. Support the creation of local and regional conservation and preservation easements that protect habitat areas, serve as wildlife corridors and help protect sensitive biological resources.
- **Policy 9.5:** Multiple species habitat conservation plan. Support and adhere to the Coachella Valley Multiple Species Habitat Conservation Plan.
- **Policy 9.7:** Landscape design. Encourage new developments to incorporate native vegetation materials into landscape plans and prohibit the use of species known to be invasive according to the California Invasive Plant Inventory.
- **Policy 9.8:** Sensitive species. Require projects proposing to develop in subareas 5, 6, and 7 to conduct surveys to determine if there is occurrence of sensitive species within the Project area. If sensitive species are present, projects must implement mitigation measures necessary as prescribed by a qualified biologist and approved by any applicable resource agency in order to receive necessary City permits.
- **Goal 10:** Passive Open Space. Preserved open space areas that represent significant aesthetic, cultural, environmental, economic and recreational resources for the community.
- **Policy 10.1:** Open space network. Require new development to contribute land and/or funding to expand the community's open space network, in support of the MSHCP.
- **Policy 10.2:** Whitewater River/Coachella Valley Stormwater Channel corridor. Preserve a public open space corridor of trails and wildlife habitat along the Whitewater River/Coachella Valley Stormwater Channel.
- **Policy 10.7:** Wildlife corridors. Establish and preserve wildlife corridors.
- **Policy 10.8:** Preservation of natural land features. Preserve significant natural features and incorporate into all developments. Such features may include ridges, rock outcroppings, natural drainage courses, wetland and riparian areas, steep topography, important or landmark trees and views.

Although implementation of the ECV would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood



control protection in the Master Plan Area, the ECV would be consistent with the city of Coachella General Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies.

5.3.5 Environmental Impacts

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 Wildlife or U.S. Fish and Wildlife Service.*

Impacts within Riverside County

As shown in **Table 5.3-B - Table 5.3-K** and **Figure 5.3-2** through **Figure 5.3-7**, two special status plant species (Orocopia sage and Mecca aster), two special status reptile species (desert tortoise and flat-tailed horned lizard), one special status fish species (desert pupfish), eight special status bird species (California black rail, Crissal thrasher, least Bell's vireo, Le Conte's thrasher, summer tanager, yellow-breasted chat, yellow warbler, and Ridgway's rail) and three special status mammals (Peninsular bighorn sheep, Palm Springs pocket mouse, and Coachella Valley round-tailed ground squirrel) occur within the Master Plan Area. While the location and sizing is still conceptual at this time, the Facilities that would traverse these species' habitats as currently shown are also identified.

Impacts to these species could occur in several ways. Grading and other land-disturbing activities as a result of constructing the Facilities may result in direct effects to species present, particularly for ground-dwelling nocturnal mammals such as the Palm Springs pocket mouse. Reptiles such as the desert tortoise and flat-tailed horned lizard and/or plants such as the Orocopia sage and Mecca aster, if present, could also be affected. Due to their higher mobility, birds would be less directly affected. The potential for impacts to birds protected by the MBTA would generally be limited to unfledged birds (i.e., nestlings, eggs). Potential impacts to larger mammals, such as the Peninsular bighorn sheep, would also be minimal as this species has not historically fallen into storm drain facilities.

Indirect impacts could also occur within all of these species groups. Indirect harm includes direct secondary impacts due to construction activities, such as disturbed breeding, feeding, nesting or foraging behaviors; loss of foraging habitat; loss of food sources; loss of burrows; and loss of nesting or roosting habitat. Indirect harm also includes ongoing secondary impacts due to human occupation, such as disturbance by human intrusion, increased night-time lighting, introduction of new species (particularly dogs and house cats) and increased urban-associated predators (such as raccoons or coyotes) due to greater availability of scavenged food sources, i.e., refuse and pet foods. (2015 RCGP EIR 521, p. 4.8-76.) However, upon construction of the Facilities, these secondary impacts due to human occupation would not likely result due to the nature of the Facility.

For all of these impacts, the severity of their effect on a given species or individual of the species depends on a variety of factors: type of habitat affected; degree/amount of habitat affected; timing/duration of habitat effects (i.e., bird nesting season); and species-specific biological or ecological niches and needs (i.e., nocturnal, scavenger, etc.). (2015 RCGP EIR 521, p. 4.8-76,)

It should be noted that impacts affecting non-listed species are considered to be less than significant from a CEQA perspective. Such non-sensitive wildlife species would generally occur in large enough numbers that impacts to individuals on a site would not be significant. In addition, any open space set aside on a site or conserved elsewhere (for example, as part of CVMSHCP requirements) would provide protected habitat for the benefit of the common species as well as sensitive and protected species. (2015 RCGP EIR 521, p. 4.8-76)

Regarding adverse effects on protected species such as those identified above and in the referenced tables and figures, these species would be adequately covered by the CVMSHCP as to ensure impacts to these species and their habitats would be less than significant. (2015 RCGP EIR 521, p. 4.8-76.)

As discussed above in Section 5.3.4.3, under the CVMSHCP's IA, Riverside County, the city of Coachella, CVWD, and other Permittees to the CVMSHCP may issue Take authorizations for species covered by the CVMSHCP, including state and federally-listed species, as well as other identified covered species and their habitats (CVMSHCP, p. 1-3). Development mitigation fees are imposed for projects within the Permittees' jurisdictions, which funds the local obligation to the CVMSHCP. By paying the mitigation fee and complying with the requirements of the CVMSHCP, a land use project would meet their obligations with respect to CEQA (as well as NEPA), FESA, and CESA for impacts to covered species and their habitats pursuant to agreements with the USFWS, CDFW, and other participating regulatory agencies. (2015 RCGP EIR 521, p. 4.8-78.) Further, impacts to USFWS-designated critical habitats such as for the southwestern willow flycatcher, Coachella Valley fringe-toed lizard, and desert tortoise are fully covered under the CVMSHCP. (2015 RCGP5 EIR 521, p. 4.8-78.)

Under the CVMSHCP, certain projects and project types are listed as Covered Activities, and as such, receive Take authorization under the Master Plan. Covered Activities for Permittees outside Conservation Areas specifically include flood control facilities, which characterize the proposed Facilities (CVMSHCP, p. 7-1). However, as shown on **Figure 5.3-9**, above, some Facilities would traverse Conservation Areas. **Table 5.3-O – CVMSHCP Conservation Areas Traversed by Facilities** identifies which Facilities would traverse which Conservation Area and the name of that Conservation Area. Facilities which do not traverse a Conservation Area have been omitted from the table.

Table 5.3-O – CVMSHCP Conservation Areas Traversed by Facilities

Facility	Conservation Area Name
68 th Avenue Channel	CVSC and Delta Conservation Area
D01	CVSC and Delta Conservation Area
E01	CVSC and Delta Conservation Area
F01	CVSC and Delta Conservation Area
I01	CVSC and Delta Conservation Area
O01	CVSC and Delta Conservation Area
P01	CVSC and Delta Conservation Area
P02	CVSC and Delta Conservation Area
Q01	CVSC and Delta Conservation Area
Training Levee & Channel (associated with 64 th Ave Channel)	Santa Rosa and San Jacinto Mountains Conservation Area
Training Levee & Channel (associated with 84 th Ave Channel)	Santa Rosa and San Jacinto Mountains Conservation Area
Training Levee & Channel (associated with Kings Rd Channel)	Santa Rosa and San Jacinto Mountains Conservation Area
Travertine Point Channel No. 3	Santa Rosa and San Jacinto Mountains Conservation Area

The CVMSHCP, however, provides Permits for covered species for certain Covered Activities that occur within Conservation Areas. Such Covered Activities within a Conservation Area include the construction, operation, and maintenance of new flood control facilities (CVMSHCP, p. 7-16). Thus, the Facilities are considered a Covered Activity under the CVMSHCP both within and outside Conservation Areas. Even so, the CVMSHCP requires focused surveys for certain plant and animal species when a project is located within a Conservation Area. For projects located outside a Conservation Area, in general, there are no specific survey requirements for covered species and the payment of development mitigation fees has been determined to be appropriate mitigation.

Sections 4.3 and 4.4 of the CVMSHCP describe the required measures for specific Conservation Areas, and the required avoidance, minimization, and mitigation requirements for Covered Activities within Conservation Areas, respectively. As set forth in these sections, pre-construction clearance surveys would be required for the following species if the Facility footprint is within the species' respective CVMSHCP-modeled habitat, and if the species is/are present, appropriate actions would be taken in compliance to Section 4.4 of the CVMSHCP. A

Joint Project Review (JPR) with the Coachella Valley Conservation Commission (CVCC) would also be required per Section 6.6.1.1 of the CVMSHCP.

Table 5.3-P – Species Requiring Construction Clearance Surveys

Facilities within CVSC and Delta Conservation Area
• Burrowing owl
• California black rail
• Crissal thrasher (if construction occurs between January 15 and June 15)
• Desert pupfish
• Least bell’s vireo (if construction occurs between March 15 and September 15)
• Le Conte’s thrasher (if construction occurs between January 15 and June 15)
• Ridgway’s rail
• Summer tanager (if construction occurs between May 1 and September 15)
• Yellow-breasted chat (if construction occurs between May 1 and September 15)
• Yellow warbler (if construction occurs between May 1 and September 15)
• Southwestern willow flycatcher (if construction occurs between May 1 and September 15)
• Mesquite hummocks (to be avoided to the maximum extent feasible)
Facilities within Santa Rosa and San Jacinto Mountains Conservation Area
• Burrowing owl
• Desert tortoise (survey must be conducted between February 15 and October 31)
• Least bell’s vireo (if construction occurs between March 15 and September 15)
• Le Conte’s thrasher (if construction occurs between January 15 and June 15)
• Summer tanager (if construction occurs between May 1 and September 15)
• Yellow-breasted chat (if construction occurs between May 1 and September 15)
• Yellow warbler (if construction occurs between May 1 and September 15)
• Southwestern willow flycatcher (if construction occurs between May 1 and September 15)*
• Triple-ribbed milkvetch* (if construction occurs between February 1 and May 15)
• Mesquite hummocks (to be avoided to the maximum extent feasible)
• Peninsular bighorn sheep (construction prohibited between January 1 and June 30 in CVMSHCP-modeled habitat, unless authorized through amendment).



*Southwestern willow flycatcher and triple-ribbed milkvetch are not expected to occur within the Master Plan Area, but have been included here to be consistent with **MM BIO 1**.

As set forth in Section 4.4 of the CVMSHCP, Master Plan Facilities would be required to avoid mesquite hummocks vegetation to the maximum extent feasible in both Conservation Areas as the mesquite hummocks is a special status habitat type. In addition, construction activities would be prohibited between January 1-June 30 in CVMSHCP-modeled habitat for Peninsular bighorn sheep in the Santa Rosa and San Jacinto Mountains Conservation Area unless otherwise authorized through a minor amendment to the CVMSHCP.

Since impacts to species would generally occur pursuant to known species habitat associations (such as those identified in the “Natural Community Association” column in **Tables 5.3-B, 5.3-C, 5.3-D, 5.3-F, 5.3-H, and 5.3-J**), foreseeable habitat losses, such as those resulting from construction of Facilities that would traverse CVMSHCP-modeled habitats, are identified on the earlier-referenced tables. Because of the programmatic-level of this EIR analysis, and that the location and sizing of the proposed Facilities are conceptual at this time and that the final location and type of Facility may change as more detailed information becomes available during the final design process, it is not feasible to analyze Facility-specific impacts to specific species in either Conservation Area at a site-specific level at this time. Moreover, it is infeasible to perform Facility-specific biological surveys, such as for the burrowing owl, for a project of this magnitude for this level of review (with a Plan Area covering 207 square miles with over 100 miles of storm drains and channels, 99 acres of debris basins, and 11 miles of training levees conceptually proposed) when some of these Facilities may never be realized or existing conditions could have changed over the span of the many years that it would take to construct this conveyance network as future development comes online. Additionally, many species are transient, changing location from day-to-day, month-to-month or year-to-year. (2015 RCGP 2015 EIR 521, p. 4.8-77.) Thus, even if performed this much in advance, species surveys would be rendered obsolete within a short amount of time and may not be reflective of the condition at the time Facilities are constructed.

Rather, in order to mitigate potential impacts to the above-listed species and habitat in the CVSC and Delta Conservation Area and Santa Rosa and San Jacinto Mountains Conservation Area, the species surveys would be performed in conjunction with future Facility-specific development and prior to construction, as is required by mitigation measure **MM BIO 1**. This mitigation measure would ensure that construction of the Facilities is conducted in compliance with the CVMSHCP.

Moreover, while the majority of the Facilities are located outside Conservation Areas, a pre-construction clearance survey for burrowing owl is required prior to the construction of any Facility by mitigation measure **MM BIO 2**, as there is no CVMSHCP-modeled habitat for the species and as the CVMSHCP seeks to limit disturbance to burrowing owls and their active burrows.



Further, as discussed above, impacts to CVMSHCP-covered species outside of Conservation Areas are mitigated through the payment of development mitigation fees. It should be noted, however, that as permitted by the CVMSHCP, in lieu of paying the fees, CVWD may conserve some of their existing land within Conservation Areas of the same monetary value as the fee. Nonetheless, to mitigate impacts to covered species outside Conservation Areas, mitigation measure **MM BIO 3** is required, which would require the agency or entity implementing the Facility to pay the required mitigation fee, or if allowed, conserve existing land within a Conservation Area of the same monetary value as the fee.

As required by the above mitigation measures **MMs BIO 1-3**, impacts to covered species and their habitats both within and outside of Conservation Areas would be mitigated in compliance to the CVMSHCP, and by this compliance, no significant impacts would result with respect to CEQA. Therefore, impacts would be **less than significant with mitigation**.

Impacts within Imperial County

Special status plant species identified for the Imperial County portion of the Master Plan Area are shown in **Table 5.3-M**, which show two special status species occur on in this area: chaparral sand verbena and Pierson's pebble pincushion. Moreover, blue palo verde wash woodland is a sensitive habitat in the Master Plan Area per CDFW. Special status animal species for the Imperial County portion of the Master Plan Area are shown in **Table 5.3-N** with 41 species, most of which may potentially occur in the Master Plan Area. The plant communities in this portion of the Master Plan Area provide suitable habitat for a number of special status animal species: rosy boa, flat-tailed horned lizard, breeding burrowing owl, breeding loggerhead shrike, black-tailed gnatcatcher, Crissal thrasher, Le Conte's thrasher, pallid San Diego pocket mouse, Colorado Valley woodrat, Peninsular bighorn sheep, Palm Springs round-tailed ground squirrel, and American badger. (TPEIR, p. 6.4-88) Direct impacts to these species associated with construction of the Facilities within the Imperial County portion of the Master Plan Area would be considered a potentially significant impact. In the case of Peninsular bighorn sheep, which is federally listed as Endangered and state listed as Threatened, flat-tailed horned lizard, which is proposed for federal listing as Threatened, and Palm Springs round-tailed ground squirrel, which is a federal candidate for listing, such impacts would be considered significant.

Several special status animals species that are known to occur or have the possibility to occur within the above habitat types would be expected to be present within the Imperial County portion of the Master Plan Area only during the non-sensitive portion of their life cycle and/or are highly mobile and would be likely to utilize these portions of the site only for foraging, and therefore would not be expected to be directly impacted by construction activities. These species include cheeseweed owl, Cooper's hawk, sharp-shinned hawk, golden eagle, wintering ferruginous hawk, prairie falcon, American peregrine falcon, pallid bat, spotted bat, western mastiff bat, and pocketed free-tailed bat. (TPEIR, p. 6.4-88) Due to the high mobility of these species, as well as the availability of similar foraging habitat in other locations within the



vicinity of the Master Plan Area, which would provide foraging habitat for these species upon construction of the Facilities in Imperial County, impacts to these species associated with construction of the Facilities in Imperial County portion would be considered less than significant.

Trees, shrubs, and ground cover found in these vegetation types within the Imperial County portion provide suitable nesting habitat for a variety of bird species. Disturbance associated with construction of the Facilities within the Imperial County could result in nest abandonment by bird species, which would be considered a potentially significant impact. (TPEIR, p. 6.4-89.)

Construction of the portions of the training levee and channel associated with 84th Avenue Channel and Travertine Point Channel No. 1 within Imperial County would result in the conversion of existing undeveloped areas including Sonoran creosote bush scrub and blue palo verde wash woodland. Further, construction activities may affect habitat for special status species, albeit marginally due to the limited footprints of the Facilities traversing this area. After construction activities are completed, the operation and maintenance of Facilities would have a negligible impact to species also due to the limited disturbance and nature of the Facilities in and of themselves.

However, the Master Plan is envisioned to be realized as future development is constructed in the Master Plan Area, thus, necessitating the need for these Facilities. The Facilities which would traverse into Imperial County were specifically designed for stormwater conveyance and flood control protection for the Travertine Point Specific Plan. Thus, the direct and indirect impacts associated with the construction of these Facilities have been previously analyzed in the Travertine Point Specific Plan EIR and appropriate mitigation measure adopted as part of that project were determined to reduce impacts in Imperial County to a less than significant level (TPEIR, p. 6.4-134). As these Facilities would only be realized with the development of the Travertine Point Specific Plan, that project's adopted mitigation measures would be in effect. Thus, no additional mitigation measures are necessary within this Recirculated Draft PEIR. Therefore, impacts from Facilities within Imperial County would be **less than significant**.

The following mitigation measures were adopted as part of the County's Travertine Point Specific Plan EIR and are applicable to the construction of Facilities within Imperial County:

6.4-15: Impacts resulting from project construction to the two special-status plant species observed within the Imperial County portion of the proposed project site, chaparral sand verbena, and Peirson's pebble pincushion, shall be mitigated through a seed collection and planting program. The planting program will be reviewed and approved by CDFG and will include provisions for monitoring success criteria and performance standards. Prior to implementing project approval, a qualified biologist, shall conduct a focused survey for the two special-status plant species within the proposed development areas in

order to determine the extent of individual plants to be impacted by the implementing project design. (TPEIR, p. 6.4-119.)

6.4-16: Prior to implementing project approval, the project applicant shall retain a qualified biologist to collect seed from special-status plant species individuals during the appropriate season (after the blooming period, when seeds have formed). The collected seed shall be planted in predetermined suitable habitat in an appropriate area within Open Space (Conservation) on the project site that will not be impacted by project development or subsequent activities. A portion of Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site designated Open Space (Conservation) will remain undeveloped upon implementation of the proposed project. In addition, appropriate disturbed/recovering Sonoran creosote bush scrub areas will also be areas for potential seed planting. (TPEIR, p. 6.4-119.)

6.4-17: Prior to implementing project approval, the project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland occurring within the Open Space-Conservation land use category through a conservation easement, deed restriction, or similar mechanism. This area provides suitable habitat for relocation of chaparral sand verbena and Peirson's pebble pincushion. A report documenting the seed collection and planting plan shall be submitted to the Imperial County Department of Planning and Building, Planning Division. (TPEIR, p. 6.4-119.)

6.4-18: Proposed project construction impacts to active burrowing owl burrows located in project impact areas within the Imperial County portion of the project site shall be mitigated through pre-construction burrowing owl surveys and other measures described below. (TPEIR, p. 6.4-119.)

Prior to implementing project approval for each implementing project, the project applicant shall retain a qualified biologist to conduct focused pre-construction burrowing owl surveys within implementing project areas and 75 meters (approximately 250 feet) of impact areas, prior to construction or site preparation activities, including grubbing or grading. Such surveys shall be conducted if ground disturbing activities commence during the burrowing owl wintering season (typically September 1 through January 31) or during the burrowing owl breeding season (typically April 15 through July 15). In accordance with the Burrowing Owl Survey Protocol and Guidelines, the pre-construction survey shall be conducted no more than 30 days prior to commencement of initial ground disturbing activity. Burrowing owl pre-construction surveys may be conducted concurrently with general nesting bird surveys; the recommended protocol for general nesting bird surveys is provided in Mitigation Measure 6.4-22. (TPEIR, p. 6.4-120.)

If active burrowing owl burrows are observed within the Imperial County portion of the implementing project impact areas or the adjacent 75 meters, during construction activities protective fencing shall be erected to provide a 75-meter buffer around the burrows during the breeding season, or a 50-meter buffer around the burrows during the wintering season. If during construction, active burrowing owl burrows are located during the breeding season, the protective fencing shall remain in place around the burrows until the young have fledged. Once the young have fledged, or if grading will occur during the non-breeding season, owls may be excluded from all active burrows through the use of exclusion devices placed in occupied burrows, in accordance with CDFG protocols. Specifically, with the approval of CDFG, exclusion devices utilizing one-way doors shall be installed in the entrances of all active burrows. The devices shall be left in the burrows for at least 48 hours to ensure that all owls have been excluded from the burrows. Each of the burrows shall then be excavated by hand and refilled to prevent reoccupation. Exclusion shall continue until the owls have been successfully excluded from the proposed project impact area, as determined by a qualified biologist. If suitable, natural alternate burrowing owl burrows are not present within the vicinity of the excluded burrows (but beyond 50 meters from the project impact zone), within or contiguous to a minimum of 6.5 acres of foraging habitat for each pair of relocated owls or each single bird (if not paired), where feasible, artificial burrows meeting these criteria shall be created for the owls. (TPEIR, p. 6.4-120.)

Prior to implementing project approval, if construction will reduce suitable on-site habitat below the threshold level of 6.5 acres per relocated pair or single bird, off-site habitat shall be provided and could include areas near the project site (such as ABDSP, SRSJM National Monument, or other state or federally controlled open space lands as allowable by the administering agencies) including areas within conservation easements. Off-site habitat shall be suitable burrowing owl habitat, as defined in the Burrowing Owl Survey Protocol and Guidelines, and CDFG shall approve the site. If the 6.5-acre threshold is not satisfied, off-site lands shall be obtained at a 1.5:1 ratio (9.75 acres per pair or single bird) for occupied habitat, at a 2:1 ratio (13 acres per pair or single bird) for habitat contiguous to currently occupied habitat, or at a 3:1 ratio (19.5 acres per pair or single bird) of suitable but unoccupied habitat. This shall be determined by a qualified biologist, at the time of implementation of ground-disturbing activities. This mitigation may be conducted concurrently with mitigating for impacts to rosy boa, flat-tailed horned lizard, pallid San Diego pocket mouse, Colorado Valley woodrat, Peninsular bighorn sheep, Palm Springs round-tailed ground squirrel, and American badger, as discussed in Mitigation Measure 6.4-21. If off-site habitat is not available for purchase by the project applicant, then the applicant shall pay an in-lieu payment at the current



market rate for a designated conservation area within the CVHCP. (TPEIR, p. 5.4-121.)

A report shall be prepared and submitted to the CDFG upon completion of pre-construction surveys for burrowing owl and implementation of any necessary mitigation. The report shall provide the CDFG with information about survey and mitigation efforts for impacts to burrowing owl resulting from construction of the proposed project within the Imperial County portion of the proposed project site. (TPEIR, p. 6.4-121.)

6.4-19: Prior to implementing project approval, construction impacts to breeding loggerhead shrike, black-tailed gnatcatcher, Crissal thrasher, and Le Conte's thrasher located in the project impact areas within the Imperial County portion of the project site shall be mitigated through pre-construction special-status bird surveys and other measures described below. Such surveys shall be conducted concurrently with pre-construction nesting bird surveys, and shall include reconnaissance for loggerhead shrike, black-tailed gnatcatcher, Crissal thrasher, or Le Conte's thrasher nests or individuals exhibiting breeding behavior. (TPEIR, p. 6.4-121.)

If special-status bird nests are found in the Imperial County portion of the project site, clearing and construction activities within 500 feet of the nest shall be postponed or halted until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting as determined by the biologist. Construction personnel shall be instructed on the sensitivity of nest areas and shall be instructed to avoid entering the approved buffers around the nest. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas (within 500 feet) to ensure that no inadvertent impacts on these nests will occur. The results of the pre-construction special-status bird surveys, as well as any avoidance measures taken and the success of those measures, shall be included in the report submitted to the County of Imperial Department of Planning and Building, Planning Division, as described in Mitigation Measure 6.4-22 for nesting birds. (TPEIR, pp. 6.4-121–6.4-122.)

6.4-20: Prior to implementing project approval, construction impacts to rosy boa, flat-tailed horned lizard, Colorado Valley woodrat, Peninsular bighorn sheep, and American badger located in project impact areas within the Imperial County portion of the proposed project site shall be mitigated through a pre-construction clearance survey and relocation. The applicant shall retain a qualified biologist, to conduct focused pre-construction surveys for the presence of these species on the proposed project site. Surveys shall be within suitable habitat located within 500 feet of grading limits. Surveys shall include an



examination of Sonoran creosote bush scrub and blue palo verde wash woodland habitats. (TPEIR, p. 6.4-122.)

If one of the above special-status species is observed on the project site during clearance surveys, potential loss of individual animals shall be mitigated by (1) ensuring that construction activities do not enter the specific area in which the individual was observed until the individual has been observed vacating the area and moving into nearby habitat that will not be directly impacted by project activities (appropriate for more mobile species), or (2) through an active trapping and relocation program, conducted by a qualified biologist, and in coordination with the CDFG, that will move individuals to suitable on-site habitat that will not be directly impacted by project implementation (appropriate for less mobile species). If an active American badger burrow is located within project impact areas, a relocation program shall be implemented to remove the individual(s) from the area. The relocation program may be passive, in which badgers are excluded from occupied burrows by installation of a one-way door in burrow entrances, monitoring of the burrow for one week to confirm badger usage has been discontinued, and hand excavation and collapse of the burrow to prevent reoccupation; or the relocation program may be active, in which badger individuals are safely captured and transported to suitable habitat outside the impact area. Trapped individuals of any of the above species shall be safely relocated onto on-site Sonoran creosote bush scrub and blue palo verde wash woodland habitat that is not planned for development. (TPEIR pp. 6.4-122–6.4-123.)

In the event that off-site habitat areas within 500 feet of grading are not accessible during preconstruction surveys, the presence of rosy boa, flat-tailed horned lizard, Colorado Valley woodrat, Peninsular bighorn sheep, and American badger shall be assumed and the entire project site boundary within 500 feet of grading activities shall be fenced to prohibit entry of these species into the grading site. The fence shall be monitored as a regular part of construction monitoring. (TPEIR, p. 6.4-123.)

It is noted that this mitigation measure may be more successful during summer months, when species such as rosy boa and flat-tailed horned lizard are above ground and active, than during winter months, when such species are inactive. It is also noted that the success of this mitigation depends upon the trapping of individual animals, which may in some cases have moved out of the immediate area between the time of observation and the time of trapping. Therefore, it is recommended that a best effort at pre-construction clearance surveys and a trap and relocate plan be implemented, as is determined to be feasible. (TPEIR, p. 6.4-123.)

6.4-21 Prior to implementing project approval, construction impacts to rosy boa, flat-tailed horned lizard, pallid San Diego pocket mouse, Colorado Valley woodrat, Peninsular bighorn sheep, Palm Springs round-tailed ground squirrel, and American badger located in the Imperial County portion of the project site shall be mitigated through the preservation of suitable habitat currently present within the proposed project site. A portion of the Sonoran creosote bush scrub and blue palo verde wash woodland located in the southern portion of the proposed project site (Open Space–Conservation), which provides suitable habitat for these species, will remain undeveloped upon construction of the proposed project. This undeveloped area is located adjacent to open space lands to the west (ABDSP, SRSJM National Monument, and other state and federally owned lands), allowing for connectivity with nearby suitable habitat for these species. The project applicant shall protect those portions of Sonoran creosote bush scrub and blue palo verde wash woodland that are to remain undeveloped through a conservation easement, deed restriction, or similar mechanism. This mitigation may be conducted concurrently with mitigating for impacts to active burrowing owl burrows, as discussed in Mitigation Measure 6.4-18. (TPEIR, p. 6.4-123.)

6.4-22: Prior to implementing project approval, construction impacts to nesting birds located in project impact areas within the Imperial County portion of the project site shall be mitigated through pre-construction nesting bird surveys and the other measures described below. Within 30 days of ground-disturbing activities associated with construction or site preparation, including grubbing or grading, the applicant shall have weekly surveys conducted by a qualified biologist, to determine if active nests of native bird species (including the special-status species discussed above) protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 300 feet (500 for raptors) of the construction zone. Because many birds known to the project area (including loggerhead shrike) nest during the late winter, breeding bird surveys shall be carried out both during the typical nesting/breeding season (mid-March through September) and in January, February, and early March for winter nesting species. The surveys shall continue on a weekly basis, with the last survey being conducted no more than three days prior to initiation of clearance or construction work. If ground-disturbing activities are delayed, then additional pre-construction surveys shall be conducted such that no more than three days will have elapsed between the last survey and the commencement of ground disturbing activities. Surveys shall include examination of trees, shrubs, and the understory, as several bird species known to the area and project site, are ground nesters, including burrowing owl, California horned lark, and mourning dove. (TPEIR, pp. 6.4-123–6.4-124.)

If active nests are found, clearing and construction activities within 300 feet of the nest (500 feet for raptors) shall be postponed or halted until the nest is vacated and juveniles have fledged and there is no evidence of a second attempt at nesting as determined by the biologist. Construction personnel shall be instructed on the sensitivity of nest areas and shall be instructed to avoid entering the approved buffers around the nest. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas (within 500 feet) to ensure that no inadvertent impacts on these nests will occur. The results of the survey, as well as any avoidance measures taken and the success of those measures, shall be submitted to the County of Imperial Department of Planning and Building, Planning Division within 30 days of completion of the pre-construction surveys and/or construction nest monitoring to document compliance with applicable state and federal laws pertaining to the protection of native birds. (TPEIR, p. 6.4-124.)

6.4-23: Prior to implementing project approval, impacts resulting from proposed project conversion of potential western yellow bat habitat (date palms) to residential and commercial development shall be mitigated through a pre-construction roosting bat survey and the mitigation measures described below. Palm trees that will be impacted (removed or within approximately 300 feet of construction areas) by proposed project construction shall be surveyed by a qualified biologist for western yellow bat. Surveys may involve visual examination of palm trees (especially hanging, dead palm fronds, behind which bats roost) for bat sign (stains created by body oils, urine, and guano) or study of bats utilizing on-site palm trees with an Anabat bat detector system. If visual surveys result in the observation of bat sign, but the species of bat roosting in the palm tree is unknown, an Anabat system shall be utilized to determine the species of bat utilizing the tree. (TPEIR, pp. 5.4-124–6.4-125.)

If western yellow bat is found to utilize on-site palm trees for roosting, and if impacts to palm trees with bats will commence during the western yellow bat breeding season (April through July), a qualified biologist shall inspect dead, hanging palm fronds on each palm tree to see whether young are present. If no young are observed, the roost is unlikely to be a maternal roost, and tree removal shall follow the methodology below. If young are observed and the tree is determined to be a maternal roost, tree removal shall be temporarily postponed until the project biologist has determined that the juvenile bat(s) have fledged, at which point tree removal shall continue, following the methodology below. (TPEIR, p. 6.4-125.)

If, during construction, western yellow bat is determined to utilize on-site palm trees for roosting, and impacts to palm trees with bats will commence outside



the western yellow bat breeding season, removal of palm trees shall commence after sundown, as western yellow bat is nocturnal and will be active and should be away from the palm tree at this time. Due to the availability of similar palm tree habitat in nearby locations, individuals would be likely to utilize palm trees in adjacent areas. (TPEIR, p. 6.4-125.)

6.4-47: Prior to implementing project approval, impacts to 67 acres of blue palo verde wash woodland, a sensitive plant community and likely riparian habitat, within the Imperial County portion of the proposed project site resulting from project construction shall be mitigated through a combination of creation or enhancement of the habitat and purchase of lands vegetated with blue palo verde wash woodland. The applicant shall secure lands through agreement with ABDSP, SRSJM National Monument or other federally or state-controlled lands, or purchase of lands in a program that has already entered a conservation easement) of blue palo verde wash woodland. The woodland shall be of comparable high quality to that of existing on-site blue palo verde wash woodland. The amount of lands to be secured shall be on the basis of providing equivalent habitat, in consultation with CDFG, for the area of blue palo verde wash woodland determined to be impacted by the proposed project. (TPEIR, p. 6.4-141.)

6.4-49: Prior to implementing project approval, the applicant shall retain a qualified biologist, to conduct a jurisdictional delineation in the Imperial County portion of the project site. The jurisdictional delineation shall be submitted to the USACE and CDFG for review, and the delineation shall be certified by the USACE prior to the issuance of a grading permit. To mitigate for impacts to jurisdictional waters, the applicant shall either create habitat of similar value and area or secure lands in a program and has already entered a conservation easement to maintain equivalent habitat of suitable USACE and CDFG waters, in consultation with the permitting agency. As feasible, mitigation for USACE and CDFG water s may be carried out in conjunction with mitigation for potential impacts to blue palo verde wash woodland, a sensitive plant community, which is discussed in Mitigation Measure 6.4-47, above. (TPEIR, pp. 6.4-148–6.4-149.)

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 Wildlife or U.S. Fish and Wildlife Service.*

Impacts within Riverside County

Sensitive habitats are natural vegetation communities that are unique, of relatively limited distribution in the region or of particularly high wildlife value, as designated by federal, state or local conservation programs. (RCGP 2015 EIR 521, p. 4.8-69.) Sensitive habitats occurring in Coachella Valley, including the Master Plan Area, are discussed in Section 5.3.1.1, listed in



Table 5.3-A CVMSHCP Vegetation Traversed by Facilities, and shown on **Figure 5.3-1 – CVMSHCP Corridors and Linkages with Natural Communities**, above, as well as which Facility would traverse which vegetation types.

Due to the sensitivity of the underlying habitats occurring in the Master Plan Area, Project impacts to the desert alkali scrub natural community (specifically the desert saltbrush scrub and desert sink scrub), the desert scrub natural community (specifically the Sonoran creosote bush scrub and Sonoran mixed woody and succulent scrub), the dry wash woodlands and mesquite natural community (specifically the desert dry wash woodlands and mesquite hummocks), as well as riparian habitat communities (specifically the desert fan palms oasis woodlands, Sonoran cottonwood-willow riparian forest, and tamarisk scrub), could be potentially significant if unmitigated. However, as the locations of the Facilities as shown in this Recirculated Draft PEIR are conceptual and the final location and design would be determined as the Master Plan is realized over the span of many years in conjunction with future development, it would be speculative to try to assess the specific impacts on habitats or species present from Facilities at this time. Rather, such impacts would necessarily be addressed, as outlined below, as the Facility(ies) are proposed for construction, at the individual Facility-specific review stage with Facility site- and design-specific details being incorporated.

Habitat may be lost or significantly altered due to direct impacts as well as indirect impacts resulting from construction of the Facilities along with the anticipated future development within the Master Plan Area. Direct impacts are generally those in which habitat is lost to grading and filling. Indirect impacts to riparian or other sensitive habitats generally occur through edge effects, habitat alterations, disturbances, fragmentation or degradation. Edge effects occur where development meets open space. Types of urban disturbances potentially affecting natural open space areas include: change in runoff quality and pattern; introduction of toxic chemicals (particularly fertilizers and other gardening chemicals) and manure; spill-over of nighttime lighting; increased ambient noise levels and spill-over noise; introduction of non-native plants (including potentially invasive species); increased risk of trash and refuse; and increased potential for human disturbances of open spaces. (2015 RCGP EIR 521, p. 4.8-69). However, upon completion of construction of the Facilities, these types of urban disturbances would not result due to the nature of the Facility as stormwater conveyance facilities.

In order to minimize these effects, Section 4.5 of the CVMSHCP, which describes land use adjacency guidelines, includes measures to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. Specifically, compliance with Section 4.5.1 would ensure the Facilities are designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within or adjacent to Conservation Areas. Compliance with Section 4.5 of the CVMSHCP is required by mitigation measure **MM BIO 4**.



Further, several agencies govern riparian and wetland resources, including the ACOE, USFWS, and CDFW, and Riverside County. The CVMSHCP does not address impacts on jurisdictional wetlands, and as such, wetland impacts would need to be coordinated with the ACOE, CDFW, and/or RWQCB for federal and state wetlands and riparian habitat, as appropriate. Where riparian or wetland habitat may occur on lands proposed for the siting of a Facility during the individual design stage for a Facility that is proposed for construction, the following analyses and (where necessary) regulatory actions are required per mitigation measures **MM BIO 5**:

- A jurisdictional delineation for waters of the U.S. and wetlands pursuant to the Clean Water Act (CWA) and ACOE protocol. If avoidance is infeasible, then the Facility's implementing proponent must obtain a CWA Section 404 Permit from ACOE prior to grading. The permit must include mitigation measures or other equivalent requirements necessary to reduce impacts to riparian and wetlands resources to below the level of significance and ensure no net loss of wetlands. Coordination with the RWQCB for a Section 401 Permit for water quality impacts in federal wetlands may also be required.
- A jurisdictional delineation of streams and vegetation with drainages and native vegetation of use to wildlife pursuant to CDFW and California Fish and Game Code Section 1600 *et seq.* Where necessary, the Facility's implementing proponent is required to obtain a Section 1601 or 1603 Permit and a Streambed Alteration Agreement from CDFW. The permit must include mitigation measures or other equivalent requirements that reduce impacts to riparian and wetlands resources to below the level of significance and ensure no net loss of wetlands. Coordination with the RWQCB for a Section 401 Permit for water quality impacts in state wetlands may also be required.

Further, in addition to mitigation measure **MM BIO 5**, compliance with the CVMSHCP would prevent significant impacts to riparian and other sensitive habitats in the Master Plan Area. The CVMSHCP features a reserve system of 745,900 acres established from lands within 21 Conservation Areas (see **Figure 5.3-9**). The CVMSHCP is designed to ensure conservation of covered species, as well as the natural communities on which they depend, including riparian habitat and other sensitive habitats (RCGP 2015 EIR 521, p. 4.8-72). To ensure necessary habitat is preserved, Facilities that would traverse Conservation Areas are submitted for JPR with the CVCC pursuant to Section 6.6.1.1 of the CVMSHCP. For Facilities within the Santa Rosa and San Jacinto Mountains Conservation Area, the Habitat Assessment and Negotiation Strategy (HANS) process is also employed (2015 RCGP EIR 521, p. 4.8-72). The JPR process for Facilities within Conservation Areas, as well as the HANS process for the Santa Rosa and San Jacinto Mountains Conservation Area is a component of mitigation measure **MM BIO 1**. (See **Table 5.3-O**, above, for the Facilities that would traverse Conservation Areas).

Implementation of the JPR and HANS process ensures that sensitive habitats and riparian areas are conserved pursuant to the CVMSHCP. (2015 RCGP EIR 521, p. 4.8-72.) Additionally, the ongoing implementation of the CVMSHCP ensures that sufficient sensitive habitats are



conserved to offset habitat losses incurred by permitted development, including that which would result from implementation of the Master Plan. Through compliance with the provisions of the CVMSHCP, as required by mitigation measures **MM BIO 1** through **MM BIO 4**, and the jurisdictional delineation and procurement of applicable regulatory permits from appropriate resource agencies as required by mitigation measure **MM BIO 5**, impacts from Facilities to riparian habitats as well as other sensitive communities identified in local and regional plans, polices, and regulations, and those identified by the CDFW and USFWS would be accounted for and adequately mitigated. Therefore, impacts would be **less than significant with mitigation**.

Impacts within Imperial County

The Imperial County portion of the Master Plan Area contains blue palo verde wash woodland, which is a CDFW-designated sensitive plant community. Impacts to this sensitive plant community and likely riparian habitat would be considered significant (TPEIR, p. 6.4-136). Specifically, the construction impacts from Facilities may result in the degradation of the quality of this habitat, albeit to a limited degree considering the limited footprint of the proposed Facilities in Imperial County. However, as mentioned above, the Master Plan is envisioned to be realized as future development is constructed in the Master Plan Area, thus, necessitating the need for these Facilities. The Facilities which would traverse into Imperial County were specifically designed for stormwater conveyance and flood control protection for the Travertine Point Specific Plan. Thus, the direct and indirect impacts associated with the construction of these Facilities have been previously analyzed in the Travertine Point Specific Plan EIR and appropriate mitigation measure adopted as part of that project were determined to reduce impacts in Imperial County to a less than significant level (TPEIR, p. 6.4-142). As these Facilities would only be realized with the development of the Travertine Point Specific Plan, that project's adopted mitigation measures would be in effect. Thus, no additional mitigation measures are necessary within this Recirculated Draft PEIR. Therefore, impacts from Facilities within Imperial County would be **less than significant**.

Threshold C: *Have a substantial adverse effect on 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.*

Impacts within Riverside County

Federally protected wetlands are defined in Section 404 of the CWA as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include freshwater marshes, riparian forests, riparian woodlands, open water, flood channels, rivers and stream beds, and similar areas. (2015 RCGP EIR 521, p. 4.8-83.) The natural vegetation communities in the Master Plan Area with the potential to contain federally protected wetlands include desert alkali scrub natural community (specifically desert saltbrush scrub and desert sink scrub); developed



(man-made) areas (specifically lake and reservoir); dry wash woodlands and mesquite natural communities (specifically desert dry wash woodlands and mesquite hummocks); marsh natural community (coastal and valley freshwater marsh); and riparian natural communities (specifically desert fan palm oasis woodlands, Sonoran cottonwood-willow riparian forest, and tamarisk scrub). Facilities that would traverse these vegetation types is shown in **Table 5.3-A – CVMSHCP Vegetation Traversed by Facilities**, above. Moreover, potential jurisdictional features within the Master Plan Area are shown on **Figure 5.3-8**, above.

Direct impacts to federally protected wetlands would occur if development of Facilities resulted in direct removal, fill (which essentially means placing dirt into), hydrological interruption or other disturbance to these resources. Such effects are often associated with clearing and grubbing, grading, paving and building for new development, redevelopment and construction of roads, flood control projects and other infrastructure. (2015 RCGP EIR 521, p. 4.8-83.)

As the locations of the Facilities as shown in this Recirculated Draft PEIR are conceptual and the final location and design would be determined as the Master Plan is realized over the span of many years in conjunction with future development, it would be speculative to try to assess the specific impacts on potential federally protected wetlands from Facilities at this time. Determination of specific locations and acreages actually affected would be performed at the implementation stage of for each Facility. Where subsequently determined to occur, impacts to federally protected wetlands would be addressed by mitigation measure **MM BIO 5**, which requires a jurisdictional delineation and adherence to associated permit conditions and measures as necessary from appropriate resource agencies, which would include procurement of a Section 404 Permit from ACOE prior to grading if the Facility would affect federally protected wetlands. Since ACOE permits must ensure no net loss of riparian habitat and preservation of biological function and value of any jurisdictional waters on site, compliance with the Section 404 Permit requirements would ensure that no wetlands are significantly affected. (2015 RCGP EIR 521, p. 4.8-84.) Therefore, impacts to federally protected wetlands would be **less than significant with mitigation**.

Impacts within Imperial County

The Imperial County portion of the Master Plan Area contains ephemeral desert wash drainages that exhibit a high water mark, riparian vegetation, and flow into the Salton Sea, and thus, are likely jurisdictional under the ACOE and CDFW (TPEIR, p. 6.4-144). As a result, construction of the Facilities within the Imperial County portion of the Master Plan Area may result in the conversion of jurisdictional waters, including wetlands and riparian habitat. However, as mentioned above, the Master Plan is envisioned to be realized as future development is constructed in the Master Plan Area, thus, necessitating the need for these Facilities. The Facilities that would traverse into Imperial County were specifically designed for stormwater conveyance and flood control protection for the Travertine Point Specific Plan. Thus, the direct and indirect impacts associated with the construction of these Facilities have been previously analyzed in the Travertine Point Specific Plan EIR and appropriate mitigation



measure adopted as part of that project were determined to reduce impacts in Imperial County to a less than significant level (TPEIR, p. 6.4-150). As these Facilities would only be realized with the development of the Travertine Point Specific Plan, that project's adopted mitigation measures would be in effect. Thus, no additional mitigation measures are necessary within this Recirculated Draft PEIR. Therefore, impacts from Facilities within Imperial County would be **less than significant**.

Threshold D: *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.*

Impacts within Riverside County

Direct impacts to wildlife movement corridors generally occur from blockage or interference with the connectivity between blocks of habitat, a decrease in the width of a corridor or linkage that constrains movement, or the loss of visual continuity within a linkage or corridor. Even when not directly constrained by development, corridors are also vulnerable to edge effects and human encroachment. Nonetheless, sufficient programs are in place by the CVMSHCP that would prevent substantial interference with wildlife movement and corridors. (RCGP 2015 EIR 521, p. 4.8-88)

Specifically, the CVMSHCP establishes Conservation Areas and articulates objectives and measures for the preservation of core habitat and the biological corridors and linkages needed to maintain essential ecological processes within the entire CVMSHCP planning area (CVMSHCP, p. 4-1). As shown on **Figure 5.3-9**, Facilities would traverse portions of the CVSC and Delta Conservation Area and the Santa Rosa and San Jacinto Mountains Conservation Area. The CVMSHCP does not identify either the CVSC and Delta Conservation Area or the Santa Rosa and San Jacinto Mountains Conservation Area with a biological corridor or linkage (CVMSHCP, pp. 4-142, 4-150). Further, as shown on **Figure 5.3-1 – CVMSHCP Corridors and Linkages with Natural Communities**, there are no biological corridors and linkages within the Master Plan Area, and thus, implementation of the Master Plan would not impact CVMSHCP-modeled biological corridors and linkages.

Wildlife nursery sites include areas that provide the resources necessary for reproduction of a species, including foraging habitat, breeding habitat and water sources. Direct impacts to nursery sites from implementation of the Master Plan would occur if the removal of such habitat results. Indirect impacts to nursery sites would potentially result from noise, lighting and changes in drainage patterns, introduction of pests or domestic animals and other edge effects. These impacts can substantially interfere with native wildlife nursery sites. (2015 RCGP EIR 521, p. 4.8-89.) However, there would be no indirect impacts such as from noise, lighting, introduction of pests or domestic animals upon completion of construction of the Facilities due to the nature of the Facility as stormwater conveyance facilities.

Determining whether or not a specific area is a nursery site requires field surveys, which are often only valid for a given breeding season depending on the wildlife species present. In its role as a natural community conservation plan, the CVMSHCP was required by state and federal permitting authorities to provide for the movement of species, protect wildlife corridors, and facilitate genetic flow. The CVMSHCP protects native wildlife nursery sites by conserving large blocks of representative native habitats suitable for supporting species' lifecycle requirements and the essential ecological processes of species which depend on such habitats, known as Conservation Areas. (2015 RCGP EIR 521, p. 4.8-89.) Thus, through the protections afforded by the CVMSHCP, implementation of the Master Plan and development of the Facilities would have a less than significant impact on the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or the use of native wildlife nursery sites within Coachella Valley, which includes the Master Plan Area. The Project would comply with the CVMSHCP as is required by mitigation measures **MM BIO 1** through **MM BIO 4**.

Further, specifically regarding migratory birds, the CVMSHCP Take permits constitute Special Purpose Permits pursuant to the MBTA. The biological opinion issued for the CVMSHCP indicates that Take of covered species listed under FESA, which are also MBTA species, is subject to the terms and conditions specified in the CVMSHCP Section 10(a) Permit. Any such Take does not violate the MBTA. (2015 RCGP EIR 521, pp. 4.8-89 – 4.8-90.) There are three such species to which this applies: least Bell's vireo, southwestern willow flycatcher, and Ridgway's rail. CVMSHCP-modeled habitat for the least Bell's vireo and Ridgway's rail occurs within the Master Plan Area and would be traversed by Facilities, and there is no CVMSHCP-modeled habitat in the Master Plan Area for the southwestern willow flycatcher (see **Table 5.3-H – Special Status Birds in Coachella Valley**). Even so, for other birds protected by the MBTA and not listed under the FESA, no Take is authorized under the MBTA (including killing and wounding of any such birds, or Take of eggs and active nests). For these, standard MBTA compliance measures are required by mitigation measure **MM BIO 6**. This mitigation measure requires a nesting bird survey to be conducted by a qualified biologist immediately prior to the initiation of construction activities if any vegetation removal is to occur during the nesting season (February 1-August 31). If no nests are found, construction may proceed; if nests are found, impact avoidance measures (e.g., buffers) would be required until the young have fledged.

Therefore, because the Master Plan would not impact CVMSHCP-modeled biological corridors and linkages, and, after compliance with the CVMSHCP by mitigation measures **MM BIO 1** through **MM BIO 4**, would not impact wildlife nursery sites, and mitigation measure **MM BIO 6** would ensure migratory birds not covered by the CVMSHCP are not impacted, impacts would be **less than significant with mitigation**.



Impacts within Imperial County

The Imperial County portion of the Master Plan Area contains two plant communities that likely serve as wildlife migration corridors and/or nursery sites in addition to the agricultural property. These include the Sonoran creosote bush scrub and blue palo verde wash woodland. (TPEIR, p. 6.4-153) While operation of the Facilities would likely not impact such migratory or nursery species, construction of the Facilities could interfere with the use of these areas as wildlife movement corridors and natal sites, albeit to a limited degree considering the footprint and nature of the Facilities within Imperial County. However, due to the availability of open space areas to the west and south, and the general availability of open space in the vicinity, impacts to wildlife movements across Imperial County and impacts to wildlife usage of the Imperial County portion of the Master Plan Area as nursery sites would be **less than significant**, and no mitigation measures are required. (TPEIR, pp. 6.4-153 – 6.4-154, 6.4-158.)

Threshold E: *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Impacts within Riverside County

City of Coachella

The city of Coachella does not currently have a tree preservation policy or ordinance preventing or restricting the removal of trees on site. However, the city of Coachella’s currently adopted General Plan identifies policies protecting biological resources within its jurisdiction.

Table 5.3-Q – Consistency with City of Coachella General Plan Policies for Biological Resources identifies these policies, which are also listed in Section 5.3.4.4, and the Project’s consistency with such policies.

Table 5.3-Q – Consistency with City of Coachella General Plan Policies for Biological Resources

City of Coachella General Plan Policy	Project Compliance
<p>Policy 11.13: Natural environment. Maintain and enhance the natural environment as critical to the attraction of tourists and ensure that new development does not adversely affect the natural environment as a tourist draw.</p>	<p>Consistent. The Facilities would parallel the pace of anticipated development as needed for the purposes described herein. However, the Facilities would not negatively impact the natural environment of the city of Coachella such that tourists would be deterred. Lines A01 and A01-01, which will be approximately 6 feet above grade, are in and near the City of Coachella where there is limited existing development; however the area is designated and zoned for industrial, residential, and agricultural uses. Improvements to the CVSC would be below or at-grade. The proposed improvements are not expected to adversely affect the natural environment as a tourist draw and the Project does not conflict with this policy.</p>



City of Coachella General Plan Policy	Project Compliance
<p>Policy 9.1: Buffers from new development. Require new developments adjacent to identified plant and wildlife habitat areas to maintain a protective buffer.</p>	<p>Consistent. The Facilities as currently shown are not located directly adjacent to identified habitat areas; however, compliance with the CVMSHCP, mitigation measures MM BIO 1 through MM BIO 4, and Project design features such as fencing will ensure the appropriate methods are used to provide a protective buffer between the construction and operation of the Facilities and any future identified habitat. The Project does not conflict with this policy.</p>
<p>Policy 9.2: Agriculture and natural habitat. Promote the creation and maintenance of natural habitat and wildlife corridors on agricultural lands through wildlife-compatible farm management practices.</p>	<p>Consistent. The Facilities would not require the use of farm management practices that would result in the creation of natural habitat or wildlife corridors. Adherence to MM BIO 4 will ensure compliance with CVMSHCP Land Use Adjacency Guidelines. Some Facilities would pass through agricultural lands and may indirectly provide a wildlife corridor. The Project does not conflict with this policy.</p>
<p>Policy 9.3: Wildlife corridors. Support the creation of local and regional conservation and preservation easements that protect habitat areas, serve as wildlife corridors and help protect sensitive biological resources.</p>	<p>Consistent. The Master Plan does not directly propose the creation of local or regional conservation and preservation easements. However, mitigation measure MM BIO 3, does support the conservation of land within the impacted Conservation Areas as an alternative to paying the Local Development Mitigation Fee. As such, the Master Plan would not conflict with this policy.</p>
<p>Policy 9.5: Multiple species habitat conservation plan. Support and adhere to the Coachella Valley Multiple Species Habitat Conservation Plan.</p>	<p>Consistent. The City, as a signatory to the CVMSHCP and a Permittee, requires compliance with the CVMSHCP which ensures impacts to wildlife and plant species are mitigated to less than significant. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP. The Project does not conflict with this policy.</p>
<p>Policy 9.7: Landscape design. Encourage new developments to incorporate native vegetation materials into landscape plans and prohibit the use of species known to be invasive according to the California Invasive Plant Inventory.</p>	<p>Consistent. The Facilities would not in and of themselves require or necessitate landscape design. As such, the Facilities would not potentially incorporate the use of invasive plant species. The Project does not conflict with this policy.</p>
<p>Policy 9.8: Sensitive species. Require projects proposing to develop in subareas 5, 6, and 7 to</p>	<p>Consistent. None of the Facilities proposed within the city limits of Coachella are within these subareas. However, these subareas also extend into the city’s Sphere of Influence where</p>



City of Coachella General Plan Policy	Project Compliance
<p>conduct surveys to determine if there is occurrence of sensitive species within the Project area. If sensitive species are present, projects must implement mitigation measures necessary as prescribed by a qualified biologist and approved by any applicable resource agency in order to receive necessary City permits.</p>	<p>Facilities are located, and thus, such Facilities may be subject to this policy if the area is incorporated into the city’s jurisdiction. Even so, the City, as a signatory to the CVMSHCP and a Permittee, requires compliance with the CVMSHCP which ensure impacts to wildlife and plant species are mitigated to less than significant. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP, which requires surveys for sensitive species and appropriate mitigation as prescribed by a qualified biologist and approved by a resource agency. The Project does not conflict with this policy.</p>
<p>Policy 10.1: Open space network. Require new development to contribute land and/or funding to expand the community’s open space network, in support of the MSHCP.</p>	<p>Consistent. The Master Plan does not directly propose to support the community’s open space network. However, mitigation measure MM BIO 3 will require implementing developers and agencies to either pay the Local Development Mitigation Fee or place land in conservation within the affected MSHCP Conservation Area. The Project does not conflict with this policy.</p>
<p>Policy 10.2: Whitewater River/Coachella Valley Stormwater Channel corridor. Preserve a public open space corridor of trails and wildlife habitat along the Whitewater River/Coachella Valley Stormwater Channel.</p>	<p>Consistent. The Project includes improvements to the CVSC for flood protection purposes and do not directly preserve a public open space corridor of trails and wildlife habitat; however, these improvements would not conflict with the intent of this policy.</p>
<p>Policy 10.7: Wildlife corridors. Establish and preserve wildlife corridors.</p>	<p>Consistent. Mitigation measure MM BIO 3 will require implementing developers and agencies to either pay the Local Development Mitigation Fee or place land in conservation within the affected MSHCP Conservation Area. Mitigation measures MM BIO 1, 2, 4, 5, and 6 ensure Project compliance with the CVMSHCP and therefore preservation of Conservation Areas, including wildlife corridors. The Project does not conflict with this policy.</p>



City of Coachella General Plan Policy	Project Compliance
<p>Policy 10.8: Preservation of natural land features. Preserve significant natural features and incorporate into all developments. Such features may include ridges, rock outcroppings, natural drainage courses, wetland and riparian areas, steep topography, important or landmark trees and views.</p>	<p>Consistent. The Master Plan is conceptual at this time and final alignments will be determined during the final design process. The Facilities will be required to adhere to the following mitigation measures to identify, avoid and/or mitigate impacts to natural land features. Mitigation measures MM CR 1 through MM CR 6 for impacts to cultural resources, as well as MM BIO 1 through MM BIO 6 for biological resources. The Project does not conflict with this policy.</p>

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the City of Coachella, the Master Plan would not conflict with the City of Coachella’s General Plan. Impacts related to potential conflicts with the City of Coachella’s local policies or ordinances protecting biological resources would be **less than significant with mitigation**.

Unincorporated Riverside County

Riverside County protects tree species through its OTMG and Ord. 599, which regulates the removal of trees. The OTMG address the treatment of oak woodlands in order to reduce potential adverse development impacts to oak trees and their protected zones. (2015 RCGP 2015 EIR 521, p. 4.8-96.) However, there are no naturally occurring oaks on the Coachella Valley floor (see **Figure 5.3-1 – CVMSHCP Corridors and Linkages with Natural Communities** for the vegetation types within the Master Plan Area). Ordinance No. 599 regulates the removal of native trees from lots that are at a minimum one-half acre and that are located above 5,000 feet in elevation in unincorporated Riverside County (RCGP 2015 EIR 521, p. 4.8-96). However, the Master Plan Area and Facilities are not above 5,000 feet in elevation. Therefore, the Project would not conflict with Riverside County’s tree preservation ordinances.

Moreover, the 2015 Riverside County General Plan’s Land Use Element and Multipurpose Open Space Element contains a total of six policies protecting biological resources within unincorporated Riverside County. **Table 5.3-R – Consistency with Riverside County’s General Plan Policies for Biological Resources** identifies these policies, which are also listed in Section 5.3.4.4, and the Project’s consistency with such policies.



**Table 5.3-R – Consistency with Riverside County
General Plan for Biological Resources**

2015 Riverside County General Plan	Project Compliance
<p>Policy LU 9.1: Provide for permanent preservation of open space lands that contain important natural resources, cultural resources, hazards, water features, watercourses, including arroyos and canyons, and scenic and recreational values.</p>	<p>Consistent. The CVMSHCP establishes a reserve system, known as Conservation Areas, for the purpose of permanently preserving open space lands that contain important natural resources, hazards, water features, watercourses, and scenic and recreational values. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP. Further, mitigation measure MM BIO 5 would ensure no significant impacts occur to jurisdictional wetlands and riparian habitats. The Project does not conflict with this policy.</p>
<p>Policy LU 9.2: Require that development protect environmental resources by compliance with the Multipurpose Open Space Element of the General Plan and Federal and State regulations such as CEQA, NEPA, the Clean Air Act, and the Clean Water Act.</p>	<p>Consistent. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP, and as such, the Project is deemed compliant with CEQA, NEPA, FESA, and CESA as determined by the issuance of the Section 10(a) Permit by the USFWS, which acknowledges the adequacy of the conservation programs as full mitigation. As the CVMSHCP does not address impacts to jurisdictional wetlands, which are a protected resource per the CWA, mitigation measure MM BIO 5 requires a jurisdictional delineation and adherence to permit conditions and measures so as to ensure compliance with the appropriate resources agencies' requirements to protect or fully mitigate impact to such wetland and riparian resources that are under the jurisdiction of the ACOE or CDFW. Further, MM BIO 6 would ensure impacts to MBTA-listed migratory birds not covered by the CVMSHCP are not significantly impacted. The Project is also consistent with the Clean Air Act (see Section 5.2 of this <u>Recirculated</u> Draft PEIR). Thus, the Project is consistent with this policy.</p>
<p>Policy OS 5.6: Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.</p>	<p>Consistent. The Project would not impact upland habitat areas as none occurs within the Master Plan Area. Thus, the Project is consistent with this policy.</p>

2015 Riverside County General Plan	Project Compliance
<p>Policy OS 17.2: Enforce the provisions of applicable MSHCPs when conducting review of development applications.</p>	<p>Consistent. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP, which is the MSHCP covering the Coachella Valley, which includes the Master Plan Area. Thus, the Project is consistent with this policy.</p>
<p>Policy OS 17.3: Enforce the provisions of applicable MSHCPs when developing transportation or other infrastructure projects that have been designated as covered activities in the applicable MSHCP.</p>	<p>Consistent. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP, which is the MSHCP covering the Coachella Valley, which includes the Master Plan Area. Further, the Facilities, which consist of flood control conveyance infrastructure, are Covered Activities within and outside of Conservation Areas pursuant to the CVMSHCP. Thus, the Project is consistent with this policy.</p>
<p>Policy OS 18.1: Preserve multi-species habitat resources in the County of Riverside through the enforcement of the provisions of applicable MSHCPs.</p>	<p>Consistent. With adherence to mitigation measures MM BIO 1 through MM BIO 4, the Project is compliant with the CVMSHCP, which is the MSHCP covering the Coachella Valley, which includes the Master Plan Area. Thus, the Project is consistent with this policy.</p>

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the 2015 Riverside County General Plan. Through compliance with the CVMSHCP, which is required by mitigation measures **MM BIO 1** through **MM BIO 4**, adherence to mitigation measures **MM BIO 5** and **MM BIO 6** regarding potentially significant impacts to jurisdictional wetlands and riparian habitats and MBTA-listed migratory birds not covered by the CVMSHCP, respectively, impacts related to potential conflicts with Riverside County’s local policies or ordinances protecting biological resources would be **less than significant with mitigation**.

Impacts within Imperial County

Imperial County does not currently have a tree preservation policy or ordinance preventing or restricting the removal of trees on site. However, Imperial County’s currently adopted General Plan Land Use Element and Conservation and Open Space Element identifies five objectives protecting biological resources within its jurisdiction. **Table 5.3-S – Consistency with Imperial County General Plan Objectives for Biological Resources** identifies these objectives, which are also listed in Section 5.3.4.4, and the Project’s consistency.



**Table 5.3-S – Consistency with Imperial County
General Plan Objectives for Biological Resources**

Imperial County General Plan Policy	Project Compliance
<p>Objective 9.1: Preserve as open space those lands containing watersheds, aquifer recharge areas, floodplains, important natural resources, sensitive vegetation, wildlife habitats, historic and prehistoric sites, or lands which are subject to seismic hazards and establish compatible minimum lot sizes.</p>	<p>Consistent. As the Facilities that would traverse into Imperial County were designed specifically for Travertine Point Specific Plan to provide stormwater conveyance and flood control protection, these Facilities were articulated and analyzed as part of the Travertine Point Specific Plan EIR. The Travertine Point Specific Plan EIR determined that that project would be consistent with this objective as natural open space areas would be incorporated into the project and seismic hazards would be mitigated (TPEIR, pp. 6.9-81 – 6.9-82). Thus, by association, construction of the Facilities in the Imperial County portion of the Master Plan Area would be consistent with this objective.</p>
<p>Objective 2.1: Conserve wetlands, fresh water marshes, and riparian vegetation.</p>	<p>Consistent. As the Facilities that would traverse into Imperial County were designed specifically for Travertine Point Specific Plan to provide stormwater conveyance and flood control protection, these Facilities were articulated and analyzed as part of the Travertine Point Specific Plan EIR. The Travertine Point Specific Plan EIR determined that that project would be consistent with this objective as impacts to wetlands and riparian habitat would be avoided in certain areas of Imperial County and those directly impacted would be adequately mitigated (TPEIR, p. 6.4-182). Thus, by association, construction of the Facilities in the Imperial County portion of the Master Plan Area would be consistent with this objective.</p>
<p>Objective 2.2: Protect significant fish, wildlife, plant species, and their habitats.</p>	<p>Consistent. As the Facilities that would traverse into Imperial County were designed specifically for Travertine Point Specific Plan to provide stormwater conveyance and flood control protection, these Facilities were articulated and analyzed as part of the Travertine Point Specific Plan EIR. The Travertine Point Specific Plan EIR determined that that project would be consistent with this objective as many natural plant communities and wildlife habitat would be designated as open space and adequately mitigation would be incorporated to replace sensitive natural areas directly impacted (TPEIR, pp. 6.4-182 – 6.4-183). Thus, by association, construction of the Facilities in the Imperial County portion of the Master Plan Area would be consistent with this objective.</p>

Imperial County General Plan Policy	Project Compliance
<p>Objective 2.3: Protect unique, rare, and endangered plants and animals and their habitats.</p>	<p>Consistent. As the Facilities that would traverse into Imperial County were designed specifically for Travertine Point Specific Plan to provide stormwater conveyance and flood control protection, these Facilities were articulated and analyzed as part of the Travertine Point Specific Plan EIR. The Travertine Point Specific Plan EIR determined that that project would be consistent with this objective as many natural plant communities and wildlife habitat would be designated as open space and adequately mitigation would be incorporated to replace sensitive natural areas directly impacted (TPEIR, p. 6.4-183). Thus, by association, construction of the Facilities in the Imperial County portion of the Master Plan Area would be consistent with this objective.</p>

Although implementation of the Master Plan would alter present land use in a comparatively limited way as necessary for the infrastructure to adequately convey storm water and provide flood control protection in the Master Plan Area, the Master Plan would be consistent with the Imperial County General Plan. Construction, operation, and maintenance of the Facilities would not conflict with the above-listed policies. As shown on the above table, potential conflicts with Imperial County’s General Plan objectives protection biological resources would be **less than significant**.

Threshold F: *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

Land Use and Planning Threshold: *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

Note to reader: to avoid duplicative analysis, the analyses for both the above thresholds are analyzed simultaneously.

Impacts within Riverside County

The CVMSHCP, which is also permitted as a Natural Community Conservation Plan (NCCP), applies to land use activities within Coachella Valley, which includes the Master Plan Area. As an NCCP, the CVMSHCP provides for the conservation of species and the natural communities on which they depend for their life-cycle needs. Through compliance to the CVMSHCP as required by mitigation measures **MM BIO 1** through **MM BIO 4**, biological effects of development from Facilities within the Master Plan Area would be mitigated to less than significant levels. There are no other adopted habitat conservations plans, natural community



conservation plans, or other approved local, regional, or state habitat conservation plans within the Master Plan Area. Therefore, impacts would be **less than significant**.

Impacts within Imperial County

The Imperial County portion of the Master Plan Area is not located within an adopted habitat conservation plan, NCCP, or other approved local, regional, or state habitat conservation plan (TPEIR, p. 6.4-164). Therefore, **no impact** would result in this respect.

5.3.6 Mitigation Measures

An EIR is required to describe feasible mitigation measures that could minimize significant adverse impacts. (*CEQA Guidelines*, Section 15126.4.)

MM BIO 1 Conservation Area: *Facility(ies) implemented within the Coachella Valley Stormwater Channel and Delta Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan shall be required to adhere to MM BIO-1, to minimize or avoid potential biological effects.*

Prior to ground-disturbing activities, the public agency or private developer implementing the Facility(ies) shall retain a qualified biologist to conduct a pre-construction clearance survey in accordance with the Coachella Valley Multiple Species Habitat Conservation Plan within 14 days prior to the ground disturbance activities per the instructions provided on the following table. Additionally the public agency or private developer implementing the Facility(ies) shall undertake a Joint Project Review with the Coachella Valley Conservation Commission, if required. Non-survey-related action related to mesquite hummocks is also shown on the table.

Coachella Valley Stormwater Channel and Delta Conservation Area		
Species	Conditions for Survey	Subsequent Action
Ridgway's rail and California black rail	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey to be conducted before any ground-disturbing activity in the Conservation Area.	If rails are found, the habitat shall be avoided or measures approved by the USFWS and CDFW taken to ensure that no Take of an individual occurs. If rails are not present, the activities may proceed (CVMSHCP §4.3)
Burrowing owl	<i>Refer to MM BIO 2</i>	<i>Refer to MM BIO 2</i>
Least Bell's vireo	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.	If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. If surveys document that none of these species are
Summer tanager		

Coachella Valley Stormwater Channel and Delta Conservation Area		
Species	Conditions for Survey	Subsequent Action
Yellow warbler Yellow-breasted chat	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.	present, then ground-disturbing activities may proceed (CVMSHCP §4.4).
Crissal Thrasher and Le Conte's Thrasher	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted, and shall include the construction footprint and adjacent areas within 500 feet of the proposed construction footprint.	If active nests are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, shall be established around the nest site. The buffer shall be staked and flagged. No construction activities would be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged (CVMSHCP §4.4).
Mesquite hummocks	N/A	The final design of the Facility(ies) within this Conservation Area shall avoid mesquite hummock vegetation to the maximum extent feasible (CVMSHCP §4.4).
Southwestern willow flycatcher	Surveys shall be conducted to determine if any active nests are present. Restrict human access to southwestern willow flycatcher-occupied habitat during the breeding season, from May 1 to September 15.	If active nests are identified, construction shall not be conducted within 200 feet of an active nest. Maintain upland buffers for all occupied habitat. Buffers should be a minimum of 50 feet wide. Access to surface water is important for this species within the habitat area. Removal of tamarisk from riparian areas would enhance habitat for southwestern willow flycatcher.

*Facility(ies) constructed within the Santa Rosa and San Jacinto Mountains Conservation Area of the Coachella Valley Multiple Species Habitat Conservation Plan shall be required to adhere to **MM BIO-1**, to minimize or avoid potential biological effects.*

Prior to ground-disturbing activities, the public agency or private developer implementing the Facility(ies) shall retain a qualified biologist to conduct a pre-construction clearance survey in accordance with the Coachella Valley Multiple Species Habitat Conservation Plan within 14 days prior to the ground disturbance activities per the instructions provided on the following table. Additionally, the public agency or private developer implementing the Facility(ies) shall undertake the Habitat Assessment and Negotiation Strategy process and Joint Project Review both with the Coachella Valley Conservation Commission, if required. Non-survey-related



actions related to Peninsular bighorn sheep and mesquite hummocks are also shown on the table.

Santa Rosa and San Jacinto Mountains Conservation Area		
Species	Conditions for Survey	Subsequent Action
Burrowing owl	<i>Refer to MM BIO 2</i>	<i>Refer to MM BIO 2</i>
Least Bell's vireo	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted.	If active nests are identified, ground-disturbing activities shall not be conducted within 200 feet of an active nest. If surveys document that none of these species are present, the ground-disturbing activities may proceed (CVMSHCP §4.4).
Summer tanager	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted. .	
Yellow warbler		
Yellow-breasted chat		
Le Conte's Thrasher	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, survey shall be conducted, and shall include the construction footprint and adjacent areas within 500 feet of the proposed construction footprint.	If active nests are found, a 500-foot buffer, or a buffer to the edge of the property boundary if less than 500 feet, shall be established around the nest site. The buffer shall be staked and flagged. No construction activities would be permitted within the buffer during the breeding season of January 15 – June 15 or until the young have fledged (CVMSHCP §4.4).
Desert Tortoise	A presence/absence survey shall be conducted, and shall include the proposed construction footprint and adjacent areas within 200 feet of the construction footprint. Survey shall look for fresh sign of desert tortoise, including live tortoises, tortoise remains, burrows, tracks, scat, or egg shells. The survey shall cover 100 percent of the survey area.	If no sign is found, a clearance survey is not required. A presence/absence survey is valid for 90 days or indefinitely if tortoise-proof fencing is installed around the construction site. If fresh sign is located, the construction area shall be fenced with tortoise-proof fencing and a clearance survey conducted during the clearance window. Desert tortoise clearance surveys shall be conducted during the clearance window from February 15 to June 15 and September 1 to October 31 or in accordance with the most recent USFWS and CDFW protocols. Clearance surveys must cover 100 percent of the construction area. A clearance survey



Santa Rosa and San Jacinto Mountains Conservation Area		
Species	Conditions for Survey	Subsequent Action
		must be conducted during different tortoise activity periods (morning and afternoon). All tortoises encountered would be moved from the construction site to a specified location per CVCC-approved protocol. (CVMSHCP §4.4)
Peninsular bighorn sheep	N/A	If CVMSHCP-modeled habitat is to be traversed within this Conservation Area, all construction-related activities shall be conducted outside of the January 1 – June 30 lambing season unless otherwise authorized through a minor amendment to the CVMSHCP with concurrence from the USFWS and CDFW (CVMSHCP §4.4).
Mesquite hummocks	N/A	The final design of the Facility(ies) within this Conservation Area shall avoid mesquite hummock vegetation to the maximum extent feasible (CVMSHCP §4.4).
Southwestern willow flycatcher	Surveys shall be conducted to determine if any active nests are present. Restrict human access to southwestern willow flycatcher-occupied habitat during the breeding season, from May 1 to September 15.	If active nests are identified, construction shall not be conducted within 200 feet of an active nest. Maintain upland buffers for all occupied habitat. Buffers should be a minimum of 50 feet wide. Access to surface water is important for this species within the habitat area. Removal of tamarisk from riparian areas would enhance habitat for southwestern willow flycatcher.
Triple-ribbed milkvetch	For construction within MSHCP-modeled habitat, surveys will be required for activities year-round.	Any occurrences of the species will be flagged and public infrastructure projects shall avoid impacts to the plants to the maximum extent feasible. Known occurrences as mapped by CVCC shall not be disturbed.

MM BIO 2 Burrowing Owl Survey: Prior to ground-disturbing activities, the public agency or private developer implementing a Facility(ies) shall retain a qualified biologist to conduct a Take avoidance (pre-construction) burrowing owl survey in accordance with the California Department of Fish and Wildlife’s *Staff Report on Burrowing Owl Mitigation* (March 7, 2012). This survey shall be conducted no less than 14 days prior to the ground disturbing activities. If



no burrowing owls are detected during the Take avoidance (pre-construction) survey, implementation of ground disturbance activities may proceed without further consideration of this species. If burrowing owls are detected during the Take avoidance (pre-construction) survey, the taking of active nests shall be avoided. As some individual burrowing owls or pairs are more sensitive than others to specific stimuli and may habituate to ongoing visual or audible disturbance, if burrowing owls and their habitat can be protected-in-place adjacent to the Facility construction footprint, as determined by the qualified biologist, the use of buffer zones, visual screen, or other measures while construction activities are occurring may be utilized to minimize disturbance impacts. Passive relocation (use of one way doors and collapse of burrows) shall occur when owls are present outside the nesting season (February 1-August 31).

MM BIO 3 Conservation: As a signatories and Permittees to the Coachella Valley Multiple Species Habitat Conservation Plan, CVWD, Riverside County, and ~~the city~~ ~~the cities~~ of Coachella and La Quinta, as applicable based on the location of the Facility(ies) being implemented, would pay the Local Development Mitigation Fee (LDMF) adopted pursuant to the Mitigation Fee Act, Government Code Section 66000 *et seq* prior to the completion of construction of the Facility(ies).

If the Facility(ies) is/are being constructed by a private developer, the agency(ies) with jurisdiction based on the location of the Facility(ies), shall require the developer to pay the LDMF prior to completion of construction of the Facility(ies) and to provide documentation to that agency(ies) of LDMF payment. However, in lieu of LDMF payment, if determined adequate by the Coachella Valley Conservation Commission, the public agency implementing the Facility(ies) may conserve some of its existing land within the affected Conservation Area, if available.

MM BIO 4 CVMSHCP Land Use Adjacency Guidelines: Prior to final design approval for a Facility(ies) within or adjacent to a Conservation Area, compliance with Section 4.5 (Land Use Adjacency Guidelines) of the Coachella Valley Multiple Species Habitat Conservation Plan shall be demonstrated by the public agency or private developer implementing a Facility(ies) to the approval of the Coachella Valley Water District. Such compliance shall include, but not necessarily be limited to, demonstrating the design of the Facility(ies) would not result in the release of toxins, chemicals, petroleum products, exotic plant materials, or other elements that might degrade or harm biological resources or ecosystem processes within or adjacent to a Conservation Area.

MM BIO 5 Jurisdictional Water: Prior to construction of a Facility(ies) that would traverse land where riparian or wetland habitat occurs or is likely to occur, the public agency or private developer implementing a Facility(ies) shall obtain the necessary authorizations from the regulatory agencies for proposed impacts to jurisdictional waters, as is applicable. This Facility(ies)-specific delineation 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. Impacts to jurisdictional waters would 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 6 Migratory Bird Treaty Act: Prior to ground-disturbing activities such as vegetation removal that would commence during the nesting/breeding season (February 1-August 31), the public agency or private developer implementing a Facility(ies) shall retain a qualified biologist to conduct a pre-construction field survey to determine if active nests of bird species protected by the Migratory Bird Treaty Act or the California Fish and Game Code – which are not otherwise covered by the Coachella Valley Multiple Species Habitat Conservation Plan – are present in the construction zone. This survey shall be conducted no less than 3 days prior to vegetation removal. If no active nests are located within the construction zone area, construction may be conducted during the nesting/breeding season. However, if active nests are located during the pre-construction field survey, no grading or heavy equipment activity shall take place within the buffer areas designated by the qualified biologist until the nest is no longer active and the young have fledged.

5.3.7 Project-Specific Environmental Effects after Mitigation Measures are Implemented

Impacts within Riverside County

With adherence to mitigation measures **MM BIO 1** through **MM BIO 4**, the Project is compliant with the CVMSHCP. As the CVMSHCP does not address impacts on jurisdictional wetlands, mitigation measure **MM BIO 5** would ensure no significant impacts to jurisdictional wetlands and riparian habitats, and **MM BIO 6** would ensure impacts to MBTA-listed migratory birds not covered by the CVMSHCP are not significantly impacted. Thus, based on compliance with the CVMSHCP and implementation of mitigation measures identified above, potential adverse biological impacts associated with special status species, both plant and animal, riparian and other sensitive natural habitats, wetlands, wildlife movement and nursery sites, local policies protecting resources, and applicable conservation plans would be reduced to less than significant. Therefore, the Project is compliant with local, state, and federal laws, including CVMSHCP and CEQA, and potential impacts related to biological resources in Riverside County are **less than significant with mitigation**.

Impacts within Imperial County

The Master Plan is envisioned to be realized as future development is constructed in the Master Plan Area, thus, necessitating the need for these Facilities. The Facilities which would traverse into Imperial County were specifically designed for stormwater conveyance and flood



control protection for the Travertine Point Specific Plan. Thus, the direct and indirect impacts associated with the construction of these Facilities have been previously analyzed in the Travertine Point Specific Plan EIR and appropriate mitigation measure adopted as part of that project were determined to reduce impacts in Imperial County to a less than significant level, where applicable. As these Facilities would only be realized with the development of the Travertine Point Specific Plan, that project's adopted mitigation measures would be in effect, and as they have been determined to mitigate potentially significant impacts to a less than significant level, no additional mitigation measures are necessary within this Recirculated Draft PEIR. Therefore, impacts from Facilities within Imperial County would be **less than significant**.

5.3.8 Cumulative Environmental Effects after Mitigation Measures are Implemented

A cumulatively considerable impact would occur if the Project in conjunction with other future projects result in a significant impact to biological resources as cumulative impacts could potentially include increased edge effects and increased wildlife mortality and loss of habitat. Because the Master Plan Area consists of jurisdictions that are signatories and Permittees to the CVMSHCP as well as area outside the CVMSHCP, the geographic scope for cumulative impacts to biological resources is the CVMSHCP planning area and Plan Area, which includes portions of unincorporated Riverside and Imperial counties and portions of the city of ~~Cities of~~ Coachella ~~and La Quinta~~.

Because the Master Plan does not propose any changes in land uses within the Plan Area, this Recirculated 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).)

Permittees to the CVMSHCP

CVWD, Riverside County, and ~~the Cities of the city of Coachella and La Quinta~~ are Permittees to the CVMSHCP. The CVMSHCP was prepared to balance environmental protection and economic development objectives in the CVMSHCP planning area and to simplify compliance with endangered species-related laws.

The CVMSHCP, to the maximum extent practicable, minimizes and mitigates the impacts of the taking, and provides for conservation of the covered species. The CVMSHCP includes the establishment of a reserve system, and sets conservation objectives to ensure the conservation of the covered species and conserved natural communities. The CVMSHCP protects 240,000 acres of open space and 27 species with the Coachella Valley. Without the CVMSHCP, there would not be a coordinated system of biological corridors and linkages provided to connect Conservation Areas, as such regional approach would not likely be as comprehensive and adequate at the project-by-project mitigation level.

Mitigation would occur at the Facility-level, through implementation of Facility-specific mitigation measures, i.e. mitigation measures **MM BIO 1** through **MM BIO 4**. The mitigation measures for biological resources were determined to reduce potential impacts to a less than significant level. Further, since cumulative projects in the Coachella Valley are required to comply with the CVMSHCP, and given that the CVMSHCP and its associated EIR/EIS have analyzed cumulative impacts within the region pursuant to CEQA, NEPA, FESA, and CESA, cumulative impacts to biological resources associated with the Project have thus been previously considered and analyzed. It was determined in the CVMSHCP's EIR/EIS that cumulative impacts to biological resources would be less than significant through the implementation of the CVMSHCP. The Project and any other future public or private projects are subject to CVMSHCP compliance including the payment of fees, which helps cover the cost of acquiring habitat and implementing the CVMSHCP. (CVMSHCP EIR, pp. 9-29-9-44.)

Impacts to jurisdictional features, which are not addressed by the CVMSHCP, and to any MBTA-listed bird species that are not covered by the CVMSHCP, would be reduced to less than significant with implementation of mitigation measures **MM BIO 5 and MM BIO 6**, respectively. future development projects would be subject to the same regulatory requirements for potential impacts to jurisdictional features, including wetland and riparian habitats, and to compliance with the MBTA as with the Project.

Therefore, as the Project would comply with the CVMSHCP and incorporates mitigation measures so as to not significantly impact jurisdictional features and MBTA-listed species not covered by the CVMSHCP, potential cumulatively considerable impacts associated with the Facilities within the boundaries of the CVMSHCP would be less than significant with mitigation.

Imperial County

Implementation of the Imperial County General Plan would impact plants and vegetative habits, largely including agricultural areas where most of the native vegetation within the central



Imperial Valley has previously been removed, and the loss or disturbance of native vegetation would also result from potential residential, agricultural, recreational, mining, public facility, and other uses in areas not presently in agricultural use. Sensitive species and habitats would also be impacted. (ICGP EIR, p. III-129.) The Imperial County General Plan EIR recognizes that site-specific measures may be required of future development proposals in order to mitigate potentially significant impacts to biological resources. All recommended mitigation measures from these future biological field surveys are to become conditions of approval on subsequent development projects, subject to approval by Imperial County. Additionally, an applicant for a development project within Imperial County is required to submit necessary permits, where applicable, to the relevant resource agencies for review and approval, and all conditions specified by these approved permits are to become conditions of approval as well. (ICGP EIR, p. III-135.) Therefore, with compliance to regulations and mitigation measures contained in the Imperial County General Plan EIR, in addition to mitigation measures **MM BIO 5** and **MM BIO 6** set forth in Section 5.3.5, impacts to biological resources from build-out of the Imperial County General Plan would be **less than significant with mitigation**.

5.3.9 References

The following references were used in the preparation of this section of the Recirculated Draft PEIR:

- 2015 RCGP Riverside County, *General Plan*, Land Use Element and Multipurpose Open Space Element, December 8, 2015. (Available at <http://planning.rctlma.org/ZoningInformation/GeneralPlan.aspx> accessed December 31, 2015.)
- 2015 RCGP Riverside County, *General Plan Environmental Impact Report No. 521*, EIR 521 Recirculated Public Review Draft, February 2015. (Available at <http://planning.rctlma.org/ZoningInformation/GeneralPlan/GeneralPlanAmendmentNo960EIRNo521CAPFebruary2015/DraftEnvironmentallImpactReportNo521.aspx>, accessed April 16, 2015.)
- CGP- City of Coachella, *General Plan Update 2035*, adopted April 22, 2015. (Available at <http://www.coachella.org/Home/ShowDocument?id=3221>, accessed September 11, 2015.)
- CVMSHCP Coachella Valley Association of Governments, *Coachella Valley Multiple Species Habitat Conservation Plan*, fully executed October 1, 2008. (Available at http://www.cvmshcp.org/Plan_Documents_old.htm, accessed April 16, 2014.)



- CVMSHCP EIR Coachella Valley Association of Governments, Final Recirculated Coachella Valley MSHCP Environmental Impact Report/Statement, September 2007. (Available at http://www.cvmshcp.org/Plan_Documents_old.htm, accessed April 16, 2014.)
- ICGP EIR Imperial County, *Final Program EIR for the County of Imperial General Plan*, 1993. (Available at <http://www.icpds.com/?pid=829>, accessed October 3, 2016.)
- Ord. 559 Riverside County, *Ordinance No. 559 (as amended through 559.7), Regulating the Removal of Trees*. (Available at <http://www.rivcocob.org/ords/500/559.7.pdf>, accessed December 31, 2014.)
- OTMG Riverside County, *Oak Tree Management Guidelines*, approved March 2, 1993. (Available at <http://planning.rctlma.org/DevelopmentProcess/DesignGuidelines/OakTreeManagementGuidelines.aspx>, accessed December 31, 2014.)
- TPEIR Travertine Point Revised Draft EIR (SCH #2007101145), May 2011. (Available at Riverside County Planning Department and Imperial County Planning & Development Services Department.)