



Palm Desert Groundwater Replenishment Project

Final Environmental Impact Report

SCH# 2017041072

prepared by

Coachella Valley Water District

75515 Hovley Lane East

Palm Desert, California 92211

Contact: Elizabeth Meyerhoff, Environmental Specialist

Phone: (760) 398-2651

prepared with the assistance of

Rincon Consultants, Inc.

301 9th Street, Suite 310

Redlands, California 92374

Phone: (805) 644-4455

January 2018



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1 Introduction to the Final EIR

1.1 Introduction

The Final Environmental Impact Report (EIR) consists of the Draft EIR, comments received during the public comment period, and responses to those comments; no errata to the Draft EIR were required. The Coachella Valley Water District (CVWD) has prepared this EIR to evaluate the potential environmental impacts related to the Palm Desert Groundwater Replenishment Project (project). CVWD is the lead agency under the California Environmental Quality Act (CEQA) for the project.

The EIR has been prepared in accordance with CEQA (as amended) (Public Resources Code §§21000-21189.3) and the 2016 State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§15000-15387). Under State CEQA Guidelines §15121 (Informational Document):

- a) An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.
- b) While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding consideration under Section 15093.
- c) The information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court.

According to State CEQA Guidelines §15089 Final Environmental Impact Report:

- a) The Lead Agency shall prepare a Final EIR before approving the project. The contents of a Final EIR are specified in Section 15132 of these Guidelines.
- b) Lead Agencies may provide an opportunity for review of the Final EIR by the public or by commenting agencies before approving the project. The review of a Final EIR should focus on the responses to comments on the Draft EIR.

1.2 Organization of the Final EIR

As directed by State CEQA Guidelines §15132, the Final EIR consists of three sections presented in one volume:

- **Section 1 – Introduction.** This chapter provides an introduction and summarizes CEQA requirements for preparation of responses to substantive public comments on the Draft EIR.
- **Section 2 – Response to Comments.** This chapter includes comments received during the public comment period and CVWD's response to each comment.
- **Chapter 3 – Errata to the Draft EIR.** Minor revisions to the Draft EIR are identified for clarification, to correct typographical errors or internal inconsistencies within the document.

Replacement pages represent the edits to the Draft EIR by the Lead Agency. The pages have been designed for the reader to insert the Replacement pages into the Draft EIR, making the revised Draft EIR a stand-alone document. Replacement pages are formatted in revision fashion: strikeouts indicate deleted text and underlines indicate additional text.

For the proposed project, no errata to the Draft EIR were required, and that section is therefore not included in this Final EIR.

1.3 Draft EIR Public Review Period

The 45-day public comment period for the Draft EIR began on November 6, 2017 and closed on December 20, 2017. Distribution of the Draft EIR was provided by CVWD to public agencies, nearby property owners, and individuals who had expressed an interest. In addition, a notice was published in the Desert Sun and La Prensa Hispana newspapers. Copies of the Draft EIR were also made available at the locations listed below.

CVWD offices	CVWD offices	Palm Desert Public Library
51501 Tyler Street Coachella, CA 92236	75515 Hovley Lane East Palm Desert, CA 92211	73300 Fred Waring Drive Palm Desert, CA 92260

CVWD circulated the Notice of Completion/Notice of Availability and included a CD-copy of the Draft EIR to various agencies as well as the California State Clearinghouse and Riverside County Clerk. Digital copies (on CD) of the Draft EIR were also made available to interested parties during a public meeting (described below). Additionally the Draft EIR was made available on CVWD's website: www.cvwd.org.

On November 30, 2017, a public meeting was held at the CVWD office in Palm Desert regarding the Draft EIR. CVWD noticed the public meeting on the CVWD website and in two newspapers: the Desert Sun, and La Prensa Hispana. A sign-up sheet was used to record attendees during the meeting. Attendees were handed a comment card and a speaker card. A professional court recorder recorded the entire meeting including the CVWD presentation and oral comments.

The public comment period closed on December 20, 2017. During the 45-day public review period, CVWD received a total of four (4) comment letters and two (2) verbal comments. Comments and responses are provided in Section 2.0, *Response to Comments*.

1.4 Certification and Project Selection Process

CVWD' Board of Directors (CVWD Board) will hold a public meeting on January 9, 2018, in the CVWD Board Room located at 75515 Hovley Lane East in Palm Desert, CA, to consider certification of the Final EIR.

In order to certify the Final EIR, the CVWD Board must find that:

- a) The Final EIR has been completed in compliance with CEQA;
- b) The Final EIR was presented to the decision-making body of the lead agency and that the decision-making body reviewed and considered the information contained in the Final EIR prior to approving the Project; and
- c) The Final EIR reflects the Lead Agency's independent judgment and analysis. (State CEQA Guidelines §15090a).

If the CVWD Board of Directors certifies the Final EIR, it would then consider Project approval.

1.5 Consideration of Recirculation

If significant new information is added to an EIR after public review, the lead agency is required to recirculate the revised document (CEQA Guidelines Section 15088.5). “Significant new information” includes, for example, a new significant environmental impact or a substantial increase in the severity of an impact. New information is not considered significant unless the document 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 that the proponent has declined to implement.

Under the standard found in CEQA Guidelines Section 15088.5, no significant new information has been added to the EIR after public notice was given of the availability of the Draft EIR for public review.

Therefore, CEQA does not require recirculation of the Draft EIR.

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2 Responses to Comments

2.1 Introduction

The Response to Comments on the Draft EIR for the project has been prepared in accordance with CEQA Guidelines Sections 15088, 15089, and 15132. CVWD's responses to comments on the Draft EIR represent a good-faith, reasoned effort to address the environmental issues identified by the commenters. This section of the Final EIR contains verbatim all comments received during the public comment period, and responses to those comments.

2.2 Responses to Comments

This section includes comments received during the 45-day public circulation of the Draft EIR prepared for the project. The comment letters and responses are provided below. The comment letters have been numbered sequentially and each separate issue raised by the commenter, if more than one, has been assigned a number. The responses to each comment identify first the number of the comment letter, and then the number assigned to each issue (Response 1-A, for example, indicates that the response is for the first issue raised in comment Letter 1).

Table 1 Comments Received on the Draft EIR

Letter No.	Commenter Name	Agency / Affiliation / City of Residence
1	Mark L. Johnson	Private Resident
2	Cheri Flores, Senior Planner	City of La Quinta
3	Jack Cheng	South Coast Air Quality Control Board
4	Sherry Kelly	Private Resident
5	Bobbie Larsen	Private Resident
6	Scott Morgan, Director	State Clearinghouse and Planning Unit – State of California Office of Planning and Research

Verbal comments received during the public meeting held on November 30, 2017, and verbal responses to those comments provided during the meeting, are presented in the transcript of the public meeting (Appendix B).

No revisions to the Draft EIR are necessary or have been incorporated based upon the comments received.

Letter 1

Mark L. Johnson

78370 Via Dijon
La Quinta, CA 92253
Phone: 760-777-2698
email: mark18trek@gmail.com

November 30, 2017

Luke Stowe
Environmental Supervisor
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92211

Subject: Palm Desert Groundwater Replenishment Project-DEIR

Dear Mr. Stowe:

I have reviewed the Draft Environmental Impact Report (DEIR) for the Palm Desert Groundwater Replenishment Project (Project) and offer the following comments.

I endorse this project because it supports the goals of the Coachella Valley Water Management Plan Update 2012 (CVWMP), i.e. the Project will; (1) reduce groundwater overdraft, (2) reduce ground subsidence and (3) effectively utilize CVWD's Colorado River water allocation.

The Project is phased nicely and will maximize the use of existing facilities, including the Mid-Valley Pipeline, Reservoirs and Pump Station, WRP-10 percolation ponds and the Whitewater River Stormwater Channel. I do support the potential use of inflatable rubber dams in the WRSC (Section 2.9.2.4).

Potential groundwater quality issues are addressed in the DEIR and the referenced Palm Desert Groundwater Replenishment Feasibility Study by Todd (2017) (PDGR Feasibility Study). The DEIR discusses groundwater water quality impacts for Total Dissolved Solids (TDS), nitrate, fluoride, arsenic, perchlorate, arsenic and chromium-6. The PDGR Feasibility Study covers groundwater water quality impacts for TDS, Chloride, Sulfate, Nitrate, Chromium-6 and Fluoride. It is suggested that the DEIR discuss all the water quality constituents evaluated for both documents. It appears, after reviewing both documents, that TDS and nitrate are the only two constituents of concern and they are mitigated as follows:

1-A

- TDS or salinity is predicted to increase but this water quality constituent is a non-health based standard. The PDGR Feasibility Study indicates TDS levels may rise to a maximum of 750 mg/l in certain portions of the aquifer under some scenarios but this level is well within the accepted range of 500 to 1,500 mg/l to avoid aesthetic concerns.
- Nitrate has been identified as a potential water quality issue. Nitrate is a health-based constituent and the DEIR indicates that groundwater monitoring will be implemented and wells taken out of service as needed. Over time, the nitrate issue is expected to dissipate due to dilution.

1-A
(cont.)

I am glad to see the nitrate issue is addressed here and will hopefully get equal attention in the Eastern Coachella Valley.

The Project is a perfect example of a fully integrated water resource system as Colorado River water will be replenished in the center of the Coachella Valley and outside of Improvement District No. 1. The economics should also be fully integrated, i.e. there should be one replenishment area of benefit and one canal rate for the entire CVWD system.

1-B

Thank you for the opportunity to comment.

Sincerely,



Mark L. Johnson

COMMENTER: Mark L. Johnson

DATE: November 30, 2017

Response 1-A

The commenter states support for the proposed project because it would reduce groundwater overdraft, reduce ground subsidence, and effectively utilize CVWD's allocation of Colorado River Water. No response is warranted.

Thank you for your comment. No revisions to the EIR are necessary.

Response 1-B

The commenter states that economics should be integrated into the analysis.

The CEQA document does not address economics such as specific water rates, although certain alternatives were screened out if they were considered to be economically infeasible.

Section 15064(e) of the CEQA Guidelines states the following regarding potential economic effects of a project:

Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect.

No revisions to the EIR are necessary.

Letter 2



December 15, 2017

Mr. Luke Stowe, Environmental Supervisor
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92211

**SUBJECT: DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT PALM DESERT
GROUNDWATER REPLENISHMENT PROJECT**

Dear Mr. Stowe,

Thank you for the opportunity to review the Draft Programmatic Environmental Impact Report (DPEIR) for the Palm Desert Groundwater Replenishment Project. The City of La Quinta has no comments. 2-A

Sincerely,

Cheri Flores
Senior Planner
City of La Quinta

cc: Gabriel Perez, Planning Manager

COMMENTS: Cheri Flores, Senior Planner
City of La Quinta

DATE: December 15, 2017

Response 2-A

The commenter states that the City of La Quinta has no comments on the Draft EIR.

No revisions to the EIR are necessary.

Letter 3

From: Jack Cheng
Sent: Tuesday, December 5, 2017 4:34 PM
To: 'Istowe@cvwd.org' <Istowe@cvwd.org>
Subject: Palm Desert Groundwater Replenishment Project

Luke,
Can you clarify if the proposed pumps (2 x 800 HP and 2 x 100-200 HP) are electrified or if they are powered by combustion engines? 3-A

Thank you.

Jack Cheng
South Coast Air Quality Management District
CEQA IGR
(909) 396-2448
jcheng@aqmd.gov

COMMENTER: Jack Cheng
 South Coast Air Quality Management District

DATE: December 5, 2017

Response 3-A

The commenter asks for clarification on whether the proposed pumps would be electrified or powered by combustion engines.

The pumps would be electrically powered. Specific text from the Draft EIR is provided below. No revisions to the EIR are necessary.

Page 83 of the DEIR:

Operational emissions are typically comprised of mobile source emissions, emissions associated with energy consumption, and area source emissions. The proposed project would not increase the number of vendor trips or employee trips, but would use electricity to pump water. However, the project would be connected to the electricity grid and operation of the pumps would use electricity generated offsite and supplied by Southern California Edison. Although consumption of electricity may indirectly result in criteria pollutant emissions associated with the production of electricity, electricity production may occur outside of the air basin, and is accounted for as part of the CEQA review process at the source of production, rather than at individual consumers; therefore, emissions associated with electricity consumption are not subject to basin-specific thresholds, and are not discussed further in this analysis. (However, emissions of greenhouse gases associated with electricity consumption are accounted for at the consumer because impacts associated with greenhouse gas emissions are global, rather than regional. Refer to Section 3.7, Greenhouse Gas Emissions, for a discussion of potential greenhouse gas emissions impact associated with the project's consumption of electricity.)

Page 145 of the DEIR:

The project involves the operation and maintenance of water storage/infiltration facilities, where regular operation and maintenance would be comparable to existing operation and maintenance activities at the WRP10 site and within the Whitewater River Stormwater Channel where Phase II of the project is proposed. Operation of Phase II of the project would include the occasional (approximately every five years) repair or replacement of the temporary berms; these activities would include earth movement, but over the project lifetime area anticipated to require comparable equipment usage as currently used within the channel to maintain its capacity through regular mowing, vegetation removal, and sediment clearing.

Operational emissions for energy use were calculated using estimated electricity consumption and energy intensity factors for GHG emissions from Southern California Edison. The energy intensity factors obtained from CalEEMod were 702 lb per CO₂ per MWh, 0.029 lb per CH₄ per MWh, and 0.006 lb per N₂O per MWh (CalEEMod 2016). According to CVWD, operation of the proposed project (including Phase I and Phase II) would include the operation of a total of six pumps operating for 24 hours per day, 365 days per year, which would lead to 18,396,000 kWh per year. GHG emissions were calculated by multiplying the energy intensity by the energy intensity factors.

Pages 146-147 of the DEIR:

Operation of the proposed project would generate greenhouse gases through an increase in energy use associated with the secondary effluent pump, and repair/replacement of the temporary berms on an as-needed basis. Emissions for energy use due to pumping were calculated using estimated electricity consumption and energy intensity factors from Southern California Edison. Assuming all six pumps are powered by electricity and operating at full pumping capacity of 92+ CFS, the total energy usage would be 18,396,000 kWh per year. Based on the energy intensity factors, operational emissions would result in approximately 5,882 MT CO₂e per year. Table 17 summarizes the long-term GHG emissions generated by energy use associated with the secondary effluent pump.

The project would generate a total of 5,938 MT CO₂e per year, which would exceed SCAQMD's threshold, which is based on AB 32. Since the project would conflict with AB 32, subsequently, the project would conflict with SB 32. Therefore, this impact would be significant and unavoidable.

Comment 4 (Verbal)

Hi. My name is Sherry Kelly. And we live in Desert Rose so we're just south of the proposed construction. And we're concerned about the dust, the noise, because we already have issues with the dust coming from the Whitewater area. And that's one of my questions, the dust that all of the construction will generate and the noise.

And what is the timeline? I didn't read anything.

COMMENTER: Sherry Kelly

DATE: November 30, 2017

Response 4-A

Construction-related dust generation is addressed in Section 3.3, *Air Quality*, of the Draft EIR. Noise associated with the proposed project is addressed in Section 3.12, *Noise and Vibration*, of the Draft EIR. The Draft EIR determined that potential impacts associated with dust and noise would be less than significant.

The proposed timeline for implantation of the project is provided in Chapter 2, *Project Description*, of the Draft EIR, and is discussed throughout the impact analysis as applicable to environmental issue areas including but not limited to Air Quality and Noise.

A CD copy of the Draft EIR was provided to the commenter.

No revisions to the EIR are necessary.

Comment 5 (Verbal)

My name is Bobbie Larsen and I too live in Desert Rose. And we have the CV link going in the Storm Channel at the same time that you guys are probably going to be doing your work back there. How is that going to coordinate? I mean, we're already going to be facing noise and dust from the CV link and now this in addition to it, so that is our big concern.

And one concern I do have is these big pumps that you're putting in. What kind of noise is going to emanate from that and how is that going to be mitigated? How is that going to affect us in our day-to-day life living right on the other side of the wash from you?

COMMENTER: Bobbie Larsen

DATE: November 30, 2017

Response 5-A

Construction-related dust generation is addressed in Section 3.3, *Air Quality*, of the Draft EIR. Noise associated with the proposed project is addressed in Section 3.12, *Noise and Vibration*, of the Draft EIR. Cumulative environmental impacts of the proposed project are also addressed throughout the Draft EIR, which determined that potential impacts associated with these issue areas would be less than significant.

The pumps would be located at the existing Mid-Valley Pipeline Pump Station, approximately six miles away from the Desert Rose community, as well as within the existing WRP10 site, on the opposite side of the Whitewater River Stormwater Channel from the Desert Rose community. All pumps would be surrounded by sound walls to prevent attenuation during operation. Potential impacts would be less than significant.

A CD copy of the Draft EIR was provided to the commenter.

No revisions to the EIR are necessary.

Letter 6



EDMUND G. BROWN JR.
GOVERNOR December 21, 2017

STATE OF CALIFORNIA
GOVERNOR'S OFFICE OF PLANNING AND RESEARCH
STATE CLEARINGHOUSE AND PLANNING UNIT



KEN ALEX
DIRECTOR

✓ Orig. to DDavis

plm
IC-BOARD SECRETARY
IC-ENVIRONMENTAL SERVICES
IC-ENGINEERING

Luke Stowe
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, CA 92211

Subject: Palm Desert Groundwater Replenishment Project
SCH#: 2017041072

Dear Luke Stowe:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 20, 2017, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

Scott Morgan
Director, State Clearinghouse

3
of

SCANNED

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

**Document Details Report
State Clearinghouse Data Base**

SCH# 2017041072
Project Title Palm Desert Groundwater Replenishment Project
Lead Agency Coachella Valley Water District

Type	EIR Draft EIR
Description	The Palm Desert Groundwater Replenishment Project is a water supply reliability project located in the central portion of the Coachella Valley in the city of Palm Desert, Riverside County. The proposed project would occur in two phases: Phase 1 would occur on and adjacent to the north of CVWD's Water Reclamation Plant No. 10, located at 43-000 Cook St in Palm Desert, CA. Primary components of Phase 1 include: re-purpose existing ponds adjacent to the north of CVWD's WRP 10 site, to function as groundwater replenishment basins; extend existing water transmission pipeline within the WRP10 site to provide transmission of imported Colorado River water from the re-purposed ponds; install a pump station adjacent to the Back Feed Reservoir, including a min of two pumps with a pumping HP of 100 to 200 HP; Relocate the existing WRP 10 operations parking area by repurposing the northeastern-most percolation basin currently located within the WRP 10 site. Phase II of the proposed project would occur on the WRP 10 site and within the existing stormwater channel, adjacent to CVWD's WRP10 site Primary components of Phase II include: construct berms using native sediments within the stormwater channel to create detention basins to receive and infiltrate Colorado River water; extend the existing MVP within the stormwater channel beyond the WRP10 site to convey Colorado River water to the new detention basins; expand and reconfigure existing secondary effluent storage ponds within WRP10 to store secondary effluent; construct a new secondary effluent pump station within the WRP 10 site to improve the routing of secondary effluent.

Lead Agency Contact

Name	Luke Stowe		
Agency	Coachella Valley Water District		
Phone	(760) 398-2651	Fax	
email			
Address	75515 Hovley Lane East		
City	Palm Desert	State CA	Zip 92211

Project Location

County	Riverside
City	Coachella
Region	
Lat / Long	
Cross Streets	Hovley Lane East/Beacon Hill
Parcel No.	
Township	
	Range
	Section
	Base

Proximity to:

Highways	111, 10
Airports	
Railways	
Waterways	Whitewater River Stormwater Channel
Schools	Palm Desert HS
Land Use	public facility and service industrial/public facilities/institutional and open space

Project Issues Air Quality; Toxic/Hazardous; Biological Resources; Geologic/Seismic; Landuse; Public Services; Recreation/Parks; Traffic/Circulation; Water Quality; Population/Housing Balance; Minerals; Aesthetic/Visual; Agricultural Land; Archaeologic-Historic; Cumulative Effects; Drainage/Absorption; Flood Plain/Flooding; Forest Land/Fire Hazard; Growth Inducing; Noise; Schools/Universities; Septic System; Soil Erosion/Compaction/Grading; Solid Waste; Water Supply

Note: Blanks in data fields result from insufficient information provided by lead agency.

**Document Details Report
State Clearinghouse Data Base**

Reviewing Agencies	Resources Agency; Department of Conservation; Department of Fish and Wildlife, Region 6; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 8; Office of Emergency Services, California; State Water Resources Control Board, Division of Water Quality; State Water Resources Control Board, Division of Water Rights; Regional Water Quality Control Board, Region 7; Native American Heritage Commission; State Lands Commission

Date Received	11/06/2017	Start of Review	11/06/2017	End of Review	12/20/2017

Note: Blanks in data fields result from insufficient information provided by lead agency.

COMMENTER: Scott Morgan, Director
State Clearinghouse and Planning Unit
State of California Office of Planning and Research

DATE: December 21, 2017

Response 6-A

The State Clearinghouse confirms that the Draft EIR was circulated to selected state agencies, and no comments were received.

No revisions to the EIR are necessary.

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Appendix A

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Environmental Impact Report (EIR) for the proposed project, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in this MMRP.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Air Quality							
AQ-1: Best Available Technology (BACT) for Construction Equipment							
Construction equipment shall utilize Tier 3 or Tier 4 compliant engines for diesel-fueled construction equipment during all construction activities at the project site.	Coachella Valley Water District shall inspect construction activities at the onset of project implementation and on a weekly basis during project construction to ensure that Tier 3 or Tier 4 compliant diesel- fueled engines are utilized during project construction.	During construction of the project	Throughout construction activities	Coachella Valley Water District			
Biological Resources							
BIO-1: Nesting Bird and Burrowing Owl Avoidance							
Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. A pre-construction survey for the burrowing owl is shall be completed on the project site prior to any ground-disturbing activities since suitable	If construction is to occur during the nesting season (February 1 to August 31), a qualified biologist shall complete a nesting bird survey (within one week of ground disturbance) and burrowing owl survey (no less than 14 days and no more than 30 days prior to ground disturbing activities). Results shall be submitted to Coachella Valley Water District.	Before ground disturbing activities	Once	Coachella Valley Water District			

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required.							
BIO-2: Consultation with Regulatory Agencies							
Prior to initiation of Phase II of the project, CVWD shall consult with CDFW, the USACE, and the Colorado River Basin RWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the un-vegetated Whitewater River Stormwater Channel. CVWD shall comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of Phase II of the project	Once	Coachella Valley Water District			
Cultural Resources							
CR-1: Retain a Qualified Archaeologist							
CVWD shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for archaeology, to carry out all mitigation measures related to archaeological and historic resources. This archaeologist shall work with CVWD and local Native American representatives to develop formal protocols for archaeological monitoring.	The qualified archaeologist will be responsible for carrying out all mitigation related to archaeological and historic resources.	Before construction	Once	Coachella Valley Water District			
CR-2: Archaeology Sensitivity Training							
A qualified archaeologist shall be retained to conduct a Worker’s Environmental Awareness	All construction personnel will sign a sign-in sheet acknowledging that they	Before construction	Once	Coachella Valley Water			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.	received the WEAP training.			District			
CR-3: Archaeological Spot-Checking							
A qualified archaeologist shall conduct daily spot-checks of all-project related ground disturbing activities within the WRP10 and the Whitewater River Stormwater Channel areas. Such monitoring activities should be coordinated with local Native American representatives who have requested consultation. Should conditions indicate the need for additional monitoring, the qualified archaeologist may increase the monitoring efforts and/or recommend the inclusion of a Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and a plan must be created for evaluating the find for significance under CEQA.	The archaeologist shall conduct daily spot-checks and keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
CR-4: Archaeological and Native American Monitoring within CA-RIV-64/H							
If ground-disturbing activities are required within or immediately adjacent to the boundaries of CA-RIV-64/H, a qualified archaeologist and local Native American representative shall monitor project-related ground-disturbing activities. Monitoring shall be conducted within 100 feet surrounding CA-RIV-64/H. If remnants of CA-RIV-64/H are	The archaeological and Native American monitors shall keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for significance under CEQA.							
CR-5: Unanticipated Discovery of Cultural Resources							
If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the qualified archaeologist must be contacted immediately to evaluate the find and develop a plan for treatment of the find/archaeological site. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.	All cultural resource finds will be reported to the Coachella Valley Water District. All evaluation plans and subsequent reports will be submitted to the Coachella Valley Water District for review and approval.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-6: Unanticipated Discovery of Tribal Resources							
In the event that archaeological resources, including tribal cultural resources of Native American origin, are identified during project construction, the qualified archaeologist would consult with CVWD to halt construction in the immediate area and begin or continue Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring may be required; a Native American monitor may also be required in addition to the archaeologist.	All potential tribal cultural resource finds will be reported to the Coachella Valley Water District, who will consult with local Native Americans regarding the find.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-7: Retain a Qualified Paleontologist							
Prior to initial ground disturbance, CVWD shall retain a project paleontologist, defined as a paleontologist who meets the SVP standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. A qualified paleontologist (Principal Paleontologist) is	The qualified paleontologist will be responsible for carrying out all mitigation related to paleontological resources.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
defined by the SVP standards as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year.							
CR-8: Paleontological Mitigation and Monitoring Program							
Prior to construction activity a qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program (PMMP) to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff WEAP training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.	The qualified paleontologist will be responsible for producing the PMMP and providing it to the Coachella Valley Water District for review and approval.	Before construction	Once	Coachella Valley Water District			
CR-9: Paleontological Worker Environmental Awareness Program (WEAP)							
Prior to the start of construction, the project paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting at which a qualified paleontologist shall attend. The paleontological WEAP may occur in concurrence with the archaeological WEAP. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find, and to appropriately handle the find before restarting work in the area, as	All construction personnel will sign a sign-in sheet acknowledging that they received the WEAP training.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
determined by the qualified paleontologist.							
CR-10: Paleontological Monitoring							
Ground disturbing construction activities (including grading, trenching, berm creation and new pipeline, pump station, and valve installation) exceeding 5 feet in depth in areas mapped as high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth would not require paleontological monitoring.	The paleontologist shall conduct daily monitoring and keep daily logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
Hazards and Hazardous Materials							
HAZ-1(a): Hazardous Materials Management and Spill Control Plan							
Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill	Construction monitors perform daily checks and weekly written reports to ensure compliance with hazardous	Before and during construction	Ongoing	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well as federal OSHA and Cal/OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.	materials management and spill controls.						
HAZ-1(b): Hazardous Materials Business Plan							
Prior to construction of the proposed project, a Hazardous Materials Business Plan (HMBP) shall be prepared and implemented. The HMBP shall include a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training. An existing HMBP may be updated for use under this project.	Construction monitors perform daily checks and weekly written reports to assure compliance of hazardous materials inventory, site plan, emergency response plan, and requirements for employee training.	Before and during construction	Ongoing	Coachella Valley Water District			
HAZ-2: Traffic Management Plan							
Prior to the start of construction, a Traffic Management Plan shall be developed, in coordination with County Transit, Public Works, and Coachella Valley Water District. The Traffic Management Plan shall include measures that address how to accommodate emergency evacuation and response, if needed. Measures to manage construction traffic could include warning signs, flag personnel, and scheduling deliveries outside the morning and evening peak traffic hours.	Construction monitors perform daily checks and weekly written reports to assure compliance of traffic management plan.	Before and during construction	Ongoing	Coachella Valley Water District			
Hydrology and Water Quality							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
HYD-1: Monitor Groundwater Drinking Wells and Ensure Health-based Water Standards are Met							
Coachella Valley Water District shall continue to monitor the quality of groundwater produced drinking water wells located near the groundwater recharge areas to ensure that all recognized health-based drinking water standards are met. If monitoring shows that the groundwater pumped from these wells exceeds any health-based drinking water standards due to recharge activities, CVWD will remove impacted wells from service and work with well owners to bring the drinking water supply into compliance by either providing domestic water from the domestic water system or providing appropriate well-head treatment within their respective service areas.	Coachella Valley Water District reports monitoring results to the Division of Drinking Water to ensure sufficiency of mitigation requirements and to meet drinking water standards.	During project operation	Ongoing throughout project operation	Coachella Valley Water District			
Transportation and Traffic							
TRA-1: Construction Traffic Management Plan							
The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls. Implementation of this measure would ensure that construction traffic impacts maintain a less than significant level.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of construction	Once	Coachella Valley Water District			

Appendix B

Public Meeting Transcript

PALM DESERT GROUNDWATER REPLENISHMENT PROJECT
DRAFT ENVIRONMENTAL IMPACT REPORT
COACHELLA VALLEY WATER DISTRICT
STEVE ROBBINS ADMINISTRATIVE BUILDING
PUBLIC MEETING

CERTIFIED COPY

THURSDAY, NOVEMBER 30, 2017
5:30 P.M. to 6:00 P.M.

75515 Hovley Lane East
Palm Desert, California

REPORTED BY:

Karen Ann Mariani

CSR No 9544

I N D E X

SPEAKERS	PAGE
Ms. Elizabeth Meyerhoff	3, 6, 7, 14, 15, 18
Ms. Carrie Oliphant	4, 7, 17, 18
Ms. Aubrey Mescher	9, 16, 17
Ms. Sherry Kelly	14, 15, 16
Ms. Bobbie Larsen	16, 17, 18
Mr. Ben Olsen	18

1 MS. MEYERHOFF: Good evening. Thank you for
2 coming out tonight for our public meeting. My name is
3 Elizabeth Meyerhoff. I'm the environmental specialist
4 with the Coachella Valley Water District.

5 This public meeting is for the Palm Desert
6 Groundwater Replenishment Project, and the purpose of
7 tonight's meeting is for staff to receive your public
8 comment. Once we receive public comment, in written
9 form, please, we will then take those public comments
10 and respond to them in writing in the Final EIR, which
11 will then also be made publicly available in probably a
12 few weeks or sometime in the future.

13 Okay. So again, the purpose of tonight's
14 meeting. This evening we are going to give you -- we're
15 providing a project summary. We're going to discuss the
16 project's purpose and need. We're also going to discuss
17 the Environmental Review process. And then as mentioned
18 just a moment ago, at the end of our presentation we're
19 going to open it up for public comment.

20 And I just would like to let everyone know we
21 have a court reporter here this evening. She helps to
22 transcribe all the comments, the presentation for
23 accuracy.

24 So the project team for the Palm Desert
25 Groundwater Replenishment is comprised of engineering

1 and environmental. Carrie Oliphant is our assistant
2 project director. And we also have Armando Rodriguez,
3 Steve Bigley, Luke Stowe, and myself.

4 GI Consultants, they're doing the project
5 design, and Rincon is providing environmental
6 consultation and support for this project as well.

7 And with that, I'd like to turn it over to
8 Carrie Oliphant. As mentioned, she's the project
9 manager and the assistant director of engineering.

10 MS. OLIPHANT: Good evening. So just a brief
11 project summary. The purpose of the project is to help
12 mitigate historical groundwater levels and improve
13 groundwater quality by replenishing the groundwater
14 basin using Colorado River water, and to meet the goals
15 of the Coachella Valley Water Management Plan to assure
16 adequate quantities of safe high-quality water at the
17 lowest cost to CVWD water users.

18 So there's approximately 25,000-acre feet of
19 Colorado River water. It's proposed to be delivered to
20 the replenishment facilities associated with this
21 project.

22 And the project is being proposed in two
23 phases. So Phase One consists of re-purposing existing
24 ponds which are located adjacent and to the north of
25 CVWD's existing Water Reclamation Plant Number Ten

1 site. We refer to that as WRP10 or WARP10. So if I
2 accidentally slip, you will know what I mean when I say
3 that. I don't mean to use the acronyms, but sometimes
4 it slips out.

5 So our Water Reclamation Plant Number Ten is
6 located behind this building north of Fred Waring and
7 just east of Cook Street, just to give you some
8 reference.

9 So we're looking at extending an existing water
10 transmission pipeline within our Water Reclamation Plant
11 Number Ten site. We're looking at installing a new
12 200-horsepower pump station at our Water Reclamation
13 Number Ten site to pump the Colorado River water to the
14 replenishment ponds located north of WRP10. And we're
15 looking at installing two new 800-horsepower pumps and a
16 hydropneumatic tank at what we call our Mid-Valley Pump
17 Station.

18 So I'm going to review each of these components
19 on an exhibit following this next slide, and so that
20 will help illustrate the project.

21 So right now I'm just trying to get through the
22 project description of Phase One and Phase Two just so
23 you know what the components are. And then when we look
24 at the exhibit, it will make more sense.

25 So Phase Two is proposed within our Whitewater

1 River Stormwater Channel. And it's also -- there are a
2 couple of components that are proposed within our Water
3 Reclamation Plant Number Ten site.

4 So the Phase Two components that will help
5 facilitate the replenishment of the Colorado River water
6 include constructing berms and detention basins within
7 the Whitewater River Stormwater Channel and extending an
8 existing Mid-Valley Pipeline within the Whitewater River
9 Stormwater Channel to get the Colorado River water to
10 the ponds.

11 Now, the following -- the next two items are
12 not necessarily related to the replenishment aspect, but
13 they do complement this project. So they include
14 expanding and reconfiguring the existing secondary
15 effluent storage ponds within the southern portion of
16 our existing Water Reclamation Plant Number Ten site and
17 constructing a new secondary effluent pump station
18 within the WRP10 site.

19 So the ponds that are located north of WRP
20 Number Ten that are being proposed for replenishment,
21 they will no longer be available for the secondary
22 effluent storage in the event there's a need for it, an
23 emergency or something to that effect.

24 MS. MEYERHOFF: So sorry to interrupt. We're
25 actually going to pause the meeting for a few minutes.

1 We have -- it looks like there are members of the public
2 that would like to attend. And our gates were
3 accidentally closed at 5:30, so --

4 MS. OLIPHANT: Oh, dry run.

5 MS. MEYERHOFF: Yeah. So we'd just like to
6 pause for a few more moments to allow additional members
7 of the public to participate. Thank you.

8 (The public meeting paused at 5:35 P.M.)

9 (The public meeting resumed at 5:39 P.M.)

10 MS. OLIPHANT: We were reviewing the Phase Two
11 components of the project. We had talked about the
12 first two items which were related to the replenishment
13 aspect of the project.

14 And then the second two, because we are going
15 to be not using the ponds north of WRP -- of our WRP10
16 site which have been available in the past for emergency
17 overflow in case we need to use the storage for
18 secondary effluent, these two components, expanding the
19 existing secondary effluent within the southern portion
20 of our existing WRP10 site and then constructing the new
21 secondary effluent pump station, these will allow for a
22 greater amount of storage and for a greater amount of
23 flexibility when it comes to treating and recycling the
24 secondary effluent.

25 So these are the exhibits that I talked about

1 that will kind of put all of these components in
2 perspective.

3 So this area here -- can you see that? So this
4 is our Phase One area which is the area north of our
5 Water Reclamation Number Ten Plant. And this is the
6 Mid-Valley Pipeline down here.

7 And so we're extending this pipeline --
8 actually, sorry, we're not extending it. It exists.
9 And we are putting in our pump. This is our
10 200-horsepower pump station here with the pipeline that
11 extends up to the northern ponds.

12 And then our Phase Two area is down here in the
13 Whitewater River Stormwater Channel. This area, C, is
14 where we are going to be doing the expansion of the
15 secondary effluent storage. And the little yellow box
16 here is where the secondary effluent pump station will
17 go.

18 So this exhibit here shows the extent of the
19 Mid-Valley Pipeline. So the Mid-Valley Pipeline is a
20 54-inch diameter pipe, and it extends from our WRP10
21 site all the way six miles east to where we have our
22 Mid-Valley Pump Station site.

23 So what's going on at the Mid-Valley Pump
24 Station site is the addition of two 800-horsepower pumps
25 and motors and a new hydropneumatic pressure tank.

1 So we currently deliver Colorado River water to
2 our Water Reclamation Plant Number Ten through this
3 Mid-Valley Pipeline. And we use the Colorado River
4 water within our existing nonpotable water system, and
5 it's delivered to customers such as golf courses for
6 irrigating large turf areas.

7 So just to recap on the key features and
8 objectives of this project, it will allow us to
9 collectively replenish approximately 25,000-acre feet of
10 Colorado River water in the Palm Desert area. It will
11 maximize our use of the annual allocation of Colorado
12 River water. It will improve the secondary effluent
13 storage and the conveyance to optimize the production
14 and delivery of tertiary treated recycled water. And it
15 will meet the goals of the Coachella Valley Water
16 Management Plan to ensure adequate quantities of safe
17 high-quality water at the lowest cost to CVWD's users.

18 So that concludes my part of the presentation
19 of the project overview. And I'm going to now turn it
20 over to Aubrey Mescher of Rincon Consultants, and she's
21 going to provide the environmental review.

22 MS. MESCHER: Hello. As Carrie mentioned, my
23 name is Aubrey. I'm with Rincon Consultants.

24 We have been contacted by the Coachella Valley
25 Water District to provide the environmental

1 documentation required for this project by the
2 California Environmental Quality Act, or CEQA.

3 So there are a lot of acronyms in using these
4 documents and I know in this presentation as well. I'll
5 do my best to minimize the use of those.

6 The reason CEQA documentation is required for
7 this project is because discretionary approval is also
8 necessary. Under CEQA, the Water District is the lead
9 agency and has prepared an Environmental Impact Report,
10 or EIR, in order to assess the potential environmental
11 impacts of the proposed project and alternatives to the
12 project.

13 So this provides an overview of the CEQA
14 process. As you can see, the point where we are right
15 now is that a Draft Environmental Impact Report has been
16 prepared and has been published and is out for public
17 review. There's a 45-day public review period which we
18 are currently in. During that period, we are accepting
19 comments from the public and agencies and other
20 interested parties on the project and potential impacts
21 of the project.

22 Following this hearing, we will consider all
23 comments received on the Draft EIR and provide responses
24 to each and every comment received in the Final EIR
25 which will then go to the -- to the Water District's

1 Board of Directors for consideration.

2 So under the California Environmental Quality
3 Act, there are a number of issue areas, environmental
4 issue areas that are considered, which are all listed up
5 here.

6 In the Environmental Impact Report we look at
7 every single one of these issue areas and characterize
8 potential impacts and make a determination as to whether
9 no impact would occur, whether an impact would be less
10 than significant with no mitigation required, less than
11 significant with mitigation required, or significant and
12 unavoidable regardless of mitigation.

13 So of all of these issue areas that were
14 considered in the Environmental Impact Report, it was
15 determined that impacts could be significant and
16 unavoidable with regard to greenhouse gas emissions and
17 also water quality. So the next couple of slides are
18 going to go over those two issue areas.

19 So this site presents the actual Environmental
20 Impact Statement. It is presented in the Environmental
21 Impact Report for the greenhouse gas impact that was
22 determined to be significant and unavoidable.

23 The reason it was determined to be significant
24 and unavoidable is because the new and expanded pumps
25 associated with the proposed project would produce

1 greenhouse gas emissions that exceed South Coast Air
2 Quality Management District thresholds for annual
3 greenhouse gas emissions.

4 Also, there is Assembly Bill 32 and Senate Bill
5 32, which both strive to reduce statewide greenhouse gas
6 emissions by 2020.

7 Because the project would exceed South Coast
8 Air Quality Management District thresholds, it would
9 also conflict with this Assembly bill and Senate bill.
10 So that's why this particular Impact Statement was
11 determined to be significant and unavoidable.

12 Similarly, here's the Impact Statement for
13 hydrology and water quality where we determined that
14 potential impacts to water quality could be significant
15 and unavoidable. So these are related -- this impact is
16 related primarily to total dissolved solids, or TDS.

17 We have two different impact determinations
18 here. One is beneficial because increasing water flow
19 in the lower valley will actually better the water
20 quality in that area. However, imported Colorado River
21 water has higher total dissolved solid concentrations
22 than existing groundwater quality. So overall,
23 introducing that new flow into the groundwater basin
24 will increase overall total dissolved solid
25 concentrations in the area.

1 That effect will eventually resolve itself so
2 that water quality in the long run will be better than
3 it is now. But in the short run, it will be a
4 significant unavoidable impact.

5 These determinations are consistent with the
6 Coachella Valley Water Management Plan, which Carrie
7 also mentioned. There was an Environmental Impact
8 Report prepared for that Water Management Plan, and a
9 statement of overriding considerations was also issued
10 for that Water Management Plan for this exact issue. So
11 in that regard, this project is entirely consistent with
12 the Water Management Plan.

13 So the next steps for this proposed project.
14 As mentioned, we are currently in the public review
15 period, so we are accepting comments on the draft
16 document until December 20th. Every comment will be
17 responded to in writing in the final document, which
18 will be produced in December of this year.

19 And then in January of 2018, the Coachella
20 Valley Water District Board of Directors will consider
21 the findings of the Environmental Impact Report at a
22 public meeting.

23 So as mentioned, public comments are being
24 received until December 20th. If you have comments that
25 you would like to make on this project or the Draft EIR,

1 please introduce yourself.

2 Are comments only in writing here?

3 MS. MEYERHOFF: So this evening we can accept
4 your written comments. Or if you wish to come up to the
5 microphone, introduce yourself and give them orally,
6 they will be transcribed. Alternatively, you can
7 provide them in a written format up to December 20th,
8 which closes the 45-day public review period.

9 And up on the screen we have an email address
10 and also a postal mailing address where your comments
11 can be submitted.

12 And then as mentioned earlier, staff will
13 receive those comments, provide written responses which
14 will be published in the Final Environmental Impact
15 Report, which will be made publicly available on our
16 website a minimum of ten days prior to a public hearing
17 where our Board of Directors would consider the
18 project.

19 So if there's anybody that would like to
20 provide comments, we would just invite you to come on
21 up. You don't need to. But if you'd like to, that's
22 the intent of this evening's meeting to provide public
23 comment.

24 MS. KELLY: Like right now?

25 MS. MEYERHOFF: Like right now, yes, ma'am.

1 And the reason we ask you to come to the
2 microphone is just so we can get it on audio and
3 transcribe it accurately.

4 I know not everybody likes to speak in front of
5 a microphone but -- if we don't have any public
6 comments, of course, that's fine too. We would then be
7 concluding our meeting as well at this time.

8 Oh, Jesse's coming up behind you if you would
9 like to probably stay seated and speak into the
10 microphone. I'm not sure if we'll be able to respond to
11 your question. We're -- the intent is to take comment,
12 but let's hear what you have to say and we may be able
13 to.

14 MS. KELLY: Hi. My name is Sherry Kelly. And
15 we live in Desert Rose so we're just south of the
16 proposed construction. And we're concerned about the
17 dust, the noise, because we already have issues with the
18 dust coming from the Whitewater area. And that's one of
19 my questions, the dust that all of the construction will
20 generate and the noise.

21 And what is the timeline? I didn't read
22 anything.

23 MS. MEYERHOFF: Thank you for your comments and
24 question. As far as a response, I think Aubrey may be
25 able to come up and give you some type of response this

1 evening, and then you will see written responses as
2 well. Thank you.

3 MS. MESCHER: So the issues associated with
4 dust and noise are both addressed in the Environmental
5 Impact Report. And we do have CD's with the full report
6 here available. You can take one with you and see how
7 those are addressed.

8 MS. KELLY: (Inaudible comment.)

9 THE REPORTER: I can't hear her.

10 MS. MESCHER: The executive was -- oh, the
11 question was the document is quite lengthy, and are
12 those issues included in the executive summary.

13 Not -- the executive summary will identify
14 which issues are assessed in the document but won't get
15 into the analysis, but you can search through the
16 document to zero right in on the issues that you're most
17 concerned with.

18 MS. LARSEN: My name is Bobbie Larsen and I too
19 live in Desert Rose. And we have the CV link going in
20 the Storm Channel at the same time that you guys are
21 probably going to be doing your work back there. How is
22 that going to coordinate? I mean, we're already going
23 to be facing noise and dust from the CV link and now
24 this in addition to it, so that is our big concern.

25 And one concern I do have is these big pumps

1 that you're putting in. What kind of noise is going to
2 emanate from that and how is that going to be mitigated?
3 How is that going to affect us in our day-to-day life
4 living right on the other side of the wash from you?

5 MS. MESCHER: I think my response would be
6 similar in that we will send you with the CD, and you
7 can check out the mitigation measures that are
8 introduced for these types of impacts.

9 And also, there are cumulative analyses for
10 each and every environmental issue area where we -- the
11 impacts that are identified. We consider how impacts of
12 other projects in the area could combine to result in an
13 increased impact.

14 Would you like to speak on the pumps?

15 MS. OLIPHANT: Yeah. So the pumps are actually
16 located at this -- what we're calling our Mid-Valley
17 Pump Station which is over here, which is six miles from
18 where we're at which is -- this is -- I believe this is
19 your development over here, Desert Rose.

20 MS. LARSEN: Yes.

21 MS. OLIPHANT: So the pumps are located over
22 here, and they're in an enclosed structure that already
23 has four existing pumps.

24 MS. LARSEN: Isn't there a 200-horsepower pump?

25 MS. OLIPHANT: Yes. That one will be located

1 up here. Let me show the large exhibit. That will be
2 located up here, and there will be a sound wall built
3 around that.

4 MS. LARSEN: Okay.

5 MR. OLSEN: Carrie, while you're up there --

6 THE REPORTER: I need a speaker identification.

7 MS. OLIPHANT: His name is Ben Olsen.

8 MR. OLSEN: P.O. Box 587, Indio. Can you hear
9 me?

10 What happens to -- what happens to B? Is that
11 level going to be maintained that helps to feed Colorado
12 River water? B and A I believe feed Colorado River
13 water to Tuscan (phonetic). Are they going to be
14 maintained with Colorado River water?

15 MS. OLIPHANT: Yes. We are not doing any
16 improvements to B or A.

17 MR. OLSEN: Okay. Thank you.

18 MS. MEYERHOFF: Okay. Thank you very much for
19 your comments. And if there are no further comments, we
20 will close tonight's public meeting. Thank you all very
21 much for attending.

22 (The public meeting concluded at 6:00 P.M.)
23
24
25

REPORTER'S CERTIFICATE

I, KAREN ANN MARIANI, CSR No. 9544, Certified
Shorthand Reporter, certify:

That the foregoing proceedings were taken
before me at the time and place therein set forth.

That all statements made at the time of the
proceedings were recorded stenographically by me and
were thereafter transcribed;

That the foregoing is a true and correct
transcript of my shorthand notes so taken.

I further certify that I am not a relative or
employee of any of the parties or financially interested
in this matter.

I declare under penalty of perjury under the
laws of California that the foregoing is true and
correct.

Dated this 5th day of December 2017.


Karen Ann Mariani
KAREN ANN MARIANI, CSR No. 9544

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Palm Desert Groundwater Replenishment Project

Findings of Fact and Statement of Overriding
Considerations Pursuant to Sections 15091 and 15093 of
the California Environmental Quality Act

SCH# 2017041072

prepared by

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January 2018



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Appendices

Appendix A Mitigation Monitoring and Reporting Plan

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1 Introduction

An environmental impact report (EIR) was prepared for *the Palm Desert Groundwater Replenishment Project* (Project) and circulated for a 45-day public review to solicit agency and public input on the analysis of the potential environmental effects associated with construction and operation of the Project. The Findings of Fact (Findings) and Statement of Overriding Considerations (SOC) presented herein address the environmental effects associated with the Project that are described and analyzed within the Final EIR. These Findings have been made pursuant to requirements of the California Environmental Quality Act (CEQA; California Public Resources Code Section 21000 et seq.), specifically Public Resources Code Sections 21081 and 21081.6, as well as the CEQA Guidelines (14 CCR 15000 et seq.) sections 15091 and 15093.

Public Resources Code Section 21081 and CEQA Guidelines Section 15091 require that the Coachella Valley Water District (CVWD), as the Lead Agency for this project, prepare written findings for any identified significant environmental effects along with a brief explanation of the rationale for each finding. Permissible findings under CEQA Guidelines Section 15091(a) are:

- (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects as identified in the Final EIR.
- (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
- (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.

Further, in accordance with Public Resources Code Section 21081 and CEQA Guidelines Section 15093, whenever significant effects cannot be mitigated to below a level of significance, CVWD as the decision-making agency, is required to balance, as applicable, the benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the benefits of a project outweigh the unavoidable adverse environmental effects, the adverse effects may be considered “acceptable,” in which case the lead agency must adopt a formal statement of overriding considerations.

The Final EIR identified potentially significant environmental effects that could result from construction and/or operation of the Project. Those effects were related to air quality, biological resources, cultural resources, hazards and hazardous materials, greenhouse gas (GHG) emissions, hydrology and water quality, and transportation and traffic. The EIR concluded that all but two of these potential effects would be reduced to below a level of significance with implementation of mitigation measures contained in the mitigation monitoring and reporting program recommended for adoption.

The Project will have significant impacts associated with GHG emissions and hydrology and water quality. The District has determined that mitigation is infeasible, thus a statement of overriding considerations is required. The Project would generate GHG emissions through construction and energy use. The project would generate a total of 5,938 MT CO₂e per year, which would exceed

SCAQMD's threshold, which is based on AB 32. Since the project would conflict with AB 32, subsequently, the project would conflict with SB 32. Therefore, this impact would be significant and unavoidable. (Draft EIR, p. 147)

In relation to hydrology and water quality, the Project would result in increased TDS concentrations near the recharge areas. Wells nearest the recharge areas could exhibit increased TDS concentrations that exceed the recommended consumer acceptance contaminant level of 500 mg/L for drinking water. If monitoring indicates that groundwater used for drinking water purposes exceeds a health-based drinking water standard due to the proposed recharge activities, CVWD will remove impacted wells from service and work with individual well owners to bring the drinking water supply into compliance by either providing domestic water service from CVWD's domestic water system, or by providing appropriate well-head treatment until primary water quality standards are achieved. Since mitigation of groundwater quality impacts to below a level of significance is not feasible, the project would result in a significant and unavoidable impact to groundwater quality. (Draft EIR, p. 173)

2 Project Description Summary

The *Palm Desert Groundwater Replenishment Project* is a water supply reliability project located in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County. The proposed project would enable CVWD to receive its full annual allocation of Colorado River water via the Coachella Canal, by providing storage at the site adjacent to WRP10 and within the Whitewater River Stormwater Channel adjacent to the southern end of the WRP10 site. Recycled water would continue to be produced at the WRP10 site, and blended with Colorado River water for service to non-potable water customers.

Construction

The proposed project would be implemented in two phases:

- **Phase I** of the proposed project would occur on and adjacent to the north of CVWD's Water Reclamation Plant No. 10 (WRP10), located at 43-000 Cook Street in Palm Desert, California. Primary components of Phase I of the project are summarized below.
 - Re-purpose existing ponds located adjacent to the north of CVWD's WRP10 site, to function as groundwater replenishment basins. Colorado River water would be delivered to the revised ponds for groundwater replenishment. There would be no co-mingling of Colorado River water and secondary effluent within the re-purposed ponds as part of the proposed project.
 - Extend existing water transmission pipeline within the WRP10 site to provide transmission of imported Colorado River water from the existing pipeline to the re-purposed ponds located adjacent to the north of CVWD's WRP10 site.
 - Install a Colorado River water pump station within the WRP10 site, adjacent to the Back Feed Reservoir, including a minimum of two pumps with a pumping horsepower (HP) in the range of 100 to 200 HP, and a sound wall surrounding the new pump station.
 - Relocate the existing WRP10 operations parking area by repurposing the northeastern-most percolation basin currently located within the WRP10 site, in order to concentrate the parking and storage of operations and maintenance vehicles to one area. The parking area will ultimately be relocated north and adjacent to WRP10.
 - Install two new 800-HP pumps and a hydropneumatic tank within the existing Mid-Valley Pipeline Pump Station, which is an existing structure and entirely enclosed (located in the City of Indio approximately 36,000 feet downstream of the existing WRP10 site); the existing Mid-Valley Pipeline Pump Station was designed to accommodate these additional pumps.
- **Phase II** of the proposed project would occur on the WRP10 site and within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of CVWD's WRP10 site. Primary components of Phase II of the project are summarized below.
 - Construct berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin.

- Extend the existing Mid-Valley Pipeline within the Whitewater River Stormwater Channel beyond the WRP10 site to convey Colorado River water to the new detention basins included under Phase II of the project.
- Expand and reconfigure the existing secondary effluent storage ponds within the southern portion of the existing WRP10 site to store approximately 100 million gallons of secondary effluent.
- Construct a new Secondary Effluent Pump Station within the WRP10 site to improve the routing of secondary effluent within the existing WRP10 site to the new lower storage ponds and subsequently back to the headworks¹ at the WRP10 site.

Facilities Operation and Maintenance

Operation and maintenance of the proposed project would include the following:

- Conveyance of Colorado River water within the Mid-Valley Pipeline (existing and extended) for groundwater infiltration at the project site;
- Maintenance of storage and percolation ponds at the WRP10 site, consistent with existing operations;
- Vegetation and sediment management within the Phase I and Phase II ponds/basins to maintain storage capacity and maximize infiltration capabilities, consistent with existing mowing and pond maintenance operations;
- Operation of pump stations consistent with existing procedures, wherein stations are controlled electronically from CVWD headquarters in Coachella and therefore require minimal site visits, approximately once per week.

No manual intervention would be required for operation of the breakaway fencing or temporary berms. No new CVWD employees are anticipated to be needed to operate the proposed facilities.

¹ "Headworks" is a civil engineering term referring to a structure situated at the "head" or diversion point of a waterway. This structure is used to divert water from a river into a canal or from a large canal into a smaller canal.

3 Project Objectives

CVWD is a public agency that provides water service, wastewater management, water resources management, flood control and recycled water service to domestic, agricultural, and industrial users in the desert, Coachella Valley area. In 2003, CVWD certified the Program EIR for the Coachella Valley Water Management Plan and State Water Project Entitlement Transfer (hereafter referred to as “the Water Management Plan”). The Water Management Plan evaluated a suite of water management elements to eliminate overdraft of the Coachella Valley groundwater basin. The Water Management Plan elements included water conservation, additional water supplies, source substitution, and groundwater recharge. The proposed project is designed for consistency with CVWD’s goal to eliminate groundwater overdraft in line with the Water Management Plan; as such, objectives of the proposed project include the following:

- Provide an estimated 25,000 acre-feet per year (AFY) of direct groundwater replenishment using imported Colorado River water in the Palm Desert area;
- Enable CVWD to maximize use of its annual allocation of Colorado River water;
- Meet the goals of the Coachella Valley Water Management Plan to assure adequate quantities of safe, high-quality water at the lowest cost to CVWD water users;
- Improve local groundwater supply and quality conditions through replenishment activities;
- Upgrade capacity of the existing Mid-Valley Pipeline Pump Station utilizing two empty bays to install 800-HP pumps;
- Implement a new 200-HP pump station at WRP10 to pump Colorado River water from the Backfeed Reservoir to the replenishment ponds;
- Expand existing Secondary Effluent Storage ponds at WRP10; and
- Optimize the availability of recycled water produced at WRP10.

The Colorado River water that CVWD would use for this project (and under existing operations to deliver water within CVWD jurisdiction) is part of the allocation that CVWD receives per the Quantification Settlement Agreement (QSA) for Colorado River water, which defines the rights of water districts in Southern California to portions of Colorado River water. This water originates at Imperial Dam and is delivered to CVWD via the All American and the Coachella Canal. The QSA quantifies CVWD’s full Colorado River entitlement at 330,000 AFY. CVWD’s “full” allocation would not be used for the proposed project, as most of the allocated water is currently delivered to agricultural users in the lower valley. However, in order for CVWD to utilize all of its allocation, the proposed project would direct the currently unused portion of its allocation for groundwater replenishment purposes. In the absence of the proposed project, CVWD would not be able to fully implement the goals of the Water Management Plan (mentioned above), the primary goal of which is to eliminate the overdraft of local groundwater resources. (Draft EIR, p. 26)

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4 Environmental Review and Public Participation

The Final EIR includes written comments on the Draft EIR that were received during the public review period and responses to those comments, as well as changes to the Draft EIR (where applicable), and a Mitigation Monitoring and Reporting Plan (MMRP). In conformance with CEQA and the State CEQA Guidelines, CVWD conducted an extensive environmental review of the Project, summarized as follows:

- Completion of an Initial Study (IS) by CVWD, which concluded a EIR should be prepared.
- The Notice of Preparation (NOP) was distributed to the State Clearinghouse, Responsible Agencies, and other interested parties on April 27, 2017 for a 30-day comment period (a copy of the NOP and the NOP distribution list are included in Appendix E of the Draft EIR).
- A public scoping meeting was held on Tuesday, May 10, 2017 at CVWD's Steve Robbins Administration Building, located at 75-515 Hovley Lane East, Palm Desert, California 92211.
- Comments received from the public and agencies during the public review period for the NOP and the public scoping meeting were considered in the preparation of the EIR prepared for the proposed project.
- The Draft EIR was distributed for a 45-day public review and comment period which started on November 6, 2017 and ended on December 20, 2017. Notification was provided to the State Clearinghouse, to local, state, and federal agencies, and to all interested parties and jurisdictions pursuant to the requirements of Section 15087 of the State CEQA Guidelines. There were six letters/correspondence received by CVWD during the 45-day review period (four written and two verbal). Comments within each letter/correspondence were evaluated and responded to in accordance with Section 15088 of the State CEQA Guidelines.
- A public meeting to receive comments on the EIR was held on November 30, 2017 at CVWD's Steve Robbins Administration Building, located at 75515 Hovley Lane East in Palm Desert, California, 92211.

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5 Findings of Fact

Having received, reviewed, and considered the information in the Final EIR for this Project, as well as the supporting administrative record, CVWD hereby makes Findings pursuant to, and in accordance with, Sections 21081, 21081.5, and 21081.6 of the Public Resources Code.

5.1 Findings Regarding Less than Significant Impacts Not Requiring Mitigation

Consistent with Public Resources Code section 21002.1 and section 15128 of the State CEQA Guidelines, the EIR focused its analysis on potentially significant impacts, and limited discussion of other impacts for which it can be seen with certainty there is no potential for significant adverse environmental impacts. State CEQA Guidelines section 15091 does not require specific findings to address environmental effects that an EIR identifies as “no impact” or a “less than significant” impact. Nonetheless, the CVWD Board of Directors hereby finds that the Project would have either no impact or a less than significant impact to the following resource areas, without the incorporation or implementation of mitigation:

a. Aesthetics

1. *Have a substantial adverse effect on a scenic vista. (Draft EIR Impact AE-1)*

Finding: Less than significant impact. (Draft EIR, p. 62)

Facts in Support of Finding. Construction of project facilities could result in temporary changes in the vicinity of construction sites due to presence of construction vehicles, equipment and materials, stockpiles, and exposed soils. Construction activities would be temporarily visible from public vantage points, particularly from Cook Street and Fred Waring Drive, where there are views into the Phase II site. (Draft EIR, p. 62)

Phase I of the project is located within and adjacent to the north of the existing WRP10 site, which is largely shielded from public view due to grade change, a brick wall surrounding the site, and existing vegetation in the form of mature tamarisk trees. In addition, this site is fully disturbed, and project uses would be consistent with existing uses. (Draft EIR, p. 62)

Phase II of the project is located within the Whitewater River Stormwater Channel, which is visible from Cook Street, Fred Waring Drive, and the backyards of some residences located adjacent to the southern levee of the stormwater channel. Ground disturbance associated with construction of Phase II would be visible from these vantage points. However, there are no scenic vistas or high-quality visual resources in the vicinity. (Draft EIR, p. 62)

Similarly, extension of the Mid-Valley Pipeline would be visible from the surrounding areas, but would occur in a previously disturbed area and would not affect scenic vistas or high-quality visual resources. Therefore, construction activities associated with the proposed project would have a less than significant impact on a scenic vista. (Draft EIR, p. 62)

2. *Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway corridor. (Draft EIR Aesthetics Significance Criterion (b))*

Finding: No impact. (Draft EIR, p. 62)

Facts in Support of Finding. There project site is located approximately 2.31 miles from both State Route (SR) 74, an officially designated State Scenic Highway, and from SR 111, an eligible State Scenic Highway that has not been officially designated; therefore, the project would not result in impacts to scenic resources, including trees, rock outcroppings, and historic buildings within a state scenic highway corridor and the criterion was not discussed further in the EIR. (Draft EIR, p. 62)

3. *Substantially degrade the existing visual character or quality of the site and its surroundings. (Draft EIR Impact AE-3)*

Finding: Less than significant impact. (Draft EIR, p. 63)

Facts in Support of Finding. Following construction of the proposed project, activities associated with operation and maintenance of Phase I would be consistent with ongoing activities at the WRP10 site, and no new impacts to visual resources would be introduced. Operation and maintenance of Phase II of the project would include the retention of Colorado River water within the Whitewater River Stormwater Channel, which is typically dry and partially vegetated; therefore, the presence of Phase II facilities would represent a change in the existing visual environment. However, there are no scenic vistas or high-quality visual resources in the area. Underground components of the project (i.e., pipelines) would not be visible after construction and would not result in adverse permanent changes that affect the visual quality or character of the surrounding area. Therefore, potential impacts would be less than significant. (Draft EIR, p. 63)

4. *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. (Draft EIR Impacts AE-2 and AE-4)*

Finding: Less than significant impact. (Draft EIR, p. 63)

Facts in Support of Finding. Project construction activities would generally occur during normal work hours, consistent with the construction hours established by the City of Palm Desert (7:00 a.m. to 5:30 p.m. on Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturday, and no construction activity on Sunday). Nighttime construction is not required. However, some early morning start times (i.e., earlier than 7:00 a.m.) may be required during summer months with high temperatures. This construction activity would not require additional lighting. Some glare may be introduced through the presence of construction vehicles and equipment; however, the project site and area are previously developed and the presence of such vehicles and equipment is typical. Therefore, potential impacts during construction associated with light or glare would be less than significant. (Draft EIR, p. 63)

The Phase I project site is currently equipped with security lighting mounted on tall poles, some of which are visible from outside the WRP10 (please see the site photos provided in Figure 5 of Draft EIR). This lighting is manually operated, and employed as needed for security and/or nighttime repairs and maintenance. This lighting would not be modified as a result of the project. (Draft EIR, p. 63)

The Phase II site is not currently equipped with lighting. Lighting similar to that existing on the Phase I site may be implemented and manually controlled as needed for security and/or nighttime repairs and maintenance. During operation and maintenance of the project, this would be a new source of light. However, as with lighting at the Phase I site, lighting at the Phase II site would be angled down and only employed as needed, such that surrounding land uses would not be directly exposed to new or intrusive lighting as a result of the project. Therefore, potential impacts would be less than significant. (Draft EIR, p. 63)

b. Agriculture and Forestry Resources

1. *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. (Draft EIR Agriculture and Forestry Resources Significance Criterion (a))*

Finding: No impact. (Draft EIR, p. 68)

Facts in Support of Finding. There are no lands within the project site or adjacent to the project site that have been mapped as Farmland by the California DOC Farmland Mapping and Monitoring Program (California DOC 2016a). Therefore, the proposed project would convert any Farmland to a non-agricultural use. The proposed project would have no impact. (Draft EIR, p. 68)

2. *Conflict with existing zoning for agricultural use, or a Williamson Act contract. (Draft EIR Agriculture and Forestry Resources Significance Criterion (b))*

Finding: No impact. (Draft EIR, p. 68)

Facts in Support of Finding. The project site and adjacent properties are not zoned for agricultural use. As described above, no lands within the project site or adjacent to the project site are under a Williamson Act contract (California DOC 2016b). Thus, the proposed project would not conflict with any existing zoning for agricultural use or a Williamson Act contract. The proposed project would have no impact. (Draft EIR, p. 68)

3. *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)). (Draft EIR Agriculture and Forestry Resources Significance Criterion (c))*

Finding: No impact. (Draft EIR, p. 68)

Facts in Support of Finding. The project site is zoned Public Facility, Open Space, and Residential-Low District. The project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There are no forest lands within the project site, as the site is largely developed with existing WRP10 facilities, Whitewater River Stormwater Channel, and the existing Mid-Valley Pipeline Pump Station. The Phase I site is zoned Public Facility, the Phase II site is zoned Open Space, and the area surrounding the Mid-Valley Pipeline pump station site is zoned Residential-Low District. Thus, the proposed project would not conflict with any zoning for forest land or timberland. The proposed project would have no impact. (Draft EIR, p. 68)

4. *Result in the loss of forest land or conversion of forest land to non-forest use. (Draft EIR Agriculture and Forestry Resources Significance Criterion (d))*

Finding: No impact. (Draft EIR, p. 68)

Facts in Support of Finding. The project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There are no forest lands within the project site, as the site is largely developed with existing WRP10 facilities, Whitewater River Stormwater Channel, and the existing Mid-Valley Pipeline Pump Station. The current development and facilities within the project site preclude the use of 10 percent or more for timber production. Thus, the proposed project would not result in the loss of forest land or conversion of forest land to a non-forest use. The proposed project would have no impact. (Draft EIR, p. 68)

5. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use. (Draft EIR Agriculture and Forestry Resources Significance Criterion (e))*

Finding: No impact. (Draft EIR, pp. 68-69)

Facts in Support of Finding. As described above, all land within and adjacent to the project site is mapped by the California DOC Farmland Mapping and Monitoring Program as either “Urban and Built-up Land” or “Other Land” categories. Farmland, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land does not occur within or adjacent to the project site. There are no portions of the project site or adjacent properties that are zoned for agriculture, forest land, or timberland. The project site is largely developed with the existing WRP10 facilities, Whitewater River Stormwater Channel, and Mid-Valley Pipeline Pump Station, which preclude use of 10 percent or more of the site for timber production. The proposed project would have no impact because agricultural and forest resources are not present within or adjacent to the project site. (Draft EIR, pp. 68-69)

c. Air Quality

1. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors). (Draft EIR Impact AQ-2)*

Finding: Less than significant impact. (Draft EIR, pp. 89-90)

Facts in Support of Finding. The project would use electricity to pump water and would be connected to the electricity grid, utilizing electricity generated offsite and supplied by Southern California Edison. Although consumption of electricity may indirectly result in criteria pollutant emissions associated with the production of electricity, electricity production would occur at locations remote from the project and therefore would not expose nearby sensitive receptors to substantial pollutant concentrations. (Draft EIR, p. 89)

In addition, the project would also include the occasional repair or replacement of the temporary berms, after large storm events; these activities would only occur on an as-needed basis, approximately every five years. The frequency of repair would depend on degradation resulting from large storm events. The types of vehicles and equipment that would be utilized to conduct repair or replacement of the temporary berms would be the same types of vehicles and equipment that are presently used within the stormwater channel for regular maintenance activities including vegetation clearing and sediment removal. Table 14 in the EIR shows estimated emissions associated with repair and/or replacement of the temporary berms, assuming one bulldozer operating for eight hours per day, for approximately one month every five years. As shown in the EIR, emissions would not exceed SCAQMD thresholds. Therefore,

emissions associated with the operation of the proposed project would be less than significant. (Draft EIR, pp. 89-90)

2. *Expose sensitive receptors to substantial pollutant concentrations. (Draft EIR Impact AQ-2)*
3. *Create objectionable odors affecting a substantial number of people. (Draft EIR Impact AQ-3)*

Finding: Less than significant impact. (Draft EIR, p. 90)

Facts in Support of Finding. As stated above, the project would use electricity to pump water and would be connected to the electricity grid, utilizing electricity generated offsite and supplied by Southern California Edison. Although consumption of electricity may indirectly result in criteria pollutant emissions associated with the production of electricity, electricity production would occur at locations remote from the project and therefore would not expose nearby sensitive receptors to substantial pollutant concentrations. (Draft EIR, p. 89)

During construction of the project, the use of vehicles and equipment on the project site could produce odors associated with emissions; however, construction vehicles and equipment are regularly present in the project area and project-related usage would not introduce an unusual or long-term odor to the area. During operation of the project, the technology that is currently employed to prevent objectionable odors from large-scale water storage would continue to be employed with the proposed project. Therefore, impacts associated with odors would be less than significant and no mitigation would be required. (Draft EIR, p. 90)

d. Biological Resources

1. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS. (Draft EIR Biological Resources Significance Criterion (b))*

Finding: No impact. (Draft EIR, p. 102)

Facts in Support of Finding. The CNDDDB documents no special-status vegetation or habitat communities within a five-mile radius of the project site. No sensitive plant communities or riparian habitat were observed on the project site during the field reconnaissance survey. No sensitive plant communities are present; therefore, there will be no impact. In addition, operation of the project would include activities within the WRP10 site, Mid-Valley Pipeline Pump Station, and continued use of the Whitewater River Stormwater Channel for flood control, as well as groundwater infiltration. Project maintenance and operation activities are not expected to result in significant adverse impacts to biological resources and therefore, there would be no impact. (Draft EIR, p. 102)

2. *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. (Draft EIR Impact BIO-3)*

Finding: Less than significant impact. (Draft EIR, p. 106)

Facts in Support of Finding. The project site does not occur within a Coachella Valley MSHCP Conservation Area. The proposed project would occur within a previously developed and managed area and is not anticipated to cause any habitat fragmentation in the region, nor is the proposed project anticipated to have significant impact on regional wildlife movement. The temporary recharge basins within the Whitewater River Stormwater Channel would be protected from human egress by “break-away” fencing that is anticipated to be chain link or

similar. Such fencing would be relatively permeable to local, urban adapted wildlife and avian species and would not be expected to limit localized wildlife movement through this urban area. It is noted that the increase in open water availability associated with the recharge ponds could potentially increase the number of water-related birds, such as ducks, and other wildlife at the site. (Draft EIR, p. 106)

3. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Draft EIR Impact BIO-4)*
4. *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. (Draft EIR Impact BIO-4)*

Finding: Less than significant impact. (Draft EIR, p. 106)

Facts in Support of Finding. The proposed project will not conflict with any local policies or ordinances due to participation in the Coachella Valley MSHCP; operation and maintenance activities within the channel is a covered activity under the Coachella Valley MSHCP. The proposed project is within the Coachella Valley MSHCP plan area, but not within any specific Coachella Valley MSHCP Conservation Area. The proposed project is about 2 miles from the nearest Coachella Valley MSHCP Conservation Area and would not have any direct or indirect impacts to this area and will not conflict with the Coachella Valley MSHCP Conservation Objectives. Therefore, impacts associated with local policies or ordinances protecting biological resources would be less than significant and no mitigation would be required. (Draft EIR, p. 106)

e. Cultural Resources

1. *Disturb any human remains, including those interred outside of dedicated cemeteries. (Draft EIR Impact CR-4)*

Finding: Less than significant impact. (Draft EIR, p. 125)

Facts in Support of Finding. Though unanticipated, project construction activities within the project site, including ground clearing, grading and excavation, have the potential to impact previously unidentified human remains. (Draft EIR, p. 125)

If human remains are discovered, State Health and Safety Code section 7050.5 requires that no further disturbance shall occur until the County has made the necessary findings as to origin and disposition pursuant to Public Resources Code section 5097.98. If the remains are determined to be of Native American descent, the coroner would notify the Native American Heritage Commission (NAHC). The NAHC would determine and notify a most likely descendant (MLD). The MLD would complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Because of existing regulations, if human remains are identified in the project site, impacts would be less than significant without mitigation. (Draft EIR, p. 125)

f. Geology and Soils

1. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*

- i. *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;*
- ii. *Strong seismic shaking*
- iii. *Seismic-related ground failure, including liquefaction,*
- iv. *Landslides.(Draft EIR Impact GS-3; GS-4)*

Finding: Less than significant impact. (Draft EIR, pp. 137-138)

Facts in Support of Finding. The project would be located within a seismically active region, but is not located in an Alquist-Priolo Earthquake Fault Zone. The major active faults capable of producing large magnitude events and high seismic activity rate recognized in the region are the San Andreas and San Jacinto Faults. As shown on Figure 4.6-2 in the EIR, there are no faults mapped on or adjacent to the site. However, the project would potentially experience strong ground shaking from earthquakes on any active or potentially active faults in the area, as would other properties in the Coachella Valley. (Draft EIR, p. 137)

The City of Palm Desert also has policies and standards in place that minimizes risks from seismic and geologic hazards, such as fault rupture and ground shaking. For example, the City of Palm Desert General Plan Safety Policy 2.1 requires the exceedance of minimum seismic safety standards for critical facilities that ensure building function and support continuity of critical services and emergency response after a seismic event. In addition, in accordance with Safety Policy 2.2, the City requires the maintenance of development code standards to prohibit siting of new seepage pits, drainage facilities, and heavily irrigated areas away from structure foundations to reduce potential soil collapse. Compliance with all applicable provisions of federal, state, and local construction and design standards would ensure that potential impacts would be less than significant, because the project would be engineered, designed, and operated consistent with the City of Palm Desert General Plan provisions mentioned above. No mitigation measures are required. (Draft EIR, p. 137-138)

Topography at the project site is relatively flat and the proposed project would not affect the topography such that an increased likelihood of landslides would result. The potential for lateral spreading at the site is low due to the flat topography. No documented areas of subsidence have been identified on or near the project site. The on-site soils have a low expansion potential (USDA 2017). Operation and maintenance of the proposed project would not involve ground-disturbing activities, except as needed to repair berms in the Phase II basins within the Whitewater River Stormwater Channel. Additionally, structures would not be exposed to seismic ground failure because the proposed project would not introduce new structures, and would not alter the potential for seismic ground failure to occur. Therefore, potential impacts associated with the characteristics of geologic units and potential for landslides, lateral spreading, and expansion would be less than significant. (Draft EIR, p. 138)

2. *Result in substantial soil erosion or the loss of topsoil. (Draft EIR Impact GS-1)*

Finding: Less than significant impact. (Draft EIR, pp. 136-137)

Facts in Support of Finding. Grading and excavation at these sites would result in disturbance to native soils. However, the Phase I, Phase II, and Mid-Valley Pipeline extension sites are developed with existing CVWD water infrastructure and have been highly altered from their original, natural state. In addition, these sites are near areas of moderate to intense urban uses, such as surface streets, residences, and recreational and commercial facilities. Consequently, no

substantial loss of topsoil due to erosion or grading would occur during construction of the project at these sites. (Draft EIR, p. 136)

The sites for both Phase I and Phase II of the project are currently disturbed, and are utilized respectively for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during stormwater events (Phase II). Construction of Phase I would involve grading and excavation to re-purpose existing ponds within the northern area of CVWD's WRP10 site and remove them from existing WRP10 site operations, as well as to construct new lower storage ponds within southern area of CVWD's WRP10 site. Construction of Phase II would include grading to construct temporary berms using native sediments within the Whitewater River Stormwater Channel located south/southeast of the WRP10 site for the purpose of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. Implementation of Phase II would also require an extension of the Mid-Valley Pipeline within the Whitewater River Stormwater Channel. Extension of the pipeline within the channel would include backfilling of the pipeline trench with a low-strength concrete slurry material to the midpoint of the pipeline and the remainder of the trench backfill would be native material from excavation. Potential erosion which may result from grading, excavation, and pipeline trenching, and other soil disturbance during construction, would be controlled during construction with implementation of erosion control measures included in the project-specific Stormwater Pollution Prevention Plan (SWPPP), required per the State Water Resources Control Board General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ). BMPs included in the SWPPP would be implemented to control erosion and discharge of polluted runoff and could include, but would not be limited to, preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities as necessary. (Draft EIR, p. 136)

Additionally, standard construction practices to prevent and minimize construction-related erosion would be included in construction documents and SWPPP that are required pursuant to federal and state National Pollutant Discharge Elimination System regulations. The SWPPP would include BMPs to prevent erosion, such as use of silt fences or other barriers to prevent erosion and sedimentation into water bodies, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. Implementation of SWPPP and BMPs would ensure that this impact would be less than significant. No mitigation measures are required. (Draft EIR, p. 137)

3. *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.* (Draft EIR Impact GS-2)

Finding: Less than significant impact. (Draft EIR, p. 137)

Facts in Support of Finding. This impact applies to the installation of underground pipelines at a depth of approximately 20 feet during the implementation of Phase II of the proposed project. Phase II would include an extension of the Mid-Valley Pipeline, which would occur within the Whitewater River Stormwater Channel consistent with existing pipeline design and configuration. Installation of this pipeline extension may result in the potential for soil instability or collapse during pipeline trenching. To address this potential, standard construction BMPs would be implemented during trenching activities, such as shoring during open trenching. As discussed in the EIR, a project-specific SWPPP would be implemented for the project, including BMPs to control erosion and discharge of polluted runoff. The BMPs could include, but would

not be limited to, preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities as necessary. Additionally, compliance with CVWD's professional engineering standards would ensure that this impact would be less than significant. No mitigation measures are required. (Draft EIR, p. 137)

4. *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. (Draft EIR Impact GS-5)*

Finding: Less than significant impact. (Draft EIR, p. 138)

Facts in Support of Finding. The project is not located on expansive soils, and would not introduce risk to life or property as a result of expansive soils. The soil types on the project sites range from low to high susceptibility for soil corrosion. Corrosive soils could, over time, deteriorate the newly-installed project facilities. However, a combination of protective coatings, pipe wrapping, and possibly cathodic protection would be included in facilities' design and construction to minimize exposure to the corrosion process. With incorporation of these design features, corrosive soil impacts to life and property would be less than significant. No mitigation measures are required. (Draft EIR, p. 138)

5. *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. (Draft EIR Geology and Soils Significance Criterion (e))*

Finding: No impact. (Draft EIR p. 136)

Facts in Support of Finding. The proposed project would not implement any septic tanks or alternative waste water disposal system(s). There would be no impact associated with the availability of sewers or disposal of waste water. (Draft EIR p. 136)

g. Greenhouse Gases

1. *Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.(Draft EIR Impact GHG-1)*

Finding: Less than significant impact. (Draft EIR, pp. 145-146)

Facts in Support of Finding. As discussed under *Regional Regulations* and *Local Regulations* sections in the EIR, a number of plans and policies have been adopted to reduce GHG emissions in Southern California, Riverside County, and Palm Desert. The SCAG's 2016-2040 RTP/SCS provides transportation and growth strategies that include reduced water usage to reduce regional emissions. Many of the regional policies in particular pertain to residential and commercial development and do not apply to the project, which is a groundwater replenishment project. Construction of the project would not conflict with regional growth or local GHG reduction policies and would not result in increased trips to the site. (Draft EIR, pp. 145-146)

Therefore, the proposed project would be consistent with the goals and policies of the SCAG RTP/SCS, and the City's Environmental Sustainability Plan. Construction of the project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Potential impacts would be less than significant with no mitigation required. (Draft EIR, p. 146)

Although the project would not conflict with GHG reduction policies in the SCAG RTP/SCS and the Palm Desert Environmental Sustainability Plan, and construction impacts would be less than significant with no mitigation required, as described below in Section 5.3, anticipated impacts during operation of the proposed project would be significant and unavoidable with respect to generation of greenhouse gas emissions.

h. Hazards and Hazardous Materials

1. *Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Draft EIR Impact HAZ-2)*

Finding: Less than significant impact. (Draft EIR, p. 157)

Facts in Support of Finding. As described in the EIR, the Phase II site of the proposed project is located within the Whitewater River Stormwater Channel, across Cook Street from Palm Desert High School, which is located at 43570 Phyllis Jackson Lane. As described for Impact HAZ-1, there is potential that an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction.

However, project activities would not occur on the school site, and mitigation measures that would be implemented under Impact HAZ-1 include BMPs to ensure that should an accidental spill or release occur during project construction, it would be contained, site-specific, and cleaned up in a timely manner such that significant impacts would be avoided. Therefore, potential impacts associated with a potential emission or release of hazardous materials or wastes in proximity to a school would be less than significant. (Draft EIR, p. 157)

2. *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. (Draft EIR Hazards and Hazardous Materials Significance Criterion (d))*

Finding: No impact. (Draft EIR, p. 155)

Facts in Support of Finding. According to the environmental database review, the project site is not included on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur. (Draft EIR, p. 155)

3. *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. (Draft EIR Hazards and Hazardous Materials Significance Criterion (e))*

Finding: No impact. (Draft EIR, p. 155)

Facts in Support of Finding. The project site is not located within an airport land use plan or within two miles of a public airport or airstrip. Therefore, no impact would occur. (Draft EIR, p. 155)

4. *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. (Draft EIR Hazards and Hazardous Materials Significance Criterion (f))*

Finding: No impact. (Draft EIR, p. 155)

Facts in Support of Finding. The nearest airport (including private airstrips) to the proposed project site is the Bermuda Dunes Airport, located approximately 4.7 miles east of the project

site, at 42nd Avenue and Indio Boulevard in Bermuda Dunes. The project would not be located within two miles of a public airport or public use airport, including private airstrips. Therefore, no impact would occur. (Draft EIR, p. 155)

5. *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. (Draft EIR Hazards and Hazardous Materials Significance Criterion (h))*

Finding: No impact. (Draft EIR, p. 155)

Facts in Support of Finding. Construction and operation of the project would not introduce potentially flammable activities in fire-prone areas. CAL FIRE has identified the project area as located within the “Non-Very High Fire Hazard Severity Zone” in the Local Responsibility Area for incorporated cities which indicates the site is not subject to wildfire hazards. Therefore, no impact would occur. (Draft EIR, p. 155)

i. Hydrology and Water Quality

1. *Violate water quality standards or waste discharge requirements. (Draft EIR Hydrology and Water Quality Significance Criterion (a) and Impact HWQ-1)*

Finding: Less than significant impact. (Draft EIR, p. 168)

Facts in Support of Findings. Construction of the proposed project, including both Phase I and Phase II, would be required to comply with all applicable federal, state, and local water quality standards and waste discharge requirements. Because construction of the proposed project would disturb more than one acre, the project would be required to obtain a Construction General Permit pursuant to the National Pollutant Discharge Elimination System (NPDES). The Construction General Permit requires development of a construction Stormwater Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) to prevent polluted runoff from leaving the construction site. The construction SWPPP and BMPs are designed to prevent sedimentation of both on-site and off-site surface waters from construction activities. (Draft EIR p. 168)

Construction of the proposed project would require grading and excavation of soil, which would inherently increase the potential for erosion and sedimentation of surface waters. Construction equipment operating in the Whitewater River Stormwater Channel would have the potential to leak oil, diesel, grease and other chemicals, resulting in potential discharges to surface waters or groundwater aquifers. Implementation of the required construction SWPPP would minimize the potential for erosion and discharge of equipment leaks; and therefore, violation of water quality standards or waste discharge requirements would be prevented. (Draft EIR, p. 168)

2. *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). (Draft EIR Impact HWQ-2)*

Finding: Less than significant impact. (Draft EIR, pp. 168-169)

Facts in Support of Finding. Water required for construction of the project and testing of equipment would be potable water obtained on-site from the existing WRP10 site. The WRP10 site has sufficient water supplies to meet existing demand in combination with the temporary,

short-term demands of project construction. The minimal demand required for construction would not substantially deplete groundwater supplies. (Draft EIR, pp. 168-169)

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agricultural lands or stormwater facilities in conformance with the Construction General Permit and applicable local discharge requirements. Because groundwater removed from dewatering would be disposed of in areas where infiltration or beneficial uses could occur, construction dewatering would not substantially deplete groundwater supplies. Construction of the proposed project would have a less than significant impact and no mitigation would be required. (Draft EIR, p. 169)

Operation of the proposed project would not require a water supply, and would ultimately benefit water supply reliability in the project area through groundwater replenishment.

3. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site. (Draft EIR Impact HWQ-1; HWQ-5)*
4. *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. (Draft EIR Impact HWQ-1; HWQ-5)*

Finding: Less than significant impact. (Draft EIR, p. 168, 170-171)

Facts in Support of Finding. Construction of the proposed project, including both Phase I and Phase II, would be required to comply with all applicable federal, state, and local water quality standards and waste discharge requirements. Because construction of the proposed project would disturb more than one acre, the project would be required to obtain a Construction General Permit pursuant to NPDES. The Construction General Permit requires development of a construction SWPPP and implementation of BMPs to prevent polluted runoff from leaving the construction site. The construction SWPPP and best management practices are designed to prevent sedimentation of both on-site and off-site surface waters from construction activities. (Draft EIR, p. 168)

Construction of the project would require grading and excavation of soils, inherently increasing the potential for erosion. However, implementation of the SWPPP and BMPs would prevent sedimentation of surface waters. The construction SWPPP and BMPs would also prevent pollutants such as oil, grease, and chemicals from construction equipment from discharging to surface waters or groundwater. Thus, implementation of the SWPPP and BMPs would be expected to prevent violations of water quality standards during project construction. Runoff from the project site during construction would not provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality. (Draft EIR, p. 168)

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. This would provide a dry work area to protect waters and preserve the work area. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agricultural lands or stormwater facilities in

conformance with the Construction General Permit and applicable local discharge requirements. Impacts would be less than significant and no mitigation would be required. (Draft EIR, p. 168)

The proposed expansion of the parking area for CVWD operations and maintenance vehicles would increase the area of impervious surface in the project area over the operational life of the proposed project; pending ongoing re-permitting of the WRP10 site with the Colorado River Basin Regional Water Quality Control Board (RWQCB), the parking area for operational vehicles will no longer be included within the boundaries of the WRP10 site. However, as noted, the increase in impervious surface area would have potential to generate increased volumes of stormwater runoff during storm events. The existing WRP10 site is not directly connected to a stormwater conveyance system for stormwater runoff management; currently, stormwater runoff from the existing WRP10 site occurs as sheet flow that is directed to pervious ground surfaces to encourage infiltration. Additional runoff from the expanded impervious parking area would be managed using this same approach, and the parking area would be designed to maintain existing runoff patterns. Thus, operation of the project would not contribute runoff water which would result in flooding. Infiltration of stormwater runoff would also prevent the potential for increased erosion from runoff. (Draft EIR, p. 170)

Operation of the project would include groundwater infiltration basins located within the Whitewater River Stormwater Channel. During periods of flooding or increased stormwater runoff, stormwater will flow through the groundwater replenishment basins. Project design features include breakaway fencing / temporary berms that would be implemented at the upstream and downstream ends of the basins. These features would maintain the function of the channel for stormwater conveyance, operate without manual intervention, and not require CVWD personnel to work in the channel during flood events. These features would also be repaired as necessary following storm events. Therefore, operation of the replenishment basins would not restrict or impede flood flows, change the flood storage capacity of the channel, result in flooding on- or off-site, or expose people to significant risks of floods. Impacts would be less than significant and no mitigation would be required. (Draft EIR, pp. 170-171)

5. *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? (Draft EIR Impact HWQ-4)*

Finding: Less than significant impact. (Draft EIR, pp. 169-170)

Facts in Support of Finding. The proposed expansion of the parking area for CVWD operations and maintenance vehicles would increase the area of impervious surface in the project area for the operational life of the project; as described, this expansion would occur outside of the WRP10 site, adjacent to the north as shown on Figure 2 of the EIR. The increase in impervious surface area would generate increased volumes of stormwater runoff during storm events. Stormwater runoff from urban parking lots may hold particulate matter, residual hydrocarbons, persistent organic pollutants, and trace quantities of heavy metals, such as copper and zinc (USEPA 1983). The expansion of the parking area would increase the area on which pollutants may accumulate and become concentrated; as noted, this expansion would occur adjacent to the north of the WRP10 site. During precipitation events, the accumulated pollutants on impervious parking surfaces could contaminate stormwater runoff. The proposed project has been designed such that stormwater runoff would not enter stormwater drains, but would instead flow to pervious ground surface where pollutants could be filtered out through natural infiltration processes. Infiltration would also prevent erosion and sedimentation. Thus,

stormwater runoff from project operations would not provide substantial additional sources of polluted runoff or substantially degrade water quality. (Draft EIR, pp. 169-170)

The increased capacity for secondary effluent storage at the existing WRP10 site would be operated consistent with existing procedures including federal, state, and local regulations. Treated secondary effluent would be required to meet the discharge requirements and standards of the Colorado River Basin RWQCB. In addition, during construction of the proposed facilities, stormwater would be managed in accordance with BMPs identified in a SWPPP. These BMPs would include measures to minimize erosion and sedimentation and general good housekeeping practices to limit potential discharge of pollutants associated with construction vehicle and equipment use. With implementation of BMPs per the SWPPP, construction of the proposed project would not violate surface water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or substantially degrade surface water quality. Groundwater quality is further addressed under Impact HWQ-6. Impacts would be less than significant and no mitigation would be required. (Draft EIR, p. 170)

6. *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.*

Finding: No impact. (Draft EIR, p. 167)

Facts in Support of Finding. The project does not include the construction of new housing. Therefore, no impact would occur. (Draft EIR, p. 167)

7. *Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*
8. *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. (Draft EIR Impact HWQ-3)*

Finding: Less than significant impact. (Draft EIR, p. 169)

Facts in Support of Finding. The project would not place structures within a 100-year flood hazard area. Construction of Phase II of the project would require construction crews to work within the Whitewater River Stormwater Channel, which is a Special Flood Hazard Area with a one percent annual chance of flooding. However, the construction activities required in the Whitewater River Stormwater Channel would involve excavation and grading, which could not be performed during periods of flood inundation. Therefore, construction crews would typically not be present within flood hazard areas during flood conditions. Construction of the proposed project would have a less than significant impact and no mitigation would be required. (Draft EIR, p. 169)

9. *Inundation by seiche, tsunami, or mudflow. (Draft EIR Hydrology and Water Quality Significance Criterion (j))*

Finding: No impact. (Draft EIR, p. 167)

Facts in Support of Finding. The project site is not located in an area subject to inundation by seiche, tsunami or mudflows. Therefore, no impact would occur. (Draft EIR, p. 167)

j. Land Use Planning

1. *Physically divide an established community.*

Finding: No impact. (Draft EIR, p. 177)

Facts in Support of Finding. Phase I of the proposed project would primarily occur adjacent to the north of the existing WRP10 site, where groundwater replenishment ponds would be implemented; Phase I would also occur within the WRP10 site, where the Mid-Valley Pipeline would be extended to transmit imported Colorado River water to the new replenishment ponds, as well as the new pump station that would be implemented within WRP10 as part of Phase I. The boundaries of the WRP10 site would not be expanded or encroach into an established community. Phase II of the proposed project would be located within the Whitewater River Stormwater Channel immediately adjacent to the WRP10 site. There are no communities, other properties, or other land uses located between the WRP10 site and Whitewater River Stormwater Channel where project components would be constructed and operated. Upgrading the capacity of the Mid-Valley Pipeline Pump Station would occur at the existing pump station site located within the right-of-way for the Coachella Canal. Therefore, the proposed project would not divide an established community and would have no impact. (Draft EIR, p. 177)

2. *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. (Draft EIR Impact LUP-1; LUP-2)*

Finding: Less than significant impact. (Draft EIR, pp. 178-179)

Facts in Support of Finding. The State CEQA Guidelines require that an EIR consider whether a proposed project may conflict with any applicable land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental impact. Operation of the proposed project would be consistent with existing land uses on the project site and would not conflict with an applicable land use plan, policy, or regulation. Construction of the proposed project would introduce temporary adverse effects such as traffic, noise, air quality emissions, and ground disturbance that could result in erosion or sedimentation; however, compliance with BMPs and mitigation measures identified in this EIR would ensure that impacts associated with land use plans, policies, and regulations would remain less than significant, and would be limited to the temporary construction period. As such, potential impacts associated with conflicts with applicable land use plans, policies, or regulations would therefore be less than significant without mitigation. (Draft EIR, p. 178)

A number of City of Palm Desert General Plan policies are applicable to the proposed project; as a water supply reliability project, the proposed project is consistent with applicable policies, including those listed below. (Draft EIR, p. 178)

- Policy 3.1 Agency coordination
- Policy 3.2 Water Supply
- Policy 3.3 Water infrastructure
- Policy 3.7 Priority infrastructure improvements (Draft EIR, pp. 178-179)

In addition, the City of Indio General Plan includes Goal DW-1, which is to provide for the planning and funding mechanism to construct, expand, and maintain water facilities needed to meet current and future demand. The Mid-Valley Pipeline Pump Station, which would receive two new pumps under the proposed project, is located within Indio; this feature of the proposed project would be consistent with the General Plan by facilitating water supply reliability in the project area. (Draft EIR, p. 179)

Impacts would be less than significant without mitigation. (Draft EIR, p. 179)

3. *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

Finding: No impact. (Draft EIR, p. 178)

Facts in Support of Finding. The project site is not located within a conservation area of the Coachella Valley MSHCP or within any other habitat or natural community conservation plans. The proposed project would not conflict with any such plans and would have no impact. (Draft EIR, p. 178)

k. Mineral Resources

1. *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. (Draft EIR Mineral Resources Significance Criterion (a))*

Finding: No impact. (Draft EIR, p. 181)

Facts in Support of Finding. As described in the EIR, there are no mines, aggregate pits or quarries within the project site, and the California Geological Survey mapping identifies the entire project site and surrounding vicinity as having little likelihood for the presence of significant mineral deposits. Although the City of Palm Desert General Plan indicates the city is an MRZ-3 classification, a large portion of the project site is developed with the existing WRP10 facilities. As known mineral resources of value are not present or likely to be present, or are precluded by existing uses if present, the proposed project would have no impact. (Draft EIR, p. 181)

2. *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. (Draft EIR Mineral Resources Significance Criterion (b))*

Finding: No impact. (Draft EIR, pp. 181-182)

Facts in Support of Finding. There are no important mineral resource recovery sites delineated on a local general plan or other land use plan within the project site. According to the City of Palm Desert General Plan, the city, including the project site, is located in the MRZ-3 classification. The City of Palm Desert General Plan states that areas within the city may contain mineral deposits that may qualify as mineral resources. A large portion of the project site is developed with the existing Mid-Valley Pipeline Pump Station and WRP10 facilities, which precludes development of mineral resources. The remainder of the project site consists of the Whitewater River Stormwater Channel, which has been developed to manage stormwater runoff events. Thus, current uses of the project site have precluded availability to or exploration of potential mineral resources in the project site. The proposed project would have no impact. (Draft EIR, pp. 181-182)

l. Noise

1. *Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (Draft EIR Impact NV-1)*
2. *Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project. (Draft EIR Impact NV-1)*

Finding: Less than significant impact. (Draft EIR, pp. 195-197)

Facts in Support of Finding. The City of Palm Desert has established limits on the hours of operation for construction activities. The City has implemented these limitations, which result in construction activities between the prescribed hours being considered exempt from the noise standards of the ordinance. (Draft EIR, p. 195)

Using the stationary-source RCNM noise prediction model and the equipment mix that could occur for the project, the project's construction activity noise level for each phase was estimated. Table 22 in the EIR provides a summary of estimated construction noise levels for each stage of construction activity. Detailed tables for each phase of construction are provided in Appendix D of the EIR. (Draft EIR, p. 195)

As shown on Table 22, the highest construction noise level impacts during Phase I would occur during grading activities, when the unmitigated peak construction noise levels may reach up to 87 dBA Leq at a distance of 50 feet from Phase I construction activities. The highest construction noise level during Phase II may reach unmitigated peak construction noise levels up to 87 dBA Leq at a distance of 50 feet from Phase II construction activities for purposes of creating detention basins and temporary berms within the Whitewater River Stormwater Channel, and extending the Mid-Valley Pipeline. At 80 feet, the distance of the nearest sensitive noise receptor to construction activity, the unmitigated peak construction noise levels during Phase I may reach up to approximately 83 dBA Leq, and the highest construction noise level during Phase II would reach up to approximately 83 dBA Leq. (Draft EIR, p. 196)

The City of Palm Desert is not the CEQA Lead Agency for the project and it is not required that the City's thresholds apply to the proposed project. However, CVWD has elected to apply Palm Desert's thresholds. The City of Palm Desert relies on limited construction hours to mitigate construction impacts. In addition, standard noise-related BMPs would be implemented including, but not limited to, the following: all construction equipment, fixed or mobile, to be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards; locate all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the project site; limit haul truck deliveries to the same hours specified for construction equipment, and require truck trips be limited to the hours of construction activity. (Draft EIR, pp. 196-197)

Construction activities associated with the project would be restricted to the allowable construction hours listed under Palm Desert City Code Section 9.24.070, and the project would not cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; therefore, potential impacts from construction-related noise levels would be less than significant. (Draft EIR, p. 197)

3. *Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. (Draft EIR Noise Significance Criterion (c))*

Finding: No impact. (Draft EIR, pp. 194-195)

Facts in Support of Finding. Phase I and Phase II sites are expected to operate at noise levels that are similar to current conditions. The sites for both Phase I and Phase II of the project are currently utilized for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during storm events (Phase II). The Phase I site includes a variety of facilities in addition to the existing ponds, and on-site parking for operational vehicles and equipment (located adjacent to the north of the WRP10 site, adjacent to the east of the proposed Phase I ponds). Once construction is complete, Phase I operations would include water storage/groundwater replenishment ponds that are either new or expanded, a relocated

parking lot, a new Colorado River water pump station surrounded by sound walls, and a new secondary effluent pump within an existing, enclosed structure that will be located within the existing WRP10 site. Phase II operations would include detention basins that will receive and infiltrate Colorado River water and underground pipelines. The detention basins and temporary berms within the Whitewater River Stormwater Channel would require regular maintenance to replace detention basins and temporary berms following storm events. Regular maintenance and replacement of detention basins and temporary berms may reach unmitigated peak construction noise levels; however, this maintenance and replacement work would only occur during allowable construction hours listed under the Palm Desert City Code Section 9.24.070. Therefore, noise levels from the Phase I and Phase II sites will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project and there would be no impact. (Draft EIR, pp. 194-195)

4. *Expose people residing or working in the project area to excessive noise levels, if 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 airports. (Draft EIR Noise Significance Criterion (e))*
5. *Expose people residing or working in the project area to excessive noise levels, if located within the vicinity of a private airstrip. (Draft EIR Noise Significance Criterion (f))*

Finding: No impact. (Draft EIR, p. 195)

Facts in Support of Finding. The proposed project is located approximately 10 miles southeast of the Palm Springs International Airport. The 65 dBA noise contour is located 9.6 miles from the Phase I and Phase II project sites. Therefore, the project site is not located within any airport noise impact contours and would not expose residents or workers to excessive noise levels from airport or private air strip operations; no impact will occur. (Draft EIR, p. 195)

6. *Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels. (Draft EIR Impact NV-2)*

Finding: Less than significant impact. (Draft EIR, pp. 197-198)

Facts in Support of Finding. Construction activity associated with the project would create ground-borne vibration on and adjacent to the project site. Buildings in the vicinity of a construction site respond to vibration to varying degrees ranging from imperceptible effects to the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, and up to minor damage at the highest vibration levels. The nearest sensitive receptors are single-family residences that are at least 80 feet from Phase I and Phase II construction activities. Table 23 in the EIR lists ground-borne vibration levels from various types of construction equipment at distances of 75 and 100 feet from construction activity. Pile driving is not included in this analysis because the project does not include any components that would require driven piles or caissons. (Draft EIR, p. 197)

As shown on Table 23 in the EIR, vibration levels from construction equipment would range from 48 VdB to 83 VdB at 75 feet from the source. Vibration levels that exceed 80 VdB are typically detectable by people living in the vicinity of the activity causing ground-borne vibration. Ground-borne vibration at the nearest sensitive receptor would create detectable vibration at 75 feet from the source when vibratory rollers are in operation. Construction activity would occur during daytime hours consistent with Section 9.24.060 of the Palm Desert Municipal Code, which would avoid sleep disruption. Table 24 in the EIR shows vibration levels at the nearest buildings, in terms of in/sec PPV. (Draft EIR, p. 197)

As shown on Table 24 in the EIR, vibration levels at adjacent structures would reach 0.062 in/sec PPV during use of the vibratory roller, which would not exceed the Caltrans threshold of 0.50 in/sec PPV for intermittent sources of vibration at new residential structures, or the Caltrans threshold of 0.50 in/sec PPV for intermittent sources of vibration at modern industrial and commercial buildings. Therefore, vibration impacts at adjacent structures would be less than significant with no mitigation required. (Draft EIR, p. 198)

m. Population and Housing

1. *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). (Draft EIR Population and Housing Significance Criterion (a))*

Finding: No impact. (Draft EIR, pp. 201-202)

Facts in Support of Finding. The proposed project does not include construction of new housing or businesses. The project would not require rezoning of land to a zone that allows for housing development at higher densities. Construction of the proposed project would draw from the workforce currently residing in Palm Desert, Indian Wells, Indio, and other nearby communities. Thus, the proposed project would have no direct impacts with regards to inducing substantial population growth. (Draft EIR, p. 201)

Groundwater is the primary source of domestic water supply in the Coachella Valley. The proposed project would not increase the annual amount of water from the Colorado River that is currently allocated to CVWD, but would enable CVWD to receive its full existing annual allocation. The proposed project would increase the capacity for groundwater recharge in the valley and thereby would increase available local supply; this may induce growth, but not beyond what existing Colorado River supplies would allow, and would be consistent with the applicable General Plan and Urban Water Management Plan. Therefore, the project would not generate excess domestic water supplies or represent a new source of domestic water that would support additional population growth in Coachella Valley. The proposed project would have no indirect impacts with regards to inducing substantial population growth. (Draft EIR, pp. 201-202)

2. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere. (Draft EIR Population and Housing Significance Criterion (b))*

Finding: No impact. (Draft EIR, p. 202)

Facts in Support of Finding. The project site consists of the existing WRP10 and an adjacent section of the Whitewater River Stormwater Channel in Palm Desert, as well as the existing Mid-Valley Pipeline Pump Station in Indio. No houses or residential structures or dwellings are located within the project site. The proposed project would not displace any existing housing. There would be no impact. (Draft EIR, p. 202)

3. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. (Draft EIR Population and Housing Significance Criterion (c))*

Finding: No impact. (Draft EIR, p. 202)

Facts in Support of Finding. The project site consists of the existing WRP10 and an adjacent section of the Whitewater River Stormwater Channel in Palm Desert, as well as the existing Mid-Valley Pipeline Pump Station in Indio. No people reside within the project site. The proposed project would not displace people, and there would be no impact. (Draft EIR, p. 202)

n. Public Services

1. *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:*
 - i. *Fire protection?*
 - ii. *Police protection?*
 - iii. *Schools?*
 - iv. *Parks?*
 - v. *Other public facilities? (Draft EIR Public Services Significance Criterion (a))*

Finding: No impact. (Draft EIR, pp. 206-207)

Facts in Support of Finding. The proposed project would not substantially increase the demand for police, fire, and school services in the project area. It is expected that construction workers would be local to Palm Desert, Indio, Indian Wells, and the surrounding Coachella Valley area, and construction would not generate new population growth. The existing CVWD workforce would operate the proposed project. New employment opportunities that would support or generate population growth in the region would not be created from construction of the proposed project. As construction of the proposed project would not generate population growth, it would also not affect established service ratios for fire protection, police protection, schools, or libraries. There are no fire stations, police stations, schools, or libraries within the project site. Thus, construction of the proposed project would not affect existing public service facilities. (Draft EIR, p. 206)

Operation of the proposed project would enable CVWD to receive its full existing annual allocation of water from the Colorado River. It would not increase the annual allocation such that an additional amount of domestic water supply would be created that would support population growth. Existing CVWD staff would operate the proposed project and no additional employment or staffing would be required for operations. As operation of the proposed project would not generate population growth, it would also not affect established service ratios for fire protection, police protection, schools, or libraries. Operation of the proposed project would have no impact on public services. (Draft EIR, p. 206)

The proposed project does not include the construction of new fire or police stations, schools, libraries or other public facilities. Neither construction nor operation of the proposed project would have no impact on public services. (Draft EIR, p. 207)

o. Recreation

1. *Would the project 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? (Draft EIR Recreation Significance Criterion (a))*

Finding: No impact. (Draft EIR, p. 210)

Facts in Support of Finding. Phase I of the proposed project would include activities at the existing WRP10 site, where public access and recreational uses are not permitted. Thus,

construction of Phase I of the project would not displace any recreational uses or users that would otherwise result in increased use elsewhere. (Draft EIR, p. 210)

Construction of Phase II of the project would involve constructing an extension of the Mid-Valley Pipeline and new detention basins within the Whitewater River Stormwater Channel, located to the south/southeast of the WRP10 site. Waterways, such as the Whitewater River Stormwater Channel, are considered an open space recreational amenity in Palm Desert. However, the segment of the Whitewater River Stormwater Channel within the project site does not contain any constructed hiking trails or other developed recreational facilities, and it is used for flood control. As this section of the Whitewater River Stormwater Channel is not used for open space or passive recreation, recreational users would not be displaced from the area from construction or operation of Phase II of the project. The proposed project would have no effects on use at existing neighborhood and regional parks or other recreational facilities. No impact would occur. (Draft EIR, p. 210)

2. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (Draft EIR Recreation Significance Criterion (b))*

Finding: No impact. (Draft EIR, p. 210)

Facts in Support of Finding. The proposed project does not include the construction of recreational facilities or require the construction or expansion of recreational facilities. No impact would occur. (Draft EIR, p. 210)

p. Transportation/Traffic

1. *Conflict with an 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. (Draft EIR Impact TR-2)*

Finding: Less than significant impact. (Draft EIR, p. 218)

Facts in Support of Finding. Operation of the proposed project will not conflict with an applicable congestion management program. The LOS standards established by the CMP are intended to regulate long-term impacts due to future operation of projects and were not developed for temporary construction projects. (Draft EIR, p. 216)

Operational traffic associated with the proposed project would be comparable to existing operation and maintenance of the Phase I and Phase II sites, comprised primarily of worker vehicle trips. The proposed project will have a very limited impact on roadway and intersection operations, and other components of the regional and local transportation system both during construction and operation. During operation of the proposed project, vehicles and equipment needed to repair or replace temporary berms in the Phase II site will be obtained from the existing vehicles and equipment stored and regularly used at the WRP10 site. Potential impacts would be less than significant with no mitigation required. (Draft EIR, p. 218)

2. *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. (Draft EIR Transportation/Traffic Significance Criterion (c))*

Finding: No impact. (Draft EIR, p. 216)

Facts in Support of Finding. There are two airports within the project area, the Jacqueline Cochran Regional Airport (Thermal) and the Bermuda Dunes Airport (Bermuda Dunes). The project will have no impact on the facilities or operations of regional airports, and will not result in a change in air traffic patterns or an increase in traffic levels. The project proposes only ground-based travel; therefore, project construction or operation would have no impact with respect to air traffic levels. (Draft EIR, p. 216)

3. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). (Draft EIR Transportation/Traffic Significance Criterion (d))*

Finding: No impact. (Draft EIR, p. 216)

Facts in Support of Finding. Proposed project facility site plans do not include sharp curves or unsafe designs. The project does not include new road designs or alterations of existing features that could substantially increase hazards. Therefore, no impact associated with design features are expected for any project site. (Draft EIR, p. 216)

4. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. (Draft EIR Transportation/Traffic Significance Criterion (f))*

Finding: No impact. (Draft EIR, pp. 216-217)

Facts in Support of Finding. A review of the relevant SunLine bus routes was conducted to determine whether and to what extent project construction or operations and maintenance could adversely affect access to transit services. Construction activities on the WRP10 site and the Mid-Valley Pipeline Pump Station site were evaluated for their potential to impact bus service or access. (Draft EIR, p. 216)

SunLine Line 53 passes directly west of the WRP10 site, where it travels north-south along Cook Street. SunLine provides a bus stop at the intersection with Merle Drive, near the project site. An additional bus stop lies several hundred feet south of the project site, at the intersection between Cook Street and Santa Fe Trail. Neither bus stop will be impacted by the proposed project. (Draft EIR, p. 216)

Near the Mid-Valley Pipeline Pump Station site, SunLine Line 54 has eastbound and westbound service along Fred Waring Drive. Bus Stop 7 is situated directly adjacent to the pump station site, located on the westbound side of Fred Waring Drive. Bus Stop 12 is the closest bus stop on the eastbound side of the street; the stop is located on the other side of Jefferson Street. Neither bus stop will be impacted by the proposed project. (Draft EIR, p. 216)

In summary, construction, operation and maintenance of the proposed project facilities will not have an adverse impact on mass transit infrastructure or activities. Project-related traffic during construction may occur on the same roadways as mass transit vehicles, but such activities would not impede existing activities. There will be no conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities and no impact would occur. (Draft EIR, p. 217)

q. Utilities and Service Systems

1. *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. (Draft EIR Utilities and Service Systems Significance Criterion (b))*
2. *Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments. (Draft EIR Utilities and Service Systems Significance Criterion (e))*

Finding: No impact. (Draft EIR, pp. 222-223)

Facts in Support of Finding. The analysis of impacts on water and wastewater treatment facilities typically evaluates whether existing utilities and service systems are adequate to serve a proposed project, or whether they require expansion or new construction to accommodate the proposed project and, if so, whether construction of the new or expanded utilities and/or service systems could have an adverse impact on the environment. The proposed project differs from typical development projects, because the project is a proposal to construct new secondary effluent ponds at the WRP10 site and construct new groundwater infiltration basins. The construction and operation of the proposed project, in and of itself, would not generate population growth or new water and sanitary sewer connections requiring expansion of a water or wastewater treatment plant. Likewise, demand for new treatment facilities would not be generated by the project. Thus, the proposed project would have no impact. (Draft EIR, p. 223)

Phase I of the proposed project includes an expansion of the parking area for CVWD operations and maintenance vehicles. The parking area would be impervious and precipitation falling on the parking area would generate stormwater runoff. Under existing conditions, on-site stormwater runoff is not directly connected to a stormwater conveyance system, but instead occurs as sheet flow that is directed to the pervious ground to encourage infiltration into the local ground surface. With implementation of the project, these patterns would be retained, with an emphasis placed on limiting site disturbance to the maximum extent practical. The additional impervious surface generated from the project would not require the expansion of existing stormwater drainage facilities. The construction of new stormwater drainage facilities would not be required to facilitate project operations and no impact would occur. (Draft EIR, p. 223)

Phase II of the proposed project includes the construction of new detention basins within the Whitewater River Stormwater Channel for the purposes of groundwater replenishment. The Whitewater River Stormwater Channel is the backbone of the CVWD stormwater protection system. The proposed basins would be situated on the sides of the existing flow channel, and designed to allow stormwater flow through the channel, as occurs under present conditions. Project design features such as breakaway fencing or temporary berms would be implemented at the upstream and downstream ends of the basins to facilitate the detention and infiltration of Colorado River water delivered to the site as part of the project, while also facilitating the removal of barriers to flow when needed, particularly in anticipation of or during a storm event. By ensuring that barriers to flow are removed in anticipation of or during a storm event, function of the channel for stormwater conveyance is maintained, and the potential for flooding due to the presence and function of the Phase II basins is avoided. Operation of the proposed project would have no impact regarding the need for new or expanded stormwater management facilities or structures. (Draft EIR, p. 223)

3. *Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board. (Draft EIR Impact U-1)*
4. *Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Draft EIR Impact U-1)*

Finding: Less than significant impact. (Draft EIR, pp. 223-224)

Facts in Support of Finding. Wastewater is water containing wastes from residential, commercial, and industrial processes, such as sanitary sewer or cooling water. Construction of the proposed project would not require residential, commercial, or industrial processes involving the use of water. Thus, construction of the proposed project would not generate wastewater. Project construction would not exceed the wastewater treatment requirements of the Colorado River Basin RWQCB. (Draft EIR, pp. 223-224)

Although construction of the project would not generate wastewater, it could result in erosion and siltation from earthmoving activities during construction. Exposed soil from excavated areas, stockpiles, and other areas where ground cover would be removed could be inadvertently transported off-site by wind or water. If not properly managed, this could increase sediment loads in surface water bodies near project sites, potentially exceeding the Colorado River Basin RWQCB waste discharge requirements. (Draft EIR, p. 224)

As construction of each of the two phases of the project would disturb more than one acre of land, construction of each phase would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), compliant with the federal Clean Water Act NPDES requirements. In compliance with the Construction General Permit, a construction SWPPP would be prepared for each phase of the proposed project. The SWPPP would include and require appropriate BMPs to be implemented to control erosion and discharge of polluted stormwater runoff. (Draft EIR, p. 224)

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. This would provide a dry work area to protect waters and preserve the work area. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agriculture lands or stormwater facilities in conformance with the State Water Resources Control Board's Stormwater General Permit and applicable local discharge requirements. (Draft EIR, p. 224)

With implementation of the SWPPP and associated BMPs, impacts related to exceeding wastewater treatment requirements would be less than significant with no mitigation required. (Draft EIR, p. 224)

6. *Have insufficient water supplies available to serve the project from existing entitlements and resources, or required new or expanded entitlements. (Draft EIR Impact U-2)*

Finding: Less than significant impact. (Draft EIR, p. 224)

Facts in Support of Finding. Water required for construction of the project and testing of equipment would be potable water obtained on-site from the existing WRP10 site. The WRP10 site has sufficient water supplies to meet existing demand in combination with the temporary, short-term demands of project construction. New or expanded entitlements would not be

required. Construction of the proposed project would have a less than significant impact. (Draft EIR, p. 224)

6. *Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs. (Draft EIR Impact U-3)*
7. *Fail to comply with federal, state, and local statutes and regulations related to solid waste. (Draft EIR Impact U-3)*

Finding: Less than significant impact. (Draft EIR, pp. 224-225)

Facts in Support of Finding. Project construction would result in the generation of waste materials, including construction debris and excess excavated soil. Materials excavated during facility construction and pipeline extension installation could be used as backfill around the facilities. Remaining soil and construction waste materials would be hauled off-site for recycling or disposal at a landfill. As the project does not include construction of structures or other facilities requiring large amounts of lumber, dry wall, roofing materials, and so forth, the amount of waste generated from construction would be minimal. The landfills serving the project site have sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction. The remaining capacity of the Badlands Sanitary Landfill as of January 2105 was 15,748,799 cubic yards (Cal Recycle 2017a). The minimal waste that would be anticipated by project construction would be only a small fraction of the remaining capacity of the Badlands Sanitary Landfill. The management and disposal of all solid waste generated from project construction would be compliant with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant. (Draft EIR, pp. 224-225)

5.2 Findings for Significant but Mitigated Effects

The EIR determined that the proposed project would result in less than significant impact for certain impact categories with incorporation of mitigation measures (MMs) identified in the EIR to reduce potentially significant project impacts to a less than significant level. Under some threshold criteria, impacts have different significance determinations for construction versus operational impacts, such as where impacts may occur to one level of intensity during the temporary construction period and a different level of intensity over the duration of the project's lifetime. As a result, some of the threshold criteria which were presented above in Section 5.1, for being less than significant with no mitigation required, are also presented in this section, for being less than significant with mitigation incorporated.

CVWD having reviewed and considered the information contained in the EIR, the Technical Appendices, and the administrative record, finds, pursuant to Section 21081(a)(1) of the California Public Resources Code and Section 15091(a)(1) of the State CEQA Guidelines that: "changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR" for the impacts discussed below.

a. Air Quality

1. *Conflict with or obstruct implementation of the applicable air quality plan. (Draft EIR Impact AQ-1; AQ-4)*

2. *Violate any air quality standard or contribute substantially to an existing or projected air quality violation. (Draft EIR Impact AQ-1)*
3. *Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors). (Draft EIR Impact AQ-1)*
4. *Expose sensitive receptors to substantial pollutant concentrations. (Draft EIR Impact AQ-1)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 85-88, 90)

As described in Section 5.1, impacts to air quality would also be less than significant with no mitigation required during operation of the project.

Facts in Support of Finding. Construction of the proposed project would result in the temporary generation of vehicle and equipment exhaust and fugitive dust. The project schedule is ultimately driven by a water delivery during the 2018 calendar year to CVWD. Construction of the proposed project would occur over one year; at the earliest, Phase I of the project is planned to begin construction in January 2018 (with completion in December 2018), while Phase II of the project would begin construction in March 2018 (with completion in September 2018). (Draft EIR, pp. 85-86)

Phase I of the project involves re-purposing existing ponds, construction of new lower storage ponds, and modification to the piping and controls associated with the percolation ponds, including extension of the Mid-Valley Pipeline within the WRP10 site to deliver imported Colorado River water to the replenishment ponds. In addition, the northeastern-most percolation pond would be re-purposed and removed from the WRP10 site operations. (Draft EIR, p. 86)

Phase II of the project includes the construction of temporary berms and extension of the Mid-Valley Pipeline within the Whitewater River Stormwater Channel, as well as installation of a new secondary effluent pump station. (Draft EIR, p. 86)

Ozone precursors (NO_x and ROG would) be emitted by the operation of construction equipment, while PM₁₀ would be emitted by activities that disturb the soil, such as grading and excavation. Emissions would also be generated by construction employees traveling to and from the construction site, as well as trucks hauling materials to and from the site. Construction-related emissions could result in adverse health risks to nearby sensitive receptors if emission thresholds are exceeded. (Draft EIR, p. 86)

Construction-related emissions were calculated using CalEEMod (see Appendix B of the EIR for assumptions and calculations). For the purposes of modeling, it was assumed that the project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required by enforcement authority SCAQMD. Local control in air quality management is provided by CARB through county-level or regional (multi-county) APCDs; the project would occur in compliance with the SCAQMD Coachella Valley PM10 State Implementation Plan and SCAQMD and Municipal Fugitive Dust Control Regulations. (Draft EIR, p. 86)

A project would be inconsistent with the SCAQMD's Air Quality Management Plan (AQMP) if (1) it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP, or (2) it would result in an increase in the frequency or severity

of existing air quality violations or contribute to new violations. The project is consistent with the AQMP in that the project would not generate population, housing, or employment. (Draft EIR, p. 90)

Table 12 in the EIR summarizes the estimated maximum daily emissions of pollutants for the project. The table also shows the maximum daily on-site emissions. (Draft EIR, p. 87)

Total emissions would be less than SCAQMD thresholds for all pollutants, except for NO_x. Based on the preliminary construction schedule, grading, and construction activities, the project would generate NO_x emissions that exceed the 100 lbs/day threshold. (Draft EIR, p. 88)

Potential mitigation to reduce NO_x emissions from combined construction of the project components to below SCAQMD thresholds would be to prevent the overlapping of Phase I and Phase II between March and June. Even though this would reduce construction emissions to below the SCAQMD threshold, this measure would extend the construction timeframe for the project and prevent the project from meeting its objective of water delivery during the calendar year of 2018 to CVWD. Therefore, this particular mitigation measure would not be feasible. (Draft EIR, p. 88)

Because construction activities associated with the project may generate NO_x emissions that exceed the 100 lbs/day threshold, air quality impacts associated with construction of the project would be significant but mitigable through the implementation of Mitigation Measure AQ-1. Implementation of Mitigation Measure AQ-1 would reduce construction-related emissions, including NO_x, to less than SCAQMD threshold levels and air quality impacts would be less than significant. (Draft EIR, p. 88)

Mitigation Measure.

MM AQ-1 BEST AVAILABLE TECHNOLOGY (BACT) FOR CONSTRUCTION EQUIPMENT

Construction equipment shall utilize Tier 3 or Tier 4 compliant engines for diesel-fueled construction equipment during all construction activities at the project site. (Draft EIR, p. 88)

b. Biological Resources

1. *Have substantial adverse effects, 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 CDFW or USFWS. (Draft EIR Impact BIO-1)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 102-104)

Facts in Support of Finding. The project site contains suitable nesting habitat for burrowing owl and common native birds. While no nesting birds or owl burrows with burrowing owl sign (whitewash, pellets and feathers) were observed during the field reconnaissance survey at the project site, they nonetheless could occur at the time of construction. In particular, ravens are known to nest in the tamarisk tree rows. The proposed project could adversely affect raptors (including burrowing owl) and nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of CFGC Section 3503, 3503.5, 3513 and 3800, and the MBTA. (Draft EIR, p. 102) Implementation of Mitigation Measure BIO-1 would reduce

impacts to a less than significant level by ensuring avoidance of nesting birds and burrowing owl. (Draft EIR, p. 104)

No other impacts to special status species would occur as no other species were identified as having the potential to occur at the project site. (Draft EIR, p. 102)

Mitigation Measure.

MM BIO-1 NESTING BIRD AND BURROWING OWL AVOIDANCE

Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If the proposed project is phased, a subsequent pre-construction nesting bird and raptor survey may be required prior to each phase of construction within the project site. (Draft EIR, p. 103)

- Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors on-site and within the designated vicinity. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities. (Draft EIR, p. 103)
- If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary. (Draft EIR, p. 103)
- A pre-construction survey for the burrowing owl shall be completed on the project site prior to any ground-disturbing activities since suitable habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required, as described further below. In addition, if a burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owls have completed their nesting activities. (Draft EIR, p. 103)
- The pre-construction survey for the burrowing owl shall occur no less than 14 days (in accordance with the Staff Report on Burrowing Owl Mitigation [CDFW 2012]) and no more than 30 days (in accordance with CVWD's Operations and Maintenance Manual) prior to ground breaking activities. Additionally, a final survey must be conducted within

24 hours of the initiation of ground disturbance activities in accordance with the CDFW 2012 protocol. If no burrowing owls are detected during those surveys, implementation of ground disturbance activities could proceed without further consideration of this species assuming there is no lapse between the surveys and construction as the protocol states "time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance." (Draft EIR, p. 103)

- If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW. (Draft EIR, p. 104)
- Compensatory mitigation may be required for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the guidance provided in Appendix A of the CDFW Burrowing Owl Staff Report (CDFW 2012). (Draft EIR, p. 104)
- Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decomposing soil and re-vegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment. (Draft EIR, p. 104)
- If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation. (Draft EIR, p. 104)

2. *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. (Draft EIR Impact BIO-2)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, p. 105)

Facts in Support of Finding. The project site does not support wetlands. However, Phase II includes the construction of temporary berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. These berms are considered temporary because they will be replaced whenever they are washed out by high flow events; depending upon the magnitude of the flood event that washes berms away, they

may be replaced in slightly different locations, but always within the project's disturbance area. In addition, a subsurface extension of the Mid-Valley Pipeline to provide water to the recharge ponds is proposed. Construction of the berms and the pipeline extension could result in the discharge of sediments into the low flow channel, but given downstream uses (including a golf course in the channel), such discharge would not have a significant adverse effect to protected biological habitats or species. Because of the lack of biological resources associated with this maintained channel, no direct biological impact would be anticipated. In addition, the area is disturbed on an ongoing basis through regular maintenance of the channel, which entails removing debris and vegetation. Maintenance of the berms (including replacement after storm events) would involve disturbance in this same area, resulting in no change in existing conditions. The berms would also not substantially alter the hydrologic characteristics of the channel, especially as compared to peak flow events. However, the proposed Phase II activity is subject to regulation by the CDFW, Colorado River Basin RWQCB, and USACE and proceeding without the appropriate authorizations and permits would be considered a potentially significant impact as it would conflict with adopted regulatory policies intended to reduce environmental effects. (Draft EIR, p. 105) Implementation of Mitigation Measure BIO-2 would reduce impacts to a less than significant level by ensuring compliance with all regulatory policies related to Phase II of the project. (Draft EIR, p. 104)

Mitigation Measure.

MM BIO-2. CONSULTATION WITH REGULATORY AGENCIES

Prior to initiation of Phase II of the project, CVWD shall consult with CDFW, the USACE, and the Colorado River Basin RWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the un-vegetated Whitewater River Stormwater Channel. CVWD shall comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.

c. Cultural Resources

1. *Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5. (Draft EIR Impact CR-1)*
2. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5. (Draft EIR Impact CR-1)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 120-122)

Facts in Support of Finding. Project construction activities within the project site, including ground clearing, grading and excavation, could have impacts on historical and archaeological resources. Resource CA-RIV-64/H is heavily disturbed within the Mid-Valley Pipeline alignment though it is possible that portions of the site remain. It is not anticipated that construction activities would occur along the existing pipeline alignment; however, if it becomes necessary for construction activities occur within the pipeline alignment, there may be potential to damage any remaining portions of CA-RIV-64/H.

Potentially significant impacts would occur if the implementation of the proposed project would result in construction activities that would damage previously unidentified significant archaeological resources. Pre-construction reconnaissance can only confidently assess the potential for encountering surficial archaeological materials; therefore, there is possibility to encounter unknown subsurface archaeological resources during construction activities. If encountered resource(s) are found to be significant, impacts would be potentially significant unless mitigation is incorporated. (Draft EIR, p. 120)

Implementation of Mitigation Measures CR-1 through CR-5 would reduce impacts to a less than significant level by ensuring identification and protection of historical and archaeological resources. (Draft EIR, p. 122)

Mitigation Measures.

MM CR-1 RETAIN A QUALIFIED ARCHAEOLOGIST

CVWD shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology, to carry out all mitigation measures related to archaeological and historic resources. This archaeologist shall work with CVWD and local Native American representatives to develop formal protocols for archaeological monitoring. (Draft EIR, p. 120)

MM CR-2 ARCHAEOLOGICAL SENSITIVITY TRAINING

A qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find. (Draft EIR, pp. 120-121)

MM CR-3 ARCHAEOLOGICAL SPOT-CHECKING

A qualified archaeologist shall conduct daily spot-checks of all-project related ground disturbing activities within the WRP10 and the Whitewater River Stormwater Channel areas. Such monitoring activities should be coordinated with local Native American representatives who have requested consultation. Should conditions indicate the need for additional monitoring, the qualified archaeologist may increase the monitoring efforts and/or recommend the inclusion of a Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and a plan must be created for evaluating the find for significance under CEQA. (Draft EIR, p. 121)

MM CR-4 ARCHAEOLOGICAL AND NATIVE AMERICAN MONITORING WITHIN CA-RIV-64/H

If ground-disturbing activities are required within or immediately adjacent to the boundaries of CA-RIV-64/H, a qualified archaeologist and local Native American representative shall monitor project-related ground-disturbing activities. Monitoring shall be conducted within 100 feet surrounding CA-RIV-64/H. If remnants of CA-RIV-64/H are encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for significance under CEQA. (Draft EIR, p. 121)

MM CR-5 UNANTICIPATED DISCOVERY OF CULTURAL RESOURCES

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the qualified archaeologist must be contacted immediately to evaluate the find and develop a plan for treatment of the find/archaeological site. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted. (Draft EIR, p. 122)

3. *Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:*
 - i. *Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or*
 - ii. *A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. (Draft EIR Impact CR-2)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 122-123)

Facts in Support of Finding. No tribal cultural resources were identified within the project site as a result of the cultural resources study or AB 52 consultation. However, there is always potential to uncover buried archaeological resources during ground disturbing activities, which could potentially be considered tribal cultural resources. If the resource(s) were found to be significant, impacts would be potentially significant unless mitigation is incorporated. Implementation of Mitigation Measure CR-6 would reduce potential impacts to tribal cultural resources to a less than significant level by ensuring they are treated in consultation with local Native Americans. (Draft EIR, p. 122-123)

Mitigation Measure.

MM CR-6 UNANTICIPATED DISCOVERY OF TRIBAL CULTURAL RESOURCES

In the event that archaeological resources, including tribal cultural resources of Native American origin, are identified during project construction, the qualified archaeologist would consult with CVWD to halt construction in the immediate area and begin or continue Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring may be required; a Native American monitor may also be required in addition to the archaeologist. (Draft EIR, p. 122)

4. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Draft EIR Impact CR-3)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 123-125)

Facts in Support of Finding. A thorough search of the LACM paleontological collection records for the project site and vicinity revealed no fossils within the project site, but at least one locality from similar sediments (Pleistocene alluvium), approximately 12 miles northwest of the project area. Such sediments may underlie the project area along its entire length. The single LACM locality (LACM 1269) contained a fossil horse (*Equus*). (Draft EIR, p. 123)

Holocene sediments mapped in the project area have low paleontological sensitivity at the surface, where they are too young to preserve fossils, but high sensitivity at unknown depths, where they may become early Holocene to Pleistocene aged. (Draft EIR, p. 123)

Proposed project ground disturbance associated with berm creation and new pipeline, pump station, and valve installation is expected to occur at depths at or exceeding 20 feet below ground surface. Thus, the project could result in significant impacts to paleontological resources, at least within previously undisturbed sediments. If the resource(s) were found to be significant, impacts would be potentially significant unless mitigation is incorporated. (Draft EIR, p. 123)

Implementation of Mitigation Measures CR-7 through CR-10 would reduce impacts to a less than significant level by ensuring identification and protection of paleontological resources. (Draft EIR, p. 125)

Mitigation Measures.

MM CR-7 RETAIN A QUALIFIED PALEONTOLOGIST

Prior to initial ground disturbance, CVWD shall retain a project paleontologist, defined as a paleontologist who meets the SVP standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. A qualified paleontologist (Principal Paleontologist) is defined by the SVP standards as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year. (Draft EIR, p. 123)

MM CR-8 PALEONTOLOGICAL MITIGATION AND MONITORING PROGRAM

Prior to construction activity a qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program (PMMP) to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff WEAP training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications. (Draft EIR, pp. 123-124)

MM CR-9 PALEONTOLOGICAL WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

Prior to the start of construction, the project paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting at which a qualified paleontologist shall attend. The paleontological WEAP may occur in concurrence with the archaeological WEAP. In the event of a fossil discovery by construction personnel,

all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find, and to appropriately handle the find before restarting work in the area, as determined by the qualified paleontologist. (Draft EIR, p. 124)

MM CR-10 PALEONTOLOGICAL MONITORING

Ground disturbing construction activities (including grading, trenching, berm creation and new pipeline, pump station, and valve installation) exceeding 5 feet in depth in areas mapped as high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth would not require paleontological monitoring. (Draft EIR, p. 124)

d. Hazards and Hazardous Materials

1. *Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.* (Draft EIR Impact HAZ-1)
2. *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.* (Draft EIR Impact HAZ-1)

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 155-157)

Facts in Support of Finding. Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the area through the operation of construction vehicles and equipment. In addition, there is potential for an accidental upset or accident condition to occur as a result of ground-disturbing activities; should such a condition occur, there would be potential for potential impacts to occur as a result of a release of hazardous materials to the environment. However, limited quantities of miscellaneous hazardous substances, such as diesel fuel, oil, solvents, and other similar materials, would be brought onto the construction site, used, and stored during the construction period. These materials would be disposed of off-site in accordance with all applicable laws pertaining to the handling and disposal of hazardous waste. Construction of the project would comply with all relevant regulations, including the enforcement of hazardous materials transportation regulations. There is a possibility that upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels, potentially introducing a hazard to the public or the environment. Therefore, to ensure an additional level of safety and reduce potential impacts to a less than significant level, Mitigation Measures HAZ-1(a) and HAZ-1(b) would be implemented. (Draft EIR, p. 156)

Potential impacts would be less than significant with mitigation incorporated. (Draft EIR, p. 156)

Mitigation Measures.

MM HAZ-1(A) HAZARDOUS MATERIALS MANAGEMENT AND SPILL CONTROL PLAN

Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well federal OSHA and Cal/OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials. (Draft EIR, p. 156)

MM HAZ-1(B) HAZARDOUS MATERIALS BUSINESS PLAN

Prior to construction of the proposed project, a Hazardous Materials Business Plan (HMBP) shall be prepared and implemented. The HMBP shall include a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training. An existing HMBP may be updated for use under this project. (Draft EIR, pp. 156-157)

3. *Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. (Draft EIR Impact HAZ-3)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 157-158)

Facts in Support of Finding. Riverside County has developed EOPs, and the City of Palm Desert, where the project is located, has developed Community Emergency Response Team (CERT) Program (City of Palm Desert 2017). The emergency response plans do not designate specific evacuation routes or sites within the cities. However, the proposed project would not increase traffic or introduce impediments to access such that emergency access or evacuation routes would be substantially affected. To ensure that emergency access and evacuation routes are maintained through project implementation, Mitigation Measure HAZ-2 would be implemented. (Draft EIR, p. 157)

With implementation of mitigation measure HAZ-2, impacts related to interference with an adopted emergency and response plan would be reduced to a less than significant level. (Draft EIR, p. 158)

Mitigation Measures

MM HAZ-2 TRAFFIC MANAGEMENT PLAN

Prior to the start of construction, a Traffic Management Plan shall be developed, in coordination with County Transit, Public Works, and Coachella Valley Water District. The Traffic Management Plan shall include measures that address how to accommodate emergency evacuation and response, if needed. Measures to manage construction traffic could include warning signs, flag personnel, and scheduling deliveries outside the morning and evening peak traffic hours. (Draft EIR, pp. 157-158)

e. Transportation and Traffic

1. *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. (Draft EIR Impact TR-1)*
2. *Result in inadequate emergency access. (Draft EIR Impact TR-1)*

Finding: Pursuant to State CEQA Guidelines Section 15091(a)(1), changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the EIR. (Draft EIR, pp. 217-218)

Facts in Support of Finding. During construction of the proposed project, there would be a temporary increase in truck trips and construction worker vehicles in the vicinity of each project site. Construction-related traffic would utilize the existing regional and local roadway network. The traffic related to construction will consist primarily of passenger cars (or light duty pickup trucks), with occasional movement of heavy equipment to and from the project sites. (Draft EIR, p. 217)

Construction Traffic Estimates

During construction activities, it is assumed that construction workers would arrive prior to construction activities, and would depart after completing construction activities for the day. For this reason, potential impacts related to construction worker traffic are distinct and independent from potential impacts related to the construction itself. Phase I construction is anticipated to take place between January 1, 2018, and December 31, 2018. Phase II construction is anticipated to take place between March 1, 2018, and September 28, 2018. Table 29 in the EIR presents the anticipated trip generation related to all construction activities. Based on the amount of construction equipment and number of construction workers, the construction traffic is not expected to result in a change in LOS. Construction traffic merging onto adjoining streets or intersections could potentially disrupt traffic flows. In order to ensure that significant impacts do not occur, including such that emergency access would not be impeded, CVWD shall prepare and implement a Construction Traffic Management Plan. Emergency access to all of the project sites will be from existing roadways. Roadway closures during construction would maintain access for emergency vehicles at all times, and no roadway closures are proposed during operation of the project. (Draft EIR, p. 217)

Mitigation Measure.

MM TRA-1 CONSTRUCTION TRAFFIC MANAGEMENT PLAN

The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls. Implementation of this measure would ensure that construction traffic impacts maintain a less than significant level. (Draft EIR, p. 218)

5.3 Findings Regarding Impacts Not Fully Mitigated to a Level of Less than Significant

The Final EIR determined that the proposed project would result in impacts that cannot be fully mitigated and will be only partially avoided or lessened in consideration of existing Plans, Programs, and Policies (PPPs) and feasible mitigation measures (MMs). Accordingly and as further explained below, CVWD makes the following findings as to each of the following impacts as allowed by State CEQA Guidelines section 15091(a): “Changes or alterations [that might further reduce Project impacts] are within the responsibility and jurisdiction of another public agency and not CVWD. Such changes have not been adopted by such other agency”; or “Specific economic, legal, social, technological, or other considerations, make infeasible the mitigation measures or Project alternatives identified in the Final EIR.” Therefore, a statement of overriding considerations consistent with State CEQA Guidelines sections 15093, 15126(b), and 15126.2(b) is required and included herein.

f. Greenhouse Gas Emissions

1. *Generate greenhouse gas emissions, either directly or indirectly, that may have a significant effect on the environment. (Draft EIR Section 3.7.4, Impact GHG-2)*

Finding: During operation of the project, GHG emissions would exceed the SCAQMD threshold for annual emissions. As a result, the project would conflict with AB 32 and SB 32. Specific economic, legal, social, technological, or other considerations make infeasible the mitigation measures or Project alternatives that would completely reduce this impact to a less than significant impact. Therefore this impact is significant and unavoidable. (Draft EIR, p. 146-147)

Facts in Support of Finding. The proposed project would generate greenhouse gas emissions through construction and energy use. Construction of the proposed project would generate an estimated 1,316 MT of CO₂e. Following the SCAQMD’s recommended methodology for amortizing construction emissions over a 30-year period (the assumed life of the project), construction of the proposed project would generate an estimated 44 MT CO₂e per year. (Draft EIR, p. 146)

Operation of the proposed project would generate greenhouse gases through an increase in energy use associated with the secondary effluent pump, and repair/replacement of the temporary berms on an as-needed basis. Emissions for energy use due to pumping were calculated using estimated electricity consumption and energy intensity factors from Southern California Edison. Assuming all six pumps are powered by electricity and operating at full pumping capacity of 92+ CFS, the total energy usage would be 18,396,000 kWh per year. Based on the energy intensity factors, operational emissions would result in approximately 5,882 MT CO₂e per year. (Draft EIR, p. 146)

The project would generate a total of 5,938 MT CO₂e per year, which would exceed SCAQMD’s threshold, which is based on AB 32. Since the project would conflict with AB 32, subsequently, the project would conflict with SB 32. Therefore, this impact would be significant and unavoidable. (Draft EIR, p. 147)

g. Hydrology and Water Quality

1. *Otherwise substantially degrade water quality. (Draft EIR Section 3.9.3, Impact HWQ-6)*

Finding: Operation of the project would introduce Colorado River water to manmade replenishment basins on the project site to facilitate replenishment of the underlying groundwater basin, which would increase the total dissolved solids (TDS) in some groundwater and could cause water produced by some Coachella Valley wells to exceed the recommended consumer acceptance contaminant levels and health-based standards for drinking water. Changes or alterations have been required in, or incorporated into, the project that substantially lessen, but do not completely avoid, the significant environmental effect associated with implementation of the project. (State CEQA Guidelines § 15091 subd. (a)(1).) Beyond the mitigation measure identified below, specific economic, legal, social, technological, or other considerations make infeasible mitigation measures or project alternatives that would completely reduce this impact to a less than significant impact. The project's water quality impact related to TDS concentrations is considered significant and unavoidable. (Draft EIR, pp. 171-173)

Facts in Support of Finding. Colorado River water has higher TDS concentrations than some native groundwater and could cause local groundwater near recharge basins to locally exceed the recommended consumer acceptance contaminant level of 500 mg/L for drinking water; however, TDS concentrations do not exceed health-based drinking water standards. Concentrations of other constituents including nitrate (discussed further below), perchlorate, arsenic, and chromium-6 are less than the drinking water standards and imported Colorado River water is not adversely affected by these constituents. CVWD monitors the quality of drinking water produced at wells near recharge areas, and will provide alternate supplies or wellhead treatment if health-based drinking water standards are exceeded. (Draft EIR, p. 172)

One of the water quality constituents noted above is nitrate; imported Colorado River water is not affected by nitrate, but existing shallow groundwater does have elevated nitrate levels. When imported Colorado River water is recharged to the local groundwater basin, it may temporarily result in elevated nitrate levels at some production wells near the recharge ponds when shallow groundwater with elevated nitrate levels migrates downward due to localized pumping. Introducing almost nitrate-free water (Colorado River water) to the local groundwater will eventually dilute existing nitrate concentrations, resulting in improved water quality over the lifetime of the project. Elevated nitrate levels in drinking water is a health concern and there are primary water quality standards in place to address nitrate. In order to ensure that the proposed project does not result in significant adverse effects associated with short-term increases of nitrate in groundwater, CVWD will implement mitigation which includes monitoring of domestic groundwater quality. If monitoring indicates that groundwater used for drinking water purposes exceeds a health-based drinking water standard due to the proposed recharge activities, CVWD will remove impacted wells from service and work with individual well owners to bring the drinking water supply into compliance by either providing domestic water service from CVWD's domestic water system, or by providing appropriate well-head treatment until primary water quality standards are achieved. (Draft EIR, p. 172)

Mitigation Measure.**MM HYD-1: MONITOR GROUNDWATER DRINKING WELLS AND ENSURE HEALTH-BASED WATER STANDARDS ARE MET.**

Coachella Valley Water District shall continue to monitor the quality of groundwater produced drinking water wells located near the groundwater recharge areas to ensure that all recognized health-based drinking water standards are met. If monitoring shows that the groundwater pumped from these wells exceeds any health-based drinking water standards due to recharge activities, CVWD will remove impacted wells from service and work with well owners to bring the drinking water supply into compliance by either providing domestic water from the domestic water system or providing appropriate well-head treatment within their respective service areas.

5.4 Findings Regarding Cumulative Impacts

The cumulative impacts analysis conducted in the individual environmental issue area sections assessed in the EIR concluded that the proposed project may result in a significant unavoidable impact for GHG emissions (see Section 3.7 of Draft EIR), resulting from the exceedance of SCAQMD thresholds for annual GHG emissions, and for water quality (see Section 3.9 of Draft EIR), resulting from higher TDS concentrations in imported Colorado River water than in the existing groundwater. Therefore, the proposed project would result in a cumulatively considerable contribution with regard to GHG emissions and water quality degradation (specific to TDS). As described throughout Chapter 3 of the EIR, the proposed project would not result in significant cumulative impacts under other environmental issue areas. (Draft EIR, p. 228)

a. Greenhouse Gas Emissions

As discussed in the EIR, evaluating the significance of a project's GHG emissions is inherently an analysis of whether the project's contribution to climate change would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]). As indicated in the discussions for Impact GHG-1 and Impact GHG-2, although the project would not conflict with GHG reduction policies in the 2016-2040 SCAG RTP/SCS and Palm Desert Environmental Sustainability Plan, operation of the project would produce GHG emissions that would exceed the SCAQMD thresholds for annual emissions, and would conflict with AB 32 and SB 32, and impacts would be significant and unavoidable. Therefore, the proposed project's impacts would be cumulatively considerable. (Draft EIR, p. 147)

b. Hydrology and Water Quality

The Coachella Valley Water Management Plan (WMP) Program EIR determined that groundwater recharge efforts in the Coachella Valley address groundwater overdraft conditions throughout the valley, and the overall cumulative effect on groundwater levels is beneficial. Additionally, reducing (or eliminating) overdraft conditions helps to prevent saline water under the Salton Sea from intruding into groundwater in the Coachella Valley, which is also a beneficial cumulative effect. Groundwater recharge activities would continue to increase saline (TDS) concentrations compared to current conditions near existing and proposed recharge basins; these effects and other significant

changes to groundwater quality were evaluated in the 2002 WMP and the 2010 WMP, which determined that no new feasible mitigation measures for cumulative groundwater quality effects are available. The proposed project would result in cumulatively significant impacts to groundwater quality. (Draft EIR, p. 173)

5.5 Findings Regarding Significant Irreversible Environmental Changes

Section 15126(c) of the State CEQA Guidelines requires that an EIR describe any significant irreversible environmental changes which would occur as a result of the proposed project should it be implemented. State CEQA Guidelines Section 15126.2(c) identifies examples such as use of nonrenewable natural resources, irreversible changes in land use, irreversible damage to the environment resulting from environmental accidents associated with a project, and unjustified consumption of resources.

The proposed project involves the transmission and infiltration of imported Colorado River water to provide water supply reliability to the CVWD jurisdiction, particularly in light of long-term ongoing drought conditions. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the WRP10 pipeline extension for Phase I and the MVP extension for Phase II, as well as for the operation of construction vehicles and equipment during implementation of the project. Consumption of these resources would occur with other water supply reliability projects in the region, and are not unique to the proposed project. (Draft EIR, p. 229)

The proposed project would involve the use of energy during the construction and operational phases of the project, to improve and implement the proposed infiltration ponds, and to operate ponds and pumps during construction for transmittal of Colorado River water to the ponds. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, and machinery. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior security lighting and operate pumps, which occur under existing conditions at the WRP10 site. As discussed in this EIR, the proposed project would also include installation of a new pump station on the WRP10 site, to facilitate the transmission of imported Colorado River water to the Phase I ponds located adjacent to the north of the WRP10 site, as well as installation of new pumps within the existing Mid-Valley Pipeline Pump Station; these new pumps would increase energy usage associated with CVWD's water supply operations. (Draft EIR, pp. 229-230)

During construction, the proposed project would result in increased weekday trips and vehicle miles traveled (VMT), as compared to current activities on the current site. During operation, the proposed project would result in increased energy usage to power new pumps for both Phase I and Phase II. However, these activities would make a minimal contribution to statewide energy consumption, and therefore would not adversely affect statewide energy supplies. (Draft EIR, p. 230)

The project would not require a new commitment of law enforcement, fire protection, water supply, wastewater treatment, or solid waste disposal services. Irreversible environmental effects (also discussed for Significant and Unavoidable Impacts), could occur for Greenhouse Gas Emissions and Hydrology and Water Quality. (Draft EIR, p. 229)

As discussed in Section 3.7 of the EIR, Greenhouse Gas Emissions, development and operation of the project may generate GHG emissions that would result in a significant impact during project operations. CEQA requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. As described in this analysis, the proposed project would result in a significant and unavoidable impact due to GHG emissions. (Draft EIR, p. 229)

As discussed in Section 3.9 of the EIR, Hydrology and Water Quality, operation of the project may result in increased TDS concentrations near the recharge areas, where wells could exhibit increased TDS concentrations that exceed the recommended consumer acceptance contamination level of 500 mg/L for drinking water. As described in this analysis, the proposed project would result in a significant and unavoidable impact due to elevated TDS concentrations. (Draft EIR, p. 229)

5.6 Findings Regarding Growth Inducing Impacts

According to State CEQA Guidelines Section 15126.2(d), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria: remove obstacles to population growth; increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects; or would encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

As discussed in Section 3.13 of the EIR, *Population and Housing*, the proposed project would not directly generate population growth because it does not include residential uses. Water stored and replenished to the groundwater through the proposed project is allocated to CVWD and would be managed to provide water supply reliability to CVWD's service territory. This would not facilitate additional population growth, but rather would support existing population and activities and land uses in the area, particularly in light of ongoing long-term drought conditions in California. (Draft EIR, p. 227)

Construction of the proposed project would utilize existing CVWD employees and skilled and general workers from the project area; some temporary employment opportunities may be introduced during project construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the project would not be growth-inducing from a temporary employment standpoint. Operation and maintenance of the proposed project would not add long-term employment opportunities in addition to the existing CVWD workforce. The proposed project would not induce economic expansion such that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around Palm Desert would be addressed as part of the CEQA environmental review for such development projects. (Draft EIR, p. 227)

The proposed project is located in a previously disturbed and urbanized area that is well-served by existing infrastructure. Existing infrastructure associated with utilities and transportation would be adequate to serve the project during the temporary construction period. The water stored and infiltrated under the proposed project would be utilized for regional water supply reliability and would not remove existing obstacles to growth. No new roads would be installed as part of the project, and the project would not increase access to or through the area. Therefore, project implementation would not remove an obstacle to growth. (Draft EIR, p. 227-228)

6 Findings Regarding Alternatives

In compliance with Section 15126.6(a) of the State CEQA Guidelines, an EIR must “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible.”

CVWD, as the CEQA lead agency, is responsible for selecting a range of project alternatives and disclosing its reasoning for selecting those alternatives. “There is no iron clad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason.” (See *Citizens of Goleta Valley vs. Board of Supervisors* (1990) 52 Cal. 3d 553 and *Laurel Heights Improvement Association vs. Regents of the University of California* (1998) 41 Cal. 3d 376). Thus, the EIR needs to evaluate those alternatives necessary to permit a reasoned choice and should not consider alternatives with effects that cannot be reasonably ascertained and whose implementation is remote and speculative.

The alternatives presented in the EIR constitute a reasonable range of alternatives necessary to permit a reasoned choice among the options available to CVWD. Based upon the administrative record for the proposed project, CVWD makes the following findings concerning the alternatives to the proposed project.

a. Alternatives Considered but Eliminated

Section 15126.6(c) of the State CEQA Guidelines specifies that an EIR should (1) identify alternatives that were considered by the lead agency but were eliminated from detailed consideration because they were determined to be infeasible during the scoping process; and (2) briefly explain the reasons underlying the lead agency’s determination. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives; (ii) infeasibility; and/or (iii) inability to avoid significant environmental impacts.

Prior to identification of the alternatives assessed in detail in the EIR, a series of other alternatives were considered by CVWD, including a series of alternatives for groundwater infiltration that were considered in the Palm Desert Groundwater Replenishment Feasibility Study. Key factors that influenced the alternatives considered in the Palm Desert Groundwater Replenishment Feasibility Study included the following: percolation rate, the size and volume of infiltration basins, groundwater levels, and site geology. Infiltration rates are based on native materials and geology, but can also be influenced by maintenance of basins. The size and volume of basins affect the recharge surface and how much water can be captured and stored. Local groundwater levels are influenced by rainfall and local recharge rates. The most easily influence variables to modify in groundwater recharge basins is the size of the basins and maintaining native recharge rates through proper maintenance of the system. (Draft EIR, p. 43)

Alternatives that were considered but eliminated for the purposes of this proposed project are described below, including those that were previously considered in the Palm Desert Groundwater Replenishment Feasibility Study. (Draft EIR, p. 43)

i) Northern Levee Pipeline Extension

In order to facilitate Phase II of the proposed project, an extension of the Mid-Valley Pipeline would be implemented; one configuration of this pipeline extension that was considered but eliminated from further analysis was installing the pipeline extensions from within the WRP10 site through the northern levee of the Whitewater River Stormwater Channel, such that Colorado River water would be conveyed directly between the project's Phase I and Phase II sites. (Draft EIR, p. 43)

Finding: This potential alternative was eliminated from further analysis due to the presence of utility conflicts within the northern levee. Existing utility lines located within the northern levee make it infeasible to install pipeline extensions through the northern levee. (Draft EIR, p. 43)

ii) Phase II Upstream of Cook Street

Phase II of the proposed project is located immediately downstream of Cook Street, between Cook Street and Fred Waring Drive; one configuration of this portion of the project that was considered but eliminated from further analysis was locating Phase II immediately upstream of Cook Street. (Draft EIR, p. 43)

Finding: This potential alternative was eliminated from further analysis because it would require a substantially longer extension of the Mid-Valley Pipeline and an additional new pump station to transmit imported Colorado River water to the Phase II ponds, including tunneling under Cook Street. This potential alternative fails to avoid significant environmental effects, due to the additional ground disturbance and energy requirements, and hence was eliminated from further analysis. (Draft EIR, pp. 43-44)

iii) Phase II Flashboard Dams

Phase II of the proposed project required the implementation of barriers to low-flow flood events to retain imported Colorado River water within the proposed basins to facilitate infiltration. One option considered for these barriers was the use of flashboards, a type of bulkhead used to raise water level and or adjust the flow rate. Flashboard systems require a concrete footing to spread forces from the boards and frames to the channel bed. The structure also acts as energy dissipation when flows overtop the flashboards. Each of the flashboards must be removed manually, which increases the time and effort required to adjust system settings, which is critical in the time before expected storm events. For minor events, the flashboards can be left in place to capture flood flows for percolation. However, for larger events, the boards require removal to prevent overtopping of the channel banks. (Draft EIR, p. 44)

Finding: This potential alternative fails to avoid significant environmental effects and was eliminated from further analysis due to the requirements for pre-storm manual labor, which increases risk and liability associated with providing channel capacity for stormwater flows during large events. (Draft EIR, p. 44)

vi) Phase II Rubber Dams

As with Phase II flashboard dams, the rubber dam option would offer a variation in design of the Phase II features. Rubber dams were considered for engineering and operational flexibility. The

height of rubber dams can be easily, and even automatically, adjusted for water conservation operations. This is particularly helpful for operations during high stormwater flow situations where the system can be kept at a set water level height to encourage water conservation during small events, while the rubber dams would lower themselves to pass larger runoff events. During runoff recession flows, the dams could be kept at safe heights to capture as much water as possible. Rubber dams are also more reliable than sugar berms during storm flows and more flexible than flashboards. (Draft EIR, p. 44)

Finding: This potential alternative fails to avoid significant environmental effects and was eliminated from further analysis due to the requirements for pre-storm manual labor, which increases risk and liability associated with providing channel capacity for stormwater flows during large events. (Draft EIR, p. 44)

b. Alternatives Selected for Further Analysis

In addition to the proposed project, the EIR assesses three alternatives: the No Project Alternative, the Phase I Only Alternative, and the Revised Phase II Alternative. Each of these alternatives is discussed below. With respect to the No Project Alternative, Section 15126.6(e) of the State CEQA Guidelines requires that an EIR evaluate a “no project” alternative to allow decision makers to compare the impacts of approving a proposed project with the impacts of not approving that project.

i. Alternative 1: No Project Alternative

Description: Under Alternative 1, the proposed project would not be implemented, existing operations and maintenance activities at the WRP10 site would continue, and existing vegetation management within the Whitewater River Stormwater Channel would continue. No new groundwater replenishment ponds would be implemented, and unused ponds located at WRP10 would not be repurposed for replenishing the underlying groundwater basin with Colorado River water. Existing facilities operated and managed by CVWD would not have the capacity to store its allocation of Colorado River water, and increased groundwater replenishment would not occur. (Draft EIR, pp. 41-42)

Finding: The CVWD Board of Directors rejects the No Project Alternative on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) Existing facilities operated and managed by CVWD would not have the capacity to store its allocation of Colorado River water, and increased groundwater replenishment would not occur; (2) the alternative fails to meet the basic Project objectives. Therefore, the No Project Alternative is eliminated from further consideration.

Facts in Support of Finding. The No Project Alternative would avoid all of the potential Project impacts, including the significant and unavoidable impacts regarding greenhouse gas emissions and water quality effects from total dissolved solids. However, the No Project Alternative would not attain any of the Project Objectives.

ii. Alternative 2: Phase I Only Alternative

Description: Under Alternative 2, only Phase I of the proposed project would be implemented. As described for the proposed project, this would include the re-purposing and improvement of existing ponds located adjacent to the north of the WRP10 site, and extension of pipeline to facilitate delivery of imported Colorado River water to these ponds. Colorado River water would

be transmitted to the site via the existing Mid-Valley Pipeline; the Mid-Valley Pipeline would be extended within and to the north of the WRP10 site under Phase I, in order to transmit water from the main Mid-Valley Pipeline located within the stormwater channel (connecting to the Mid-Valley Pipeline Pump Station in Indio). Colorado River water would be deposited in ponds on the northern portion of the WRP10 site and allowed to percolate to the subsurface to replenish the underlying groundwater basin. As with the proposed project and described in Section 2.5.1 of the EIR, Colorado River water is delivered to the CVWD jurisdiction via the Coachella Canal, which transmits Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Coachella Valley. As described in the Project Description (Section 2.6 of Draft EIR), Phase I of the proposed project would include the re-purposing of existing ponds located north and adjacent to the WRP10 site. No co-mingling of Colorado River water with secondary effluent would occur as a result of the proposed project. (Draft EIR, p. 42)

Phase II of the proposed project would not occur and no construction within the Whitewater River Stormwater Channel would occur. No extension of the Mid-Valley Pipeline would occur. In addition, the secondary effluent pump station and expansion/reconfiguration of the secondary effluent storage area located on the WRP10 site would not be constructed under the Phase I Only Alternative. (Draft EIR, p. 42)

With implementation of this alternative, CVWD would not maximize use of its allocation of Colorado River water, minimizing groundwater replenishment benefits in comparison with the proposed project due to the elimination of replenishment basins on the Phase II site. Please see Sections 2.4 and 2.5 of the Draft EIR for discussion of CVWD's QSA for Colorado River water. (Draft EIR, p. 42)

Finding: The CVWD Board of Directors rejects Alternative 2, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative would not allow CVWD to maximize use of its allocation of Colorado River water, minimizing groundwater replenishment benefits in comparison with the proposed project due to the elimination of replenishment basins on the Phase II site; (2) the alternative fails to achieve a basic Project objective of maximizing groundwater replenishment and water supply reliability. Therefore, Alternative 2 is eliminated from further consideration.

Facts in Support of Finding. Alternative 2 would still result in significant and unavoidable impacts regarding water quality effects from total dissolved solids. Alternative 2 would disturb less area when compared only to the proposed project, but would not meet Project objectives, as discussed above.

iii. Alternative 3: Revised Phase II Alternative

Description: Under Alternative 3, only Phase II of the proposed project would be implemented. As described for the proposed project, this would include the construction of detention/infiltration ponds within the Whitewater River Stormwater Channel, as well as an approximately 0.5-mile extension of the Mid-Valley Pipeline located within the stormwater channel, consistent with the design of the existing Mid-Valley Pipeline within the channel; as such, the pipeline extension would be buried to a depth of approximately 20 feet, and backfilled with a material designed to protect the pipeline extension. Infiltration ponds within the stormwater channel would be located on either side of the pipeline extension, to maximize permeability and infiltration potential. (Draft EIR, p. 42)

Secondary effluent ponds in the southern portion of the WRP10 site would not be improved, and a new secondary effluent pump station would not be constructed within the WRP10 site (because in the absence of Phase I of the project, secondary effluent treatment and transmission operations would continue as-is on the WRP10 site, and no modifications to the storage or transmittal of secondary effluent on the WRP10 site would be necessary). (Draft EIR, p. 42)

Similar to Alternative 2, discussed above, this alternative may not enable CVWD to maximize use of its allocation of Colorado River water. In order to capture, store, and infiltrate water under this alternative in such a way that CVWD's QSA for Colorado River water would be maximized, additional ponds would be required within the stormwater channel than would occur under the proposed project (please see Sections 2.4 and 2.5 of Draft EIR for discussion of CVWD's QSA for Colorado River water). As such, ponds may need to be implemented along the entire stretch of channel between Cook Street and Fred Waring Drive. Although this area is previously disturbed, due to its current use as a stormwater channel, it does not already contain the facilities required for the proposed groundwater replenishment activities, such as are present on the Phase I site (which would not be utilized under this alternative); therefore, environmental impacts associated with project implementation would be amplified in comparison with the proposed project and Alternative 2. (Draft EIR, p. 43)

Finding: The CVWD Board of Directors rejects Alternative 3, on the following grounds, each of which individually provides sufficient justification for rejection of this alternative: (1) the alternative would not allow CVWD to maximize use of its allocation of Colorado River water, minimizing groundwater replenishment benefits in comparison with the proposed project due to the elimination of replenishment basins on the Phase I site; (2) the alternative fails to achieve a basic Project objective of maximizing groundwater replenishment and water supply reliability. Therefore, the Alternative 3 is eliminated from further consideration.

Facts in Support of Finding. Alternative 3 would still result in significant and unavoidable impacts regarding greenhouse gas emissions and water quality effects from total dissolved solids. Alternative 3 would disturb less area when compared only to the proposed project, but would not meet Project objectives, as discussed above.

c. Environmentally Superior Alternative

The CEQA Guidelines Section 15126.6(e) requires that an environmentally superior alternative be identified among the alternatives considered. According to CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives evaluated. The environmentally superior alternative is generally defined as the alternative that would result in the fewest adverse environmental impacts on the project sites and surrounding areas. (Draft EIR, p. 247)

Table 30 in the EIR provides an overview comparison of the proposed project and alternatives. (Draft EIR, p. 248)

In this case, the No Project Alternative is the environmentally superior alternative, insofar as it would result in no direct impacts on the environment. However, the No Project Alternative would not meet any of the project objectives. (Draft EIR, p. 248)

The Phase I Only Alternative and Revised Phase II Alternative generally have similar impacts when compared to the proposed project, with exceptions in some environmental issue areas where

impacts are tied to ground-disturbing activities. Both alternatives would slightly reduce impacts of the proposed project because each would reduce the area of disturbance. The Phase I Only Alternative would be slightly preferable to the Revised Phase II Alternative due to the avoidance of impacts associated with air quality and GHG emissions during ground-disturbing activities within the Whitewater River Stormwater Channel, because less land disturbance would occur under the Phase I Only Alternative than the Revised Phase II Alternative. (Draft EIR, p. 249)

However, neither the Phase I Only Alternative nor the Revised Phase II Alternative would have capacity to implement all identified objectives of the proposed project. The proposed project would meet all project objectives, and all potential environmental impacts would be mitigated to less-than-significant levels with the exception of greenhouse gas emissions and water quality impacts associated with TDS concentrations, where potential emissions would be significant and unavoidable. (Draft EIR, p. 249)

7 Statement of Overriding Considerations

Pursuant to Public Resources Code Section 21081(b) and CEQA Guidelines Sections 15093 and 15043, CVWD has balanced the economic, legal, social, technological, and other benefits of the proposed project, against the following unavoidable adverse impacts associated with the proposed project identified in Section 5.3, above, and has adopted all feasible mitigation measures with respect to the specific impacts described in Section 5.3 in the environmental impact areas of Greenhouse Gas Emissions, and Hydrology and Water Quality. CVWD also has examined alternatives to the proposed project, none of which meet the Project objectives nor are environmentally superior to the proposed project. CVWD declares that the EIR has identified and discussed significant effects that may occur as a result of the Project. With the implementation of existing regulations, and mitigation measures set forth in the EIR, the environmental effects of the Project can be mitigated to less than significant levels, except for unavoidable significant impacts associated with greenhouse gas emissions, and water quality effects from total dissolved solids.

CVWD declares that it has made a reasonable and good faith effort to eliminate or substantially mitigate the impacts listed above. To the extent any mitigation measures could not be incorporated, such mitigation measures are infeasible because of specific economic, legal, social, technological and other considerations and the benefits of the Project outweigh the unmitigated impacts.

CVWD declares that, having reduced the significant adverse environmental effects of the Project to the extent feasible by adopting the mitigation measures, having considered the entire administrative record on the Project, and having weighed the benefits of the Project against its unavoidable adverse impacts after mitigation, CVWD has determined that the following social, economic, and environmental benefits of the Project outweigh the potential unavoidable significant adverse impacts and render those potential adverse environmental impacts acceptable. Each benefit set forth below constitutes an overriding consideration warranting approval of the Project, independent of the other benefits, and CVWD determines that the adverse environmental impacts of the Project are “acceptable” if any of these benefits would be realized. The Project would provide the following benefits:

1. Provide an estimated 25,000 acre-feet per year (AFY) of direct groundwater replenishment using imported Colorado River water in the Palm Desert area
2. Enable CVWD to maximize use of its annual allocation of Colorado River water
3. Meet the goals of the Coachella Valley Water Management Plan (CVWD 2002 and 2012) to assure adequate quantities of safe, high-quality water at the lowest cost to CVWD water users
4. Improve local groundwater supply and quality conditions through replenishment activities
5. Upgrade capacity of the existing Mid-Valley Pipeline Pump Station utilizing two empty bays to install 800-HP pumps
6. Implement a new 200-HP pump station at WRP10 to pump Colorado River water from the Backfeed Reservoir to the replenishment ponds;
7. Expand existing Secondary Effluent Storage ponds at WRP10

8. Optimize the availability of recycled water produced at WRP10

For each and all of these reasons, CVWD finds that the benefits of the Project outweigh the significant and unavoidable environmental effects related to greenhouse gas emissions and water quality effects associated with total dissolved solids. Therefore, the adverse effects are considered “acceptable”, given the importance of this project to the overall mission of CVWD. The substantial evidence demonstrating the benefits of the Project are found in these Findings and elsewhere in the record before the CVWD Board of Directors.

8 Custodian and Location of Documents

Public Resources Code Section 21081.6(a)(2) requires that CVWD, (in its Lead Agency capacity), specify the location and custodian of the documents of other materials that constitute the record of proceedings upon which its decision has been based. CVWD is the custodian of the administrative record for the project. Copies of these documents, which constitute the Record of Proceedings, are and at all relevant times have been and will be available upon request at the CVWD office. This information is provided in compliance with Public Resources Code Section 21081.6(a)(2) and Guidelines Section 15091(e). The following location is where review of the record may be performed:

Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, California 92211

CVWD has relied upon all of the documents contained within the record of proceedings in reaching its decision on the project.

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9 Conclusion

For the foregoing reasons, CVWD finds that the Project's adverse, unavoidable environmental impacts are outweighed by the above-referenced benefits, any one of which individually would be sufficient to outweigh the adverse environmental effects of the Project. Therefore, CVWD has adopted these Findings of Fact and Statement of Overriding Considerations.

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Appendix A

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Environmental Impact Report (EIR) for the proposed project, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in this MMRP.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Air Quality							
AQ-1: Best Available Technology (BACT) for Construction Equipment							
Construction equipment shall utilize Tier 3 or Tier 4 compliant engines for diesel-fueled construction equipment during all construction activities at the project site.	Coachella Valley Water District shall inspect construction activities at the onset of project implementation and on a weekly basis during project construction to ensure that Tier 3 or Tier 4 compliant diesel- fueled engines are utilized during project construction.	During construction of the project	Throughout construction activities	Coachella Valley Water District			
Biological Resources							
BIO-1: Nesting Bird and Burrowing Owl Avoidance							
Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. A pre-construction survey for the burrowing owl is shall be completed on the project site prior to any ground-disturbing activities since suitable	If construction is to occur during the nesting season (February 1 to August 31), a qualified biologist shall complete a nesting bird survey (within one week of ground disturbance) and burrowing owl survey (no less than 14 days and no more than 30 days prior to ground disturbing activities). Results shall be submitted to Coachella Valley Water District.	Before ground disturbing activities	Once	Coachella Valley Water District			

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required.							
BIO-2: Consultation with Regulatory Agencies							
Prior to initiation of Phase II of the project, CVWD shall consult with CDFW, the USACE, and the Colorado River Basin RWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the un-vegetated Whitewater River Stormwater Channel. CVWD shall comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of Phase II of the project	Once	Coachella Valley Water District			
Cultural Resources							
CR-1: Retain a Qualified Archaeologist							
CVWD shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for archaeology, to carry out all mitigation measures related to archaeological and historic resources. This archaeologist shall work with CVWD and local Native American representatives to develop formal protocols for archaeological monitoring.	The qualified archaeologist will be responsible for carrying out all mitigation related to archaeological and historic resources.	Before construction	Once	Coachella Valley Water District			
CR-2: Archaeology Sensitivity Training							
A qualified archaeologist shall be retained to conduct a Worker’s Environmental Awareness	All construction personnel will sign a sign-in sheet acknowledging that they	Before construction	Once	Coachella Valley Water			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.	received the WEAP training.			District			
CR-3: Archaeological Spot-Checking							
A qualified archaeologist shall conduct daily spot-checks of all-project related ground disturbing activities within the WRP10 and the Whitewater River Stormwater Channel areas. Such monitoring activities should be coordinated with local Native American representatives who have requested consultation. Should conditions indicate the need for additional monitoring, the qualified archaeologist may increase the monitoring efforts and/or recommend the inclusion of a Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and a plan must be created for evaluating the find for significance under CEQA.	The archaeologist shall conduct daily spot-checks and keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
CR-4: Archaeological and Native American Monitoring within CA-RIV-64/H							
If ground-disturbing activities are required within or immediately adjacent to the boundaries of CA-RIV-64/H, a qualified archaeologist and local Native American representative shall monitor project-related ground-disturbing activities. Monitoring shall be conducted within 100 feet surrounding CA-RIV-64/H. If remnants of CA-RIV-64/H are	The archaeological and Native American monitors shall keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for significance under CEQA.							
CR-5: Unanticipated Discovery of Cultural Resources							
If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the qualified archaeologist must be contacted immediately to evaluate the find and develop a plan for treatment of the find/archaeological site. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.	All cultural resource finds will be reported to the Coachella Valley Water District. All evaluation plans and subsequent reports will be submitted to the Coachella Valley Water District for review and approval.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-6: Unanticipated Discovery of Tribal Resources							
In the event that archaeological resources, including tribal cultural resources of Native American origin, are identified during project construction, the qualified archaeologist would consult with CVWD to halt construction in the immediate area and begin or continue Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring may be required; a Native American monitor may also be required in addition to the archaeologist.	All potential tribal cultural resource finds will be reported to the Coachella Valley Water District, who will consult with local Native Americans regarding the find.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-7: Retain a Qualified Paleontologist							
Prior to initial ground disturbance, CVWD shall retain a project paleontologist, defined as a paleontologist who meets the SVP standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. A qualified paleontologist (Principal Paleontologist) is	The qualified paleontologist will be responsible for carrying out all mitigation related to paleontological resources.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
defined by the SVP standards as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year.							
CR-8: Paleontological Mitigation and Monitoring Program							
Prior to construction activity a qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program (PMMP) to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff WEAP training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.	The qualified paleontologist will be responsible for producing the PMMP and providing it to the Coachella Valley Water District for review and approval.	Before construction	Once	Coachella Valley Water District			
CR-9: Paleontological Worker Environmental Awareness Program (WEAP)							
Prior to the start of construction, the project paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting at which a qualified paleontologist shall attend. The paleontological WEAP may occur in concurrence with the archaeological WEAP. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find, and to appropriately handle the find before restarting work in the area, as	All construction personnel will sign a sign-in sheet acknowledging that they received the WEAP training.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
determined by the qualified paleontologist.							
CR-10: Paleontological Monitoring							
Ground disturbing construction activities (including grading, trenching, berm creation and new pipeline, pump station, and valve installation) exceeding 5 feet in depth in areas mapped as high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth would not require paleontological monitoring.	The paleontologist shall conduct daily monitoring and keep daily logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
Hazards and Hazardous Materials							
HAZ-1(a): Hazardous Materials Management and Spill Control Plan							
Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill	Construction monitors perform daily checks and weekly written reports to ensure compliance with hazardous	Before and during construction	Ongoing	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well as federal OSHA and Cal/OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.	materials management and spill controls.						
HAZ-1(b): Hazardous Materials Business Plan							
Prior to construction of the proposed project, a Hazardous Materials Business Plan (HMBP) shall be prepared and implemented. The HMBP shall include a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training. An existing HMBP may be updated for use under this project.	Construction monitors perform daily checks and weekly written reports to assure compliance of hazardous materials inventory, site plan, emergency response plan, and requirements for employee training.	Before and during construction	Ongoing	Coachella Valley Water District			
HAZ-2: Traffic Management Plan							
Prior to the start of construction, a Traffic Management Plan shall be developed, in coordination with County Transit, Public Works, and Coachella Valley Water District. The Traffic Management Plan shall include measures that address how to accommodate emergency evacuation and response, if needed. Measures to manage construction traffic could include warning signs, flag personnel, and scheduling deliveries outside the morning and evening peak traffic hours.	Construction monitors perform daily checks and weekly written reports to assure compliance of traffic management plan.	Before and during construction	Ongoing	Coachella Valley Water District			
Hydrology and Water Quality							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
HYD-1: Monitor Groundwater Drinking Wells and Ensure Health-based Water Standards are Met							
Coachella Valley Water District shall continue to monitor the quality of groundwater produced drinking water wells located near the groundwater recharge areas to ensure that all recognized health-based drinking water standards are met. If monitoring shows that the groundwater pumped from these wells exceeds any health-based drinking water standards due to recharge activities, CVWD will remove impacted wells from service and work with well owners to bring the drinking water supply into compliance by either providing domestic water from the domestic water system or providing appropriate well-head treatment within their respective service areas.	Coachella Valley Water District reports monitoring results to the Division of Drinking Water to ensure sufficiency of mitigation requirements and to meet drinking water standards.	During project operation	Ongoing throughout project operation	Coachella Valley Water District			
Transportation and Traffic							
TRA-1: Construction Traffic Management Plan							
The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls. Implementation of this measure would ensure that construction traffic impacts maintain a less than significant level.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of construction	Once	Coachella Valley Water District			

Appendix A

Mitigation Monitoring and Reporting Plan

Mitigation Monitoring and Reporting Plan

CEQA requires that a reporting or monitoring program be adopted for the conditions of project approval that are necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This Mitigation Monitoring and Reporting Plan (MMRP) is designed to ensure compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the Environmental Impact Report (EIR) for the proposed project, specifications are made herein that identify the action required and the monitoring that must occur. In addition, a responsible agency is identified for verifying compliance with individual conditions of approval contained in this MMRP.

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Air Quality							
AQ-1: Best Available Technology (BACT) for Construction Equipment							
Construction equipment shall utilize Tier 3 or Tier 4 compliant engines for diesel-fueled construction equipment during all construction activities at the project site.	Coachella Valley Water District shall inspect construction activities at the onset of project implementation and on a weekly basis during project construction to ensure that Tier 3 or Tier 4 compliant diesel- fueled engines are utilized during project construction.	During construction of the project	Throughout construction activities	Coachella Valley Water District			
Biological Resources							
BIO-1: Nesting Bird and Burrowing Owl Avoidance							
Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. A pre-construction survey for the burrowing owl is shall be completed on the project site prior to any ground-disturbing activities since suitable	If construction is to occur during the nesting season (February 1 to August 31), a qualified biologist shall complete a nesting bird survey (within one week of ground disturbance) and burrowing owl survey (no less than 14 days and no more than 30 days prior to ground disturbing activities). Results shall be submitted to Coachella Valley Water District.	Before ground disturbing activities	Once	Coachella Valley Water District			

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required.							
BIO-2: Consultation with Regulatory Agencies							
Prior to initiation of Phase II of the project, CVWD shall consult with CDFW, the USACE, and the Colorado River Basin RWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the un-vegetated Whitewater River Stormwater Channel. CVWD shall comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of Phase II of the project	Once	Coachella Valley Water District			
Cultural Resources							
CR-1: Retain a Qualified Archaeologist							
CVWD shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior’s Professional Qualifications Standards for archaeology, to carry out all mitigation measures related to archaeological and historic resources. This archaeologist shall work with CVWD and local Native American representatives to develop formal protocols for archaeological monitoring.	The qualified archaeologist will be responsible for carrying out all mitigation related to archaeological and historic resources.	Before construction	Once	Coachella Valley Water District			
CR-2: Archaeology Sensitivity Training							
A qualified archaeologist shall be retained to conduct a Worker’s Environmental Awareness	All construction personnel will sign a sign-in sheet acknowledging that they	Before construction	Once	Coachella Valley Water			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.	received the WEAP training.			District			
CR-3: Archaeological Spot-Checking							
A qualified archaeologist shall conduct daily spot-checks of all-project related ground disturbing activities within the WRP10 and the Whitewater River Stormwater Channel areas. Such monitoring activities should be coordinated with local Native American representatives who have requested consultation. Should conditions indicate the need for additional monitoring, the qualified archaeologist may increase the monitoring efforts and/or recommend the inclusion of a Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and a plan must be created for evaluating the find for significance under CEQA.	The archaeologist shall conduct daily spot-checks and keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
CR-4: Archaeological and Native American Monitoring within CA-RIV-64/H							
If ground-disturbing activities are required within or immediately adjacent to the boundaries of CA-RIV-64/H, a qualified archaeologist and local Native American representative shall monitor project-related ground-disturbing activities. Monitoring shall be conducted within 100 feet surrounding CA-RIV-64/H. If remnants of CA-RIV-64/H are	The archaeological and Native American monitors shall keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for significance under CEQA.							
CR-5: Unanticipated Discovery of Cultural Resources							
If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the qualified archaeologist must be contacted immediately to evaluate the find and develop a plan for treatment of the find/archaeological site. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.	All cultural resource finds will be reported to the Coachella Valley Water District. All evaluation plans and subsequent reports will be submitted to the Coachella Valley Water District for review and approval.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-6: Unanticipated Discovery of Tribal Resources							
In the event that archaeological resources, including tribal cultural resources of Native American origin, are identified during project construction, the qualified archaeologist would consult with CVWD to halt construction in the immediate area and begin or continue Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring may be required; a Native American monitor may also be required in addition to the archaeologist.	All potential tribal cultural resource finds will be reported to the Coachella Valley Water District, who will consult with local Native Americans regarding the find.	During construction	Ongoing throughout construction	Coachella Valley Water District			
CR-7: Retain a Qualified Paleontologist							
Prior to initial ground disturbance, CVWD shall retain a project paleontologist, defined as a paleontologist who meets the SVP standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. A qualified paleontologist (Principal Paleontologist) is	The qualified paleontologist will be responsible for carrying out all mitigation related to paleontological resources.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
defined by the SVP standards as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year.							
CR-8: Paleontological Mitigation and Monitoring Program							
Prior to construction activity a qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program (PMMP) to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff WEAP training, paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.	The qualified paleontologist will be responsible for producing the PMMP and providing it to the Coachella Valley Water District for review and approval.	Before construction	Once	Coachella Valley Water District			
CR-9: Paleontological Worker Environmental Awareness Program (WEAP)							
Prior to the start of construction, the project paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting at which a qualified paleontologist shall attend. The paleontological WEAP may occur in concurrence with the archaeological WEAP. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find, and to appropriately handle the find before restarting work in the area, as	All construction personnel will sign a sign-in sheet acknowledging that they received the WEAP training.	Before construction	Once	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
determined by the qualified paleontologist.							
CR-10: Paleontological Monitoring							
Ground disturbing construction activities (including grading, trenching, berm creation and new pipeline, pump station, and valve installation) exceeding 5 feet in depth in areas mapped as high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth would not require paleontological monitoring.	The paleontologist shall conduct daily monitoring and keep daily logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.	During construction	Daily throughout ground-disturbing activities	Coachella Valley Water District			
Hazards and Hazardous Materials							
HAZ-1(a): Hazardous Materials Management and Spill Control Plan							
Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill	Construction monitors perform daily checks and weekly written reports to ensure compliance with hazardous	Before and during construction	Ongoing	Coachella Valley Water District			

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well as federal OSHA and Cal/OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.	materials management and spill controls.						
HAZ-1(b): Hazardous Materials Business Plan							
Prior to construction of the proposed project, a Hazardous Materials Business Plan (HMBP) shall be prepared and implemented. The HMBP shall include a hazardous materials inventory, site plan, an emergency response plan, and requirements for employee training. An existing HMBP may be updated for use under this project.	Construction monitors perform daily checks and weekly written reports to assure compliance of hazardous materials inventory, site plan, emergency response plan, and requirements for employee training.	Before and during construction	Ongoing	Coachella Valley Water District			
HAZ-2: Traffic Management Plan							
Prior to the start of construction, a Traffic Management Plan shall be developed, in coordination with County Transit, Public Works, and Coachella Valley Water District. The Traffic Management Plan shall include measures that address how to accommodate emergency evacuation and response, if needed. Measures to manage construction traffic could include warning signs, flag personnel, and scheduling deliveries outside the morning and evening peak traffic hours.	Construction monitors perform daily checks and weekly written reports to assure compliance of traffic management plan.	Before and during construction	Ongoing	Coachella Valley Water District			
Hydrology and Water Quality							

Mitigation Measure/ Condition of Approval	Action Required	Monitoring Timing	Monitoring Frequency	Responsible Agency	Compliance Verification		
					Initial	Date	Comments
HYD-1: Monitor Groundwater Drinking Wells and Ensure Health-based Water Standards are Met							
Coachella Valley Water District shall continue to monitor the quality of groundwater produced drinking water wells located near the groundwater recharge areas to ensure that all recognized health-based drinking water standards are met. If monitoring shows that the groundwater pumped from these wells exceeds any health-based drinking water standards due to recharge activities, CVWD will remove impacted wells from service and work with well owners to bring the drinking water supply into compliance by either providing domestic water from the domestic water system or providing appropriate well-head treatment within their respective service areas.	Coachella Valley Water District reports monitoring results to the Division of Drinking Water to ensure sufficiency of mitigation requirements and to meet drinking water standards.	During project operation	Ongoing throughout project operation	Coachella Valley Water District			
Transportation and Traffic							
TRA-1: Construction Traffic Management Plan							
The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls. Implementation of this measure would ensure that construction traffic impacts maintain a less than significant level.	Coachella Valley Water District shall consult with resource agencies.	Prior to initiation of construction	Once	Coachella Valley Water District			



Palm Desert Groundwater Replenishment Project

Draft Environmental Impact Report

SCH# 2017041072

prepared by

Coachella Valley Water District

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Palm Desert, California 92211

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November 2017



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Acronyms and Abbreviations

AAC	All American Canal
AB	Assembly Bill
AFY	acre feet per year
APCD	Air Pollution Control Districts
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ASCE	American Society of Civil Engineers
BACM	Best Avoidable Control Measures
BMP	Best Management Practices
BRA	Biological Resource Area
CAAQS	California Ambient Air Quality Standards
CBC	California Building Code
CRHR	California Register of Historical Resources
CAPCOA	California Air Pollution Control Officer's Association
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CAT	Climate Action Team
CCAA	California Clean Air Act
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CERT	Community Emergency Response Team
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	methane
CHRIS	California Historical Resources Information System

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

CMP	Congestion Management Program
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
CRDPH	County of Riverside Department of Public Health
CRPR	California Rare Plant Rank
CRRWQCB	Colorado River Regional Water Quality Control Board
Coachella Valley MSHCP	Coachella Valley Multiple Species Conservation Plan
CVWD	Coachella Valley Water District
CWA	Clean Water Act
dBA	A-weighted decibels
DDM	Development Design Manual
DOC	Department of Conservation
DPM	diesel particulate matter
DUSD	Desert Sands Unified School District
DWR	Department of Water Resources
EIC	Eastern Information Center
EIR	environmental impact report
EOP	Emergency Operating Plan
ESA	Endangered Species Act
FCAA	Federal Clean Air Act
FCWCD	Flood Control and Watershed Conservation District
FEMA	Federal Emergency Management Administration
FHWA	Federal Highway Administration
FIRM	flood insurance rate map
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GWP	Global Warming Potential
HAP	Hazardous Air Pollutant
HFC	hydrofluorocarbon

HMBP	Hazardous Materials Business Plan
HMMSCP	Hazardous Materials Management and spill control plan
HP	horsepower
IA	Implementation Agreement
ICCP	impressed current cathodic protection
IFC	International Fire Code
IPCC	United Nations Intergovernmental Panel on Climate Change
LOS	Level of Service
LRA	Local responsibility area
LST	Localized Significance Thresholds
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MLD	most likely descendant
MMT	million metric tons
MOU	Memorandum of Understanding
MSAT	mobile source air toxics
MSL	mean sea level
MVP	Mid-Valley Pipeline
NAAQS	National Ambient Air Quality Standard
NAHC	Native American Heritage Commission
NEPA	National Environmental Policy Act
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NMFS	National Marine Fisheries Service
NO ₂	nitrogen dioxide
NOC	notice of completion
NOD	notice of determination
NOP	notice of preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OES	Office of Emergency Services (Riverside)

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

OHP	Office of Historic Preservation
OS	Open Space
OSHA	(federal) Occupational Safety and Hazard Administration
P	Public Facility
Pb	lead
PFC	perfluorocarbons
PM	particulate matter (PM10 and PM2.5)
PMMP	Paleontological Mitigation and Monitoring Program
PPV	peak particle velocity
QSA	Quantification Settlement Agreement
QSA	Quantification Settlement Agreement
RCNM	Roadway Construction Noise Model
RCRA	Resource Conservation and Recovery Act
RCTC	Riverside County Transportation Commission
RHA	Rivers and Harbors Act
ROG	reactive organic compound
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SANBAG	San Bernardino Association of Governments
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SDC	Seismic Design Category
SF6	sulfur hexafluoride
SI	Service Industrial
SIP	State Implementation Plan
SMARA	State Mining and Reclamation Act
SO2	sulfur dioxide
SR	State Route
SRA	Source Receptor Area
SSAB	Salton Sea Air Basin
SSC	Species of Special Concern
SVP	Society of Vertebrate Paleontology

SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TPM	Tentative Parcel Map
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile Organic Compounds
VPD	vehicles per day
WEAP	Worker Environmental Awareness Program
WRSC	Whitewater River Stormwater Channel

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Executive Summary

The Coachella Valley Water District (“CVWD” or “District”) has prepared this Environmental Impact Report (EIR) to evaluate the potential environmental impacts related to the proposed Palm Desert Groundwater Replenishment Project (“project” or “proposed project”). CVWD is the lead agency under the California Environmental Quality Act (CEQA) for this project.

This EIR has been prepared in accordance with CEQA (as amended) (Public Resources Code §§21000-21189.3) and the 2017 State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§15000-15387). Under State CEQA Guidelines §15121 (Informational Document):

- An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency.
- While the information in the EIR does not control the agency’s ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding consideration under Section 15093.
- The information in an EIR may constitute substantial evidence in the record to support the agency’s action on the project if its decision is later challenged in court.

Under State CEQA Guidelines §15123, this Executive Summary chapter presents a brief summary of the proposed project and the potentially significant impacts and required mitigation measures. Also identified in this chapter is a summary of the alternatives to the project evaluated in this Draft EIR (Draft EIR or DEIR), including those that would avoid potentially significant effects; issues of concern/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 EIR should be consulted for specific information about the potential environmental effects and mitigation measures to address those effects.

Summary of the Proposed Project

The Palm Desert Groundwater Replenishment Project is a water supply reliability project located in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County. The proposed project would be implemented in two phases:

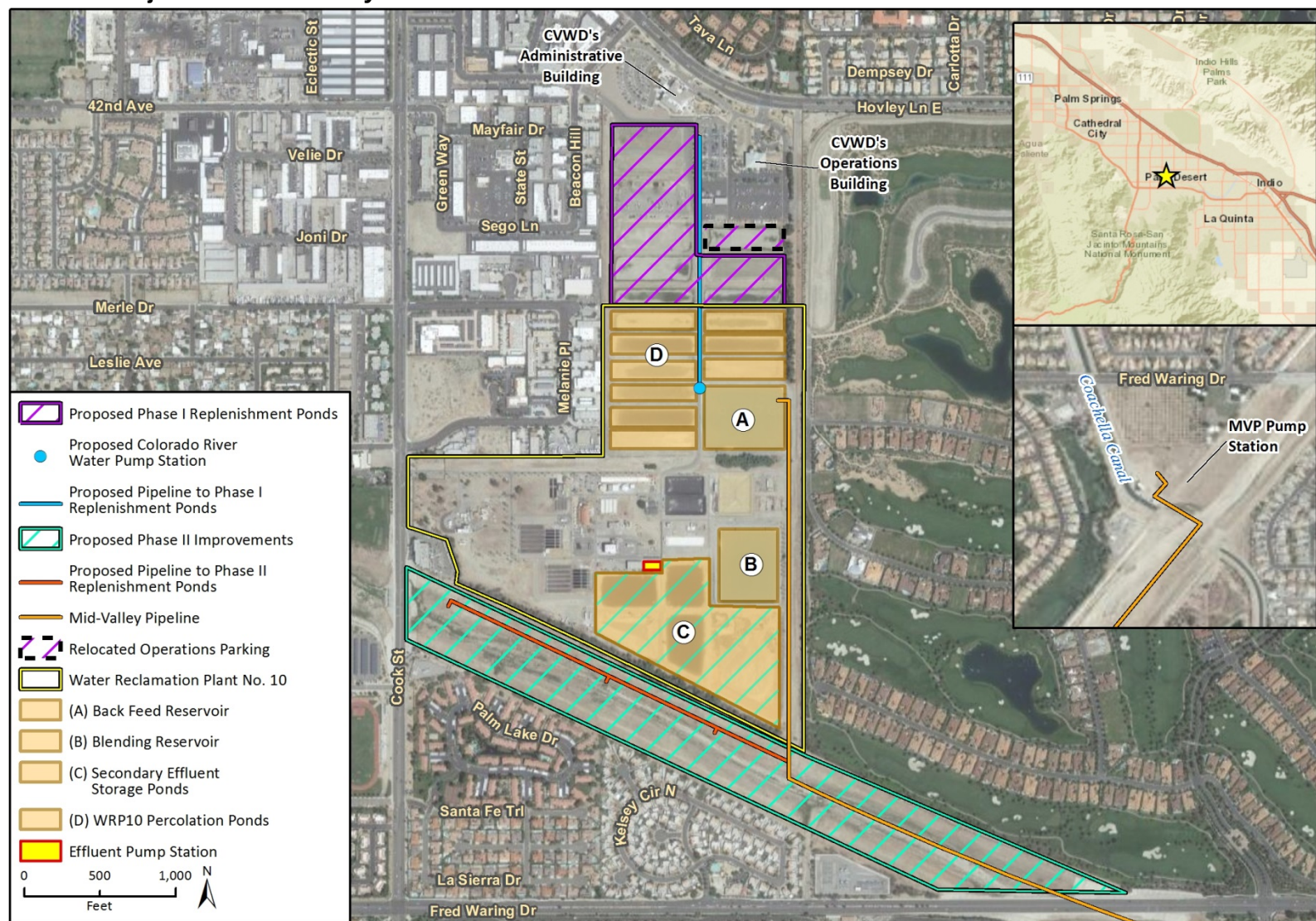
- **Phase I** of the proposed project would occur on and adjacent to the north of CVWD’s Water Reclamation Plant No. 10 (WRP10), located at 43-000 Cook Street in Palm Desert, California. Primary components of Phase I of the project are summarized below.

- Re-purpose existing ponds located adjacent to the north of CVWD's WRP10 site, to function as groundwater replenishment basins. Colorado River water would be delivered to the revised ponds for groundwater replenishment.
- Extend existing water transmission pipeline within the WRP10 site to provide transmission of imported Colorado River water from the existing pipeline to the re-purposed ponds located adjacent to the north of CVWD's WRP10 site.
- Install a Colorado River water pump station adjacent to the Back Feed Reservoir, including a minimum of two pumps with a pumping horsepower (HP) in the range of 100 to 200 HP, and a sound wall surrounding the new pump station.
- Relocate the existing WRP10 operations parking area by repurposing the northeastern-most percolation basin currently located within the WRP10 site, in order to concentrate the parking and storage of operations and maintenance vehicles to one area. The parking area will ultimately be relocated north and adjacent to WRP10.
- Install two new 800-HP pumps and a hydropneumatic tank within the existing MVP Pump Station, which is an existing structure and entirely enclosed; the existing MVP Pump Station was designed to accommodate these additional pumps.
- **Phase II** of the proposed project would occur on the WRP10 site and within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of CVWD's WRP10 site. Primary components of Phase II of the project are summarized below.
 - Construct berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin.
 - Extend the existing MVP within the Whitewater River Stormwater Channel beyond the WRP10 site to convey Colorado River water to the new detention basins included under Phase II of the project.
 - Expand and reconfigure the existing secondary effluent storage ponds within the southern portion of the existing WRP10 site to store approximately 100 million gallons of secondary effluent.
 - Construct a new Secondary Effluent Pump Station within the WRP10 site to improve the routing of secondary effluent within the existing WRP10 site to the new lower storage ponds and subsequently back to the headworks¹ at the WRP10 site.

Figure ES-1 provides an overview of the project site and proposed project features. For additional information, the proposed project is described in detail in Chapter 2 of this EIR.

¹ "Headworks" is a civil engineering term referring to a structure situated at the "head" or diversion point of a waterway. This structure is used to divert water from a river into a canal or from a large canal into a smaller canal.

Figure ES-1 Project Site and Vicinity



Imagery provided by Google and its licensors © 2017.
Additional data provided by Coachella Valley Water District, 2017.

Fig.2 Project Site and Vicinity

Statement of Project Objectives

Under State CEQA Guidelines §15124(b), the project description shall include a statement of objectives. These objectives have been designed to assist CVWD in developing a reasonable range of project alternatives to evaluate in the EIR, and aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary.

The project objectives are intended to address the purpose of the proposed Palm Desert Groundwater Replenishment Project. CVWD has identified the following list of criteria as the objectives for the project.

- Provide an estimated 25,000 acre-feet per year (AFY) of direct groundwater replenishment using imported Colorado River water in the Palm Desert area;
- Enable CVWD to maximize use of its annual allocation of Colorado River water;
- Meet the goals of the Coachella Valley Water Management Plan (CVWD 2012) to assure adequate quantities of safe, high-quality water at the lowest cost to CVWD water users;
- Improve local groundwater supply and quality conditions through replenishment activities;
- Upgrade capacity of the existing MVP Pump Station utilizing two empty bays to install 800-HP pumps;
- Implement a new 200-HP pump station at WRP10 to pump Colorado River water from the Backfeed Reservoir to the replenishment ponds;
- Expand existing Secondary Effluent Storage ponds at WRP10; and
- Optimize the availability of recycled water produced at WRP10.

Objectives of the proposed project are further addressed in Section 2.4 of this EIR.

Summary of Project Impacts and Mitigation Measures

Chapter 3, Environmental Impact Analysis, provides an assessment of potential environmental impact for all CEQA resource topics, and identifies mitigation measures to reduce significant impacts to a less than significant level, where appropriate and feasible. A summary of all impacts and mitigation measures from Chapter 3 is provided in Table 1 at the end of this chapter. The table is intended to provide a summary of the project's impacts and mitigation measures; please refer to Chapter 3 for the complete analysis and discussion.

Alternatives Summary

Chapter 5, Alternatives, of this EIR presents the alternatives analysis for the proposed project. CEQA Guidelines §15126.6 requires that an EIR describe and evaluate the comparative merits of a range of alternatives to the project that could feasibly attain most of the objectives of the project, but would avoid or substantially lessen any significant adverse effects of the project. An EIR is not required to consider every conceivable alternative to a project; rather, it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. The State CEQA Guidelines further state that the specific alternative of "no project" shall also be evaluated. The alternatives evaluated in this EIR were identified based on input from CVWD and

identification of the project's potentially significant environmental impacts in this EIR. The alternatives were selected in consideration of the following factors:

- Extent to which the alternative would accomplish most of the basic objectives of the project;
- Extent to which the alternative would avoid or lessen any of the identified significant adverse environmental effects of the project;
- Feasibility of the alternative, taking into account site/geographic suitability, economic viability, constructability, and consistency with regulatory requirements; and
- Appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit a reasoned choice by decision-makers.

In consideration of the above factors, the following alternatives were selected to be analyzed in this EIR.

- **Alternative 1: No Project Alternative.** The proposed project would not be implemented, existing operations and maintenance activities at the WRP10 site would continue, and existing vegetation management within the Whitewater River Stormwater Channel would continue.
- **Alternative 2: Phase I Only Alternative.** Only Phase I of the proposed project would be implemented, including the re-purposing and improvement of existing ponds located adjacent to the north of the existing WRP10 site. Unused ponds located at WRP10 would be repurposed for replenishing the underlying groundwater basin. A new pump station would be implemented on the WRP10 site, adjacent to the Back Feed Reservoir. Phase II of the proposed project would not occur and no construction within the Whitewater River Stormwater Channel would occur.
- **Alternative 3: Revised Phase II Alternative.** Only Phase II of the proposed project would be implemented, including the construction of detention/infiltration ponds within the Whitewater River Stormwater Channel, as well as an approximately 0.5-mile extension of the MVP located within the stormwater channel. Phase I of the proposed project would not be implemented. In addition, secondary effluent ponds in the southern portion of the WRP10 site would not be improved, and a new secondary effluent pump station would not be constructed within the WRP10 site (because in the absence of Phase I of the project, secondary effluent treatment and transmission operations would continue as-is on the WRP10 site, and no modifications to the storage or transmittal of secondary effluent on the WRP10 site would be necessary).

These alternatives are further discussed in Section 2.9 and assessed in Chapter 5 of this EIR.

In addition, this analysis considered alternatives which were introduced and evaluated in the Palm Desert Groundwater Replenishment Feasibility Study (CVWD 2017), to consider all potential feasible alternatives for groundwater replenishment that also meet the proposed project objectives.

Alternatives that were considered but eliminated for the purposes of this document are discussed in Section 5.1.

Issues of Concern / Areas of Controversy

When a Lead Agency determines that an EIR is required for a project, a Notice of Preparation (NOP) must be prepared and submitted to the State Clearinghouse. The purpose of the NOP is to provide responsible and trustee agencies, and the public, with sufficient information describing the proposed project and the potential environmental effects, to enable interested parties/persons to

make a meaningful response. CVWD issued the NOP for the proposed Palm Desert Groundwater Replenishment Project on April 25, 2017, and it concluded after the 30-day public review period concluded on May 26, 2017. In addition to the NOP, CVWD conducted a public scoping meeting for the project on May 10, 2017 at the CVWD Administration Building in Palm Desert, California. The purpose of the meeting was to present information about the project to the public and agencies, and to solicit input as to the scope and content of the EIR.

The public scoping period for the proposed project is further discussed in Section 1.4.1 of this EIR. Based on the comments received on the NOP and at the scoping meeting, the following issues of concern were raised about the project:

- Noise associated with project operations
- Potential impacts to groundwater quality
- Potential contamination and hazardous materials concerns

Table 1, below, provides an overview of impacts associated with the proposed project, and the associated significance determinations, which were determined per CEQA significance criteria for each respective issue area. Significance criteria are listed out in each issue area section included in Chapter 3 of this EIR; where no impact would occur under a particular significance criterion, the impact analyses in Chapter 3 provide discussion of how and why no impact would occur, in issue-area-specific subsections titled “Areas of No Project Impact”. Where no impact would occur under a particular significance criterion, no impact statement is introduced in this EIR; as such, impact significance determinations listed in Table 1 below are either “Less than Significant”, “Less than Significant with Mitigation”, or “Significant and Unavoidable”.

Table 1 Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance Determination
Aesthetics		
Impact AE-1 Project construction would not have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	n/a	Less than Significant
Impact AE-2 Project construction would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	n/a	Less than Significant
Impact AE-3 Proposed project facilities would not have a substantial adverse impact on a scenic vista, resource, or on the visual character of a site or its surroundings.	n/a	Less than Significant
Impact AE-4 Project operation would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	n/a	Less than Significant
Air Quality		
Impact AQ-1 Construction of the proposed project would result in temporary generation of air pollutants, which would affect local air quality. Short term emissions would exceed SCAQMD thresholds for NO _x .	Mitigation Measure AQ-1. Best Available Technology (BACT) for Construction Equipment.	Less than Significant with Mitigation

Impact	Mitigation Measures	Significance Determination
Impact AQ-2 Operation of the proposed project would not exceed SCAQMD thresholds or expose sensitive receptors to substantial pollutant concentrations.	n/a	Less than Significant
Impact AQ-3 The proposed project would continue to utilize odor prevention technology and would not emit odors.	n/a	Less than Significant
Impact AQ-4 The proposed project would not conflict with the applicable air quality plan.	Mitigation Measure AQ-1 (above)	Less than Significant with Mitigation
Biological Resources		
Impact BIO-1 The Project would have a substantial adverse effect, either directly or indirectly, or through habitat modifications, on species identified as a candidate, sensitive, or special status species (including species listed as threatened or endangered) in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.	Mitigation Measure BIO-1. Nesting Bird and Burrowing Owl Avoidance.	Less than Significant with Mitigation
Impact Bio-3 The Project would 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.	Mitigation Measure BIO-2. Consultation with Regulatory Agencies.	Less than Significant with Mitigation
Impact Bio-4 The Project would not 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.	n/a	Less than Significant
Impact Bio-5 The Project would not conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Additionally, The Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan.	n/a	Less than Significant
Cultural Resources		
Impact CR-1 Construction of the proposed project would involve surface excavation, which has the potential to unearth or adversely impact historical or archaeological resources.	Mitigation Measure CR-1. Retain a Qualified Archaeologist. Mitigation Measure CR-2. Archaeological Sensitivity Training. Mitigation Measure CR-3. Archaeological Spot-Checking. Mitigation Measure CR-4. Archaeological and Native American Monitoring within CA-RIV-64/H. Mitigation Measure CR-5. Unanticipated Discovery of Cultural Resources.	Less than Significant with Mitigation

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Impact	Mitigation Measures	Significance Determination
Impact CR-2 Construction of the proposed project would involve surface excavation, which has the potential to impact previously unidentified tribal cultural resources.	Mitigation Measure CR-6. Unanticipated Discovery of Tribal Cultural Resources.	Less than Significant with Mitigation
Impact CR-3 Construction of the proposed project would involve surface excavation, which has the potential to unearth or adversely impact paleontological resources.	Mitigation Measure CR-7. Retain a Qualified Paleontologist. Mitigation Measure CR-8. Paleontological Mitigation and Monitoring Program. Mitigation Measure CR-9. Paleontological Worker Environmental Awareness Program (WEAP). Mitigation Measure CR-10. Paleontological Monitoring.	Less than Significant with Mitigation
Impact CR-4 Construction of the proposed project would involve excavation, which has the potential to unearth or adversely impact previously unidentified human remains.	n/a	Less than Significant
Geology and Soils		
Impact GS-1 Construction of the project would not result in substantial soil erosion or the loss of top soil.	n/a	Less than Significant
Impact GS-2 Construction of Some project pipeline components would be located on geologic units or soils that are unstable or that may become unstable during project construction, and potentially result in soil instability or collapse. However, this exposure would not result in substantial risk to people or structures.	n/a	Less than Significant
Impact GS-3 The proposed project would be subject to strong groundshaking and would have not be installed in a fault zone, however seismically induced ground shaking could destroy or damage structures and infrastructure, resulting in loss of property or risk to human safety. However, the project's compliance with all applicable provisions of federal, state, and local construction and design standards would render impacts less than significant.	n/a	Less than Significant
Impact GS-4 The project site is not located on a geologic unit 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, and would not expose people or structures to seismic-related ground failure including liquefaction or landslides.	n/a	Less than Significant
Impact GS-5 Some of the project infrastructure would be located on sites with corrosive soils. However, this exposure would not result in a substantial risk to people or structures. The project would not be located on expansive soils.	n/a	Less than Significant
Greenhouse Gas Emissions		

Impact	Mitigation Measures	Significance Determination
Impact GHG-1 The proposed project would not conflict with GHG reduction policies in the 2016-2040 SCAG RTP/SCS and Palm Desert Environmental Sustainability Plan.	n/a	Less than Significant
Impact GHG-2 The proposed project would generate greenhouse gas emissions through construction and energy use. GHG emissions would exceed the SCAQMD threshold for annual greenhouse gas emissions. The project would conflict with AB 32 and SB 32.	n/a	Significant and Unavoidable
Hazards and Hazardous Materials		
Impact HAZ-1 The project would not create a significant hazard to the public or the environment related to transport, use, or disposal of hazardous materials during construction, or due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	Mitigation Measure HAZ-1(a). Hazardous Materials Management and Spill Control Plan. Mitigation Measure HAZ-1(b). Hazardous Materials Business Plan.	Less than Significant with Mitigation
Impact HAZ-2 The Project site would not emit hazardous emissions or handle hazardous materials or wastes within 0.25 mile of an existing or proposed school.	n/a	Less than Significant
Impact HAZ-3 The Project site would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Mitigation Measure HAZ-2. Traffic Management Plan.	Less than Significant with Mitigation
Hydrology and Water Quality		
Impact HWQ-1 Construction of the proposed project would require grading and excavation of soil, which would inherently increase the potential for erosion and sedimentation of surface waters. Construction equipment operating in the Whitewater River Stormwater Channel would have the potential to leak oil, diesel, grease and other chemicals, resulting in potential discharges to surface waters or groundwater aquifers. Implementation of the required construction Storm Water Pollution Prevention Plans (SWPPP) would minimize the potential for erosion and discharge of equipment leaks. Violations of water quality standards or waste discharge requirements would be prevented.	n/a	Less than Significant

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Impact	Mitigation Measures	Significance Determination
Impact HWQ-2 Construction of the proposed project would require water and temporarily increase potable water demand, which is from groundwater sources. Extension of the MVP may require dewatering during construction, which would temporarily remove local groundwater. However, construction would be short term and temporary, and not demand much water use. Groundwater removed from dewatering would be discharged to beneficial reuse ponds or existing drainage systems for agricultural lands or stormwater facilities where infiltration could occur, thereby minimizing potential impacts. Construction of the project, including dewatering, would not substantially deplete groundwater supplies or interfere with groundwater recharge.	n/a	Less than Significant
Impact HWQ-3 Construction of the proposed project would require the construction workforce to work within the Whitewater River Stormwater Channel, which is a Special Flood Hazard Area. Due to the nature of the construction activities required in the Whitewater River Stormwater Channel, construction crews would be unable to work in the channel during floods. Thus, construction of the proposed project would not expose people to a significant risk of injury or death as a result of flooding.	n/a	Less than Significant
Impact HWQ-4 Runoff from the expanded Palm Desert Operations Unit may increase the volume of polluted stormwater runoff. However, on-site infiltration BMPs will be used to prevent run-off to surface waters. The increased capacity for secondary effluent would be operated compliant with federal, state, and local regulations. Thus, operation of the proposed project would not violate surface water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or substantially degrade surface water quality. Runoff from project operations would not exceed the capacity of existing or planned stormwater drainage systems.	n/a	Less than Significant

Impact	Mitigation Measures	Significance Determination
Impact HWQ-5 Operation of the groundwater replenishment basins within the Whitewater River Stormwater Channel would alter the drainage patterns within the channel. However, the basins would be operated to allow surface flows to pass through during storm events. The stormwater management functions of the channel would not be altered. The basins would include features that accommodate flood events and do not restrict or impede flood flows. These features would not require manual operation and CVWD staff would not be required to work in the channel or basins during flood events. Thus, operation of the replenishment basins would not restrict or impede flood flows, change the flood storage capacity of the channel, result in flooding on- or off-site, or expose people to significant risks of floods.	n/a	Less than Significant
Impact HWQ-6 Operation of the project would introduce Colorado River water to manmade replenishment basins on the project site in order to facilitate replenishment of the underlying groundwater basin, which would increase the total dissolved solids (TDS) in some groundwater and could cause water produced by some Coachella Valley wells to exceed the recommended consumer acceptance contaminant levels and health-based standards for drinking water.	Mitigation Measure HYD-1. Monitor Groundwater Drinking Wells and Ensure Health-based Water Standards are Met.	Significant and Unavoidable
Land Use and Planning		
Impact LUP-1 Potential environmental impacts resulting from construction of the project would not conflict with an applicable land use plan, policy, or regulation that has been adopted with the purpose of avoiding or mitigating an environmental impact.	n/a	Less than Significant
Impact LUP-2 Potential environmental impacts resulting from operation of the project would not conflict with an applicable land use plan, policy, or regulation that has been adopted with the purpose of avoiding or mitigating an environmental impact.	n/a	Less than Significant
Noise		
Impact NV-1 Project construction would result in noise levels in excess of local standards.	n/a	Less than Significant
Impact NV-2 Project construction would not result in excessive ground-borne vibration.	n/a	Less than Significant
Transportation and Traffic		
Impact TR-1 Project construction would conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, or result in inadequate emergency access.	Mitigation Measure TRA-1. Construction Traffic Management Plan.	Less than Significant with Mitigation

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Impact	Mitigation Measures	Significance Determination
Impact TR-2 Operation and maintenance of the proposed project will not conflict with an 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.	n/a	Less than Significant
Utilities and Service Systems		
Impact UTL-1 Construction of the proposed project would not generate new sources of wastewater. Construction would increase the potential for erosion and sedimentation from stormwater runoff. Implementation of the required Stormwater Pollution Prevention Plan and associated best management practices would minimize erosion and discharge of polluted runoff. New or expanded stormwater management facilities would not be required.	n/a	Less than Significant
Impact UTL-2 Construction of the proposed project would require water and temporarily increase water demand. The CVWD WRP10 site has sufficient water supplies to meet existing water demand in combination with the temporary, short-term demands of project construction.	n/a	Less than Significant
Impact UTL-3 The proposed project would be served by a landfill with sufficient permitted capacity to accommodate the project's construction solid waste disposal needs. Construction would not result in a substantial adverse effect related to compliance with federal, state, and local statutes and regulations pertaining to solid waste.	n/a	Less than Significant

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1 Introduction

1.1 Legal Authority

The proposed project is a water supply reliability project located in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County. The proposed project would be implemented in two phases. Phase I of the proposed project would occur on and adjacent to the north of CVWD's Water Reclamation Plant No. 10 (WRP10), and would consist of re-purposing existing ponds for groundwater replenishment, extending the existing Mid-Valley Pipeline (MVP) within the WRP10 site, installing a new pump station within WRP10, and installing two new pumps within the existing MVP pump station. Phase II of the proposed project would occur within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of the Coachella Valley Water District (CVWD) WRP10 site, and would construct new berms to create detention basins designed to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin; Phase II also includes an extension of the existing MVP, which will be used to convey Colorado River water to the Phase II ponds.

The proposed project requires the discretionary approval by the Coachella Valley Water District Board of Directors; therefore, the project is subject to the environmental review requirements of CEQA. In accordance with Section 15121 of the *CEQA Guidelines* (California Code of Regulations, Title 14), the purpose of this Environmental Impact Report (EIR) is to serve as an informational document that:

“...will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

This EIR has been prepared as a project-level EIR pursuant to Section 15161 of the *CEQA Guidelines*. As stated in the *CEQA Guidelines*:

“This type of EIR should focus primarily on the changes in the environment that would result from the development project. The EIR shall examine all phases of the project, including planning, construction, and operation.”

This EIR is to serve as an informational document for the public and CVWD's decision-makers. The process will include public hearings before the CVWD Board of Directors to consider certification of a Final EIR and approval of the proposed project.

1.2 Lead, Responsible, and Trustee Agencies

The *CEQA Guidelines* define lead, responsible and trustee agencies.

- **Lead Agency.** A lead agency is the public agency that has the primary responsibility for approving a project. The Coachella Valley Water District is the lead agency for the project. Per the California Code of Regulations (Title 14, Chapter 3, §15367), the lead agency is responsible for deciding whether an EIR or Negative Declaration is required for a proposed project. For this

proposed project, it was determined that an EIR is the appropriate level of CEQA documentation, due to the potential for significant environmental impacts to occur. Therefore, this EIR assesses all potential impacts of the project and identified mitigation measures as feasible to reduce or minimize potential impacts. Contact information for the lead agency is: Luke Stowe, CVWD Environmental Specialist, 75515 Hovley Lane East, Palm Desert CA; Phone: (760) 398-2651.

- **Responsible Agencies.** Responsible agencies include any public agencies (other than the lead agency) which have discretionary approval power over the project; as such, permitting approval by responsible agencies needs to be issued for a project to be implemented. For this project, responsible agencies include the Colorado River Basin Regional Water Quality Control Board (RWQCB), which regulates water quality in the region, and the South Coast Air Quality Management District (SCAQMD), which regulates air quality in the region. The EIR will be submitted to these agencies for review and comment.
- **Trustee Agencies.** A trustee agency refers to a state agency having jurisdiction by law over natural resources affected by a project. There are no identified trustee agencies for this project.

1.3 Purpose of the EIR

The CVWD is the lead agency for implementation of CEQA for the Palm Desert Groundwater Replenishment Project. CVWD has prepared this EIR to provide information about the potentially significant adverse environmental effects of the proposed project, to identify reasonable and feasible measures intended to minimize adverse effects (where necessary), and to describe and analyze alternatives to the proposed project.

The EIR has been prepared in accordance with CEQA (Public Resources Code §§21000-21189.3) and the 2017 State CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, §§15000-15387). Under State CEQA Guidelines §15121 (Informational Document):

- A. An EIR is an informational document which will inform public agency decision makers and the public generally of the significant environmental effect of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information which may be presented to the agency;
- B. While the information in the EIR does not control the agency's ultimate discretion on the project, the agency must respond to each significant effect identified in the EIR by making findings under Section 15091 and if necessary by making a statement of overriding consideration under Section 15093.
- C. The information in an EIR may constitute substantial evidence in the record to support the agency's action on the project if its decision is later challenged in court.

1.4 Scope and Content

This EIR addresses potential impacts that could occur under the environmental issue areas identified in the *CEQA Guidelines* Appendix G as a result of the proposed project. As noted above in Section 1.2, an Initial Study was not prepared for this project, as it was anticipated in the early stages of the CEQA process that an EIR would be the appropriate level of CEQA documentation.

In preparing this EIR, use was made of pertinent CVWD policies and guidelines, certified EIRs and adopted CEQA documents for the project area, and other relevant background documents and published materials. A full reference list is provided in Section 6.1, *Bibliography*.

The alternatives section of this EIR (Chapter 5) was prepared in accordance with Section 15126.6 of the *CEQA Guidelines* and focuses on alternatives that are capable of the following:

- Eliminate or reduce significant adverse effects associated with the project, and
- Feasibly attain the basic project objectives.

In addition, the alternatives section identifies the "environmentally superior" alternative among the alternatives assessed. The alternatives evaluated include the CEQA-required "No Project" alternative and two alternative development scenarios for the project area.

The level of detail utilized throughout this EIR is consistent with the requirements of CEQA and applicable court decisions. Section 15151 of the *CEQA Guidelines* provides the standard of adequacy on which this document is based. The *Guidelines* state:

“An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of the proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection, but for adequacy, completeness, and a good faith effort at full disclosure.”

1.5 CEQA Process Overview

The environmental impact review process, as required under CEQA, is summarized below and illustrated in Figure 1. An overview of the CEQA process for the project is presented in sequential order.

1. **Notice of Preparation.** After deciding that an EIR is required, the lead agency (CVWD) must file a NOP soliciting input on the EIR scope to the State Clearinghouse, other concerned agencies, and parties previously requesting notice in writing (CEQA Guidelines Section 15082; Public Resources Code Section 21092.2). The NOP must be posted in the County Clerk’s office for 30 days. The NOP may be accompanied by an Initial Study that identifies the issue areas for which the project could create significant environmental impacts. An Initial Study was not prepared for this project because it was determined early in the CEQA process that an EIR is the appropriate level of CEQA documentation.

CVWD circulated the NOP to relevant agencies, Native American tribes, and other interested agencies, organizations, and individuals; the NOP was circulated on April 27, 2017, and comments responding to the NOP were received through May 26, 2017.

2. **Scoping Meeting.** CEQA requires a scoping meeting for projects of statewide, regional, or local significance. CVWD held a scoping meeting for the proposed project on Tuesday, May 10, 2017 at 6:00 p.m., at CVWD’s Steve Robbins Administration Building, located at 75-515 Hovley Lane East, Palm Desert, California 92211. A presentation was given at the scoping meeting to provide an overview of the proposed project and the CEQA process; this

presentation is included as Appendix E to this EIR. See Section 1.5.1 below for a list of comments received and where the response can be found in the Draft EIR.

3. **Draft EIR.** The Draft EIR must contain: a) table of contents or index; b) summary; c) project description; d) environmental setting; e) discussion of significant impacts (direct, indirect, cumulative, growth-inducing and unavoidable impacts); f) a discussion of alternatives; g) mitigation measures; and h) discussion of irreversible changes. A Draft EIR must be circulated for public and agency review for a period of at least 45 days. The public review period will be announced in local newspapers and mailings, which will also include information regarding the locations where hard copies of the Draft EIR will be available for public review.

CVWD is circulating the Draft EIR to local, state, and federal agencies, Native American tribes, and other interested agencies, organizations, and individuals. Written comments on the Draft EIR may be submitted to the lead agency during the 45-day public review period for the Draft EIR.

4. **Notice of Completion and Notice of Availability.** The lead agency must file a Notice of Completion (NOC) with the State Clearinghouse when it completes a Draft EIR, and prepare a Notice of Availability (NOA) of a Draft EIR.
 - The **NOC** will include information regarding where hard copies of the Draft EIR are available for review, as well as information on how to submit comments on the Draft EIR to the lead agency (CVWD). The lead agency will file the NOC with the County Clerk's office for 30 days (Public Resources Code Section 21092) and send a copy of the NOC to the State Clearinghouse (Office of Planning and Research). The lead agency must solicit input from other agencies and the public, and respond in writing to all comments received during the public scoping period (Public Resources Code Sections 21104 and 21253). When a Draft EIR is sent to the State Clearinghouse for review, the public review period must be 45 days unless the State Clearinghouse approves a shorter period (Public Resources Code 21091).
 - The **NOA** will include information regarding where hard copies of the Draft EIR are available for review, as well as information on how to submit comments on the Draft EIR to the lead agency (CVWD). The lead agency will provide the NOA of the Draft EIR at the same time as it sends an NOC to the State Clearinghouse. Notice must also be given to all organizations and individuals who have previously requested such notice. Notice must be filed for posting with the County Clerk of the county in which the project is to be located (Public Resources Code §21092.3). Notice will also be given by at least one of the following procedures:
 - Publication at least one time by the public agency in a newspaper of general circulation in the area affected by the proposed project;
 - Posting of notices by the public agency on and off the site in the area where the project is to be located; and/or
 - Direct mailing to the owners and occupants of property contiguous to the parcel or parcels on which the project is located.

CVWD will prepare a joint NOC/NOA and will circulate these notices to the Riverside County Clerk, the State Clearinghouse, and other interested parties (as noted above,

this include all organizations and individuals who have previously requested such notice).

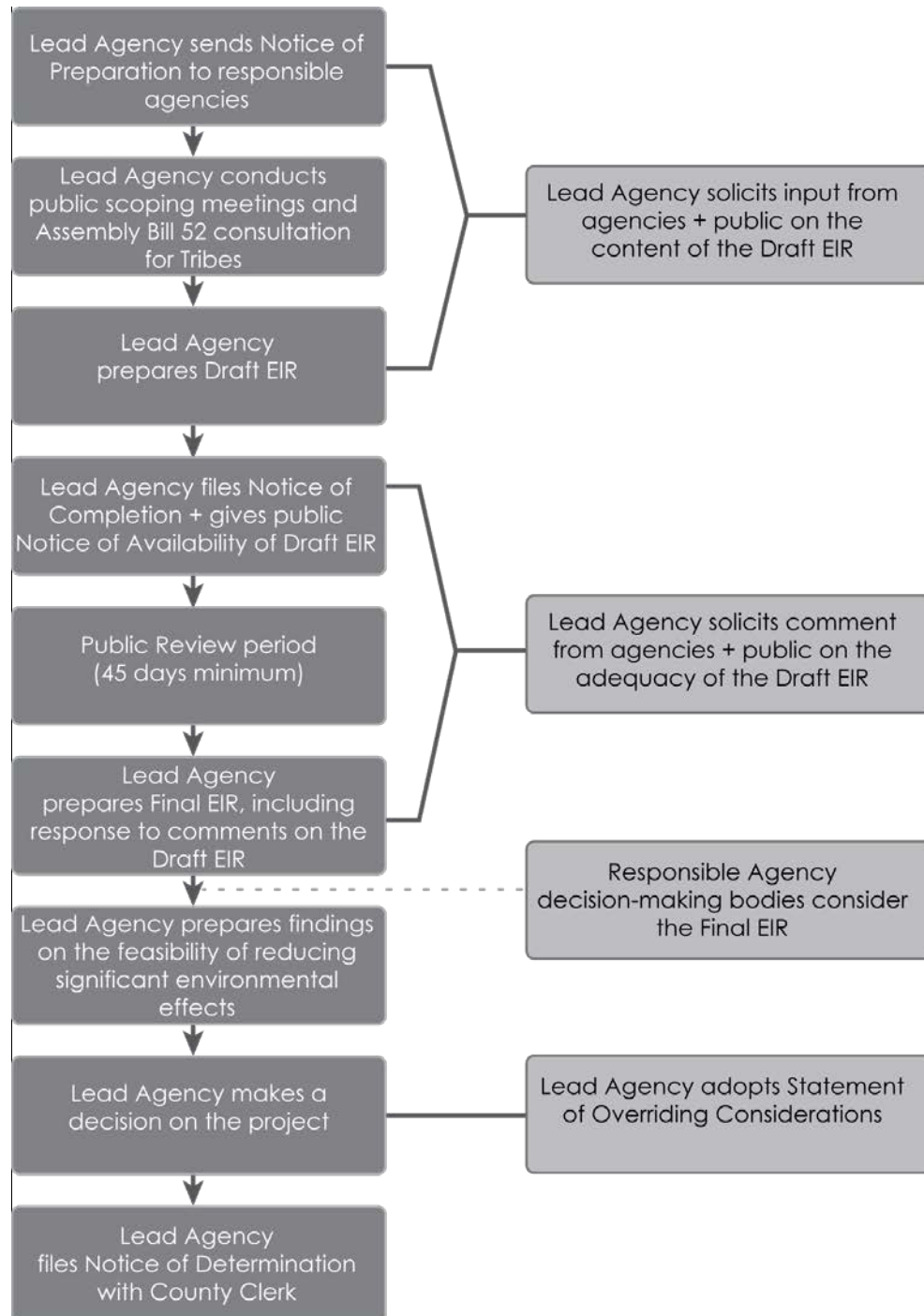
5. **Final EIR.** A Final EIR must include: a) the Draft EIR; b) copies of comments received during public review; c) list of persons and entities commenting; d) responses to comments on the Draft EIR, and e) errata, or a list of errors and corrections to the Draft EIR that are incorporated to the Final EIR. A Final EIR for the proposed project will be prepared following completion of the review period for the Draft EIR.

Per CEQA Guidelines 15088(b), CVWD's responses to written comments received on the Draft EIR will be provided to state/public agencies a minimum of 10 days prior to the CVWD Board of Directors meeting. Per public disclosure requirements of the Brown Act, the Final EIR will be available for public review at least three days prior to the Board of Directors meeting.

6. **Certification of Final EIR.** Prior to making a decision on a proposed project, the lead agency must certify that: a) the Final EIR has been completed in compliance with CEQA; b) the Final EIR was presented to the decision-making body of the lead agency; and c) the decision making body reviewed and considered the information in the Final EIR prior to approving a project (*CEQA Guidelines* Section 15090).
7. **Lead Agency Project Decision.** The lead agency may a) disapprove the project because of its significant environmental effects; b) require changes to the project to reduce or avoid significant environmental effects; or c) approve the project despite its significant environmental effects, if the proper findings and statement of overriding considerations are adopted (*CEQA Guidelines* Sections 15042 and 15043). The CVWD Board of Directors will make a determination on this proposed project during a regularly scheduled Board of Directors meeting.
8. **Findings of Fact and Statement of Overriding Considerations.** For each significant impact of the project identified in the EIR, the lead agency must find, based on substantial evidence, that either: a) the project has been changed to avoid or substantially reduce the magnitude of the impact; b) changes to the project are within another agency's jurisdiction and such changes have or should be adopted; or c) specific economic, social, or other considerations make the mitigation measures or project alternatives infeasible (*CEQA Guidelines* Section 15091). If an agency approves a project with unavoidable significant environmental effects, it must prepare a written Statement of Overriding Considerations that sets forth the specific social, economic, or other reasons supporting the agency's decision.
9. **Mitigation Monitoring Reporting Program.** When the lead agency makes findings on significant effects identified in the EIR, it must adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of project approval to mitigate significant effects.
10. **Notice of Determination.** The lead agency must file a Notice of Determination (NOD) after deciding to approve a project for which an EIR is prepared (*CEQA Guidelines* Section 15094). The lead agency must file the NOD with the County Clerk within five working days of project approval. The NOD must be posted for 30 days and sent to anyone previously requesting notice. Posting of the NOD starts a 30-day statute of limitations on CEQA legal challenges (Public Resources Code Section 21167[c]).

As shown below in Figure 1, a preliminary step in the CEQA process is to prepare an Initial Study. The Initial Study assesses impact significance criteria and is used to determine if potentially significant impacts could occur as a result of a proposed project, thereby requiring the preparation of an EIR. However, prior to the preparation of an Initial Study, if it is already known or reasonably anticipated that a potentially significant impact could occur as a result of a proposed project, then under CEQA the Initial Study step may be skipped, with the analysis starting at the EIR phase. This is the direction taken for this proposed project.

Figure 1 Environmental Review Process



1.5.1 Public Scoping Comments and Responses

CVWD distributed a NOP of the EIR for a 30-day public scoping period starting on April 25, 2017 and ending on May 26, 2017. In addition, CVWD held a public scoping meeting for the project's EIR on May 10, 2017. The meeting was held at 6:00 p.m. at CVWD's administrative offices in Palm Desert, located at 75-515 Hovley Lane East in Palm Desert. Six people attended the meeting, including three agency representatives (all from the Colorado River Basin RWQCB), and three private individuals (two of whom represented GEI, the engineering firm providing design services for the project). Presentations were made on the project design and the CEQA environmental review process, and presenters were available for discussion with agencies and the public. Verbal comments were recorded by a court reporter; two verbal comments were received during the scoping meeting.

In total during the scoping period, CVWD received comment letters from two agencies and no private individuals in response to the NOP. All comments and questions received during the scoping period are addressed in this EIR. Table 2 summarizes the content of verbal and written comments received in response to the NOP, as well as guidance on where those comments are addressed in this EIR.

Table 2 NOP Comments and EIR Responses

Comment Source	Comment or Request	Response or Where Comment is Addressed
Written Comments		
Colorado River Basin RWQCB May 24, 2017	Groundwater quality and hydrogeology considerations: 1. Co-mingling of secondary treated wastewater and imported Colorado River water intended for groundwater replenishment 2. Mobilization of existing contaminants in soil 3. Effects on hydrogeology from the proposed groundwater recharge activities 4. Degradation of existing groundwater quality	Comments regarding groundwater quality and supply are addressed in Section 3.9, Hydrology and Water Quality. Overview of responses: 1. Co-mingling of secondary treated wastewater and Colorado River water will not occur as part of this project. The replenishment basins receiving Colorado River water under the proposed project will be an entirely separate operation from activities at the WRP10 site. 2. Previous studies conducted to assess groundwater replenishment feasibility in the area address the potential for groundwater contamination and are incorporated by reference in this analysis, including but not limited to the Palm Desert Groundwater Replenishment Feasibility Study (CVWD 2017). There is potential for groundwater contamination to occur as a result of the project. Mitigation is discussed under Section 3.9, Hydrology and Water Quality. 3. The project is designed to avoid adverse impacts to hydrogeology, through the utilization of temporary berms within the stormwater channel. 4. Colorado River water does not require further treatment prior to use for groundwater replenishment; however, there is potential for groundwater quality degradation to occur, as addressed in the impact analysis contained herein, as well as the impact analysis provided in the Program EIR for the Coachella

Comment Source	Comment or Request	Response or Where Comment is Addressed
Riverside County Flood Control and Water Conservation District (FCWCD) May 18, 2017	1. This project is located outside District jurisdiction. 2. The project may require permit approval including but not limited to: National Pollutant Discharge Elimination System (NPDES) permit from the SWRCB; approval of the Federal Emergency Management Agency (FEMA) for work within a mapped floodplain, the California Department of Fish and Wildlife (CDFW), and U.S. Army Corps of Engineers (USACE).	Valley Water Management Plan (WMP) (CVWD 2011), which is incorporated by reference into this analysis. 1. Noted – this comment does not in any way constitute or imply District approval or endorsement. 2. The project will comply with all required permits. See Chapter 3 for discussion of the regulatory environment, environmental setting, and impact analyses for all issue areas.
South Coast Air Quality Management District (SCAQMD) May 12, 2017	1. Requests copy of the Draft EIR including appendices with the input and output information for the air quality modeling provided in spreadsheets not PDF. 2. Lead Agency should characterize air quality emissions associated with all project phases. 3. Should the project generate or attract vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that a mobile source health risk assessment is performed. 4. Potential impacts associated with mitigation measures must be addressed. 5. Alternatives must include options that would substantially decrease adverse impacts. 6. SCAQMD permits and regulations should be addressed in the EIR.	1. This information will be provided to SCAQMD upon completion of the Draft EIR. 2. Emissions modeling was conducted for the proposed project and is discussed in Section 3.3 of this EIR. 3. Vehicle use associated with the project is assessed in Section 3.3 of this EIR. A health risk assessment for the project was not performed because operational vehicle/equipment usage would be comparable to existing conditions. 4. Residual impacts associated with mitigation measures are addressed throughout Chapter 3, where applicable. 5. Alternatives are assessed in Section 5.3 and include assessment of two variations of the proposed project that could reduce potential impacts, as well as the No Project. 6. SCAQMD permits and regulations are addressed in Section 3.3.4 of this EIR.
Verbal Comments		
Mr. Steven Smith (private citizen)	Generally in favor of the project, because it would benefit water supply reliability. Other comments include: 1. Noise – Would residents along the stormwater channel experience increased noise, particularly associated with pump improvements? 2. Water quality – Would the project degrade water quality?	1. Noise is addressed in Section 3.12 of this EIR. Potential impacts would be less than significant. 2. Water quality is addressed in Section 3.9 of this EIR. Potential impacts would be significant and unavoidable due to increased total dissolved solids (TDS) concentrations in imported Colorado River water. There are no primary drinking water quality standards for TDS. Potential water quality impacts for all other constituents would be less than significant with mitigation to address nitrates in existing groundwater.
Ms. Mary Serra (Colorado River Basin)	Requested clarification as to when the close of the public comment period was	Comments during the public scoping period were received through May 26, 2017.

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

Comment Source	Comment or Request	Response or Where Comment is Addressed
RWQCB)	and the last date that comments would be received.	

1.6 Organization of the EIR

The organization of the EIR is as follows:

- **Executive Summary.** The Executive Summary includes a description of the project and summarizes construction and operational impacts that the project would have on environmental resources, along with mitigation measures to reduce those impacts, where feasible. Significant unavoidable impacts of the project are also identified, where applicable. Alternatives that would reduce or avoid the significant impacts of the project are summarized. Areas of controversy are also identified.
- **Chapter 1 – Introduction.** This chapter describes the CEQA process and the organization of this document.
- **Chapter 2 – Project Description.** This chapter provides an overview of project components, describes the project objectives, and provides a list of permits and approvals that are anticipated to be required for the project.
- **Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures.** This chapter presents the physical and regulatory setting by environmental resource area, identifies impact significance criteria, and analyzes potential impacts of the project. Mitigation measures are identified, where applicable. Chapter 3 analyzes the following resource areas:
 - Overview (Section 3)
 - Aesthetics (Section 3.1)
 - Agriculture and Forest Resources (Section 3.2)
 - Air Quality (Section 3.3)
 - Biological Resources (Section 3.4)
 - Cultural Resources (Section 3.5)
 - Geology and Soils (Section 3.6)
 - Greenhouse Gas Emissions (Section 3.7)
 - Hazards and Hazardous Materials (Section 3.8)
 - Hydrology and Water Quality (Section 3.9)
 - Land Use and Planning (Section 3.10)
 - Mineral and Energy Resources (Section 3.11)
 - Noise and Vibration (Section 3.12)
 - Population and Housing (Section 3.13)
 - Public Services (Section 3.14)
 - Recreation (Section 3.15)
 - Traffic and Transportation (Section 3.16)
 - Utilities and Service Systems (Section 3.17)
- **Chapter 4 – Other CEQA Required Discussions.** This chapter discusses growth inducement, significant environmental effects that cannot be avoided if the project is implemented, and significant irreversible environmental changes associated with the project. This chapter also provides a summary of cumulative impacts that are discussed in the resource sections.
- **Chapter 5 – Alternatives.** This chapter describes alternatives to the project and compares their impacts to those of the project. This chapter also summarizes alternatives that were considered but eliminated from further analysis.

- **Chapter 6 – References.** This chapter provides a list of references, as well as a list of CVWD staff and its consultants responsible for preparation of this document.

Appendices provide information in support of the above chapters and are identified in the Table of Contents. Previous studies conducted in the Coachella Valley region and project area have been incorporated by reference, and include the Coachella Valley Water Management Plan and the Coachella Valley Water Management Plan EIR (CVWD 2002; CVWD 2012), and the Palm Desert Groundwater Replenishment Feasibility Study (CVWD 2017).

2 Project Description

This section describes the Palm Desert Groundwater Replenishment Project (“proposed project”), including the project applicant, the lead agency, the project site and surrounding land uses, project characteristics, project objectives, and discretionary actions needed for approval of the project.

2.1 Project Applicant

Coachella Valley Water District (CVWD)
75515 Hovley Lane East
Palm Desert, California 92211
(760) 398-2651

2.2 Lead Agency Contact Person

Luke Stowe, Environmental Supervisor
Coachella Valley Water District
75515 Hovley Lane East
Palm Desert, California 92211
(760) 398-2651

2.3 Project Location

The project site is located in the central portion of the Coachella Valley in the city of Palm Desert, in central Riverside County. As described in detail later in this chapter, the proposed project would be implemented in two phases:

- Phase I of the proposed project would occur adjacent to the north of CVWD’s existing Water Reclamation Plant No. 10 (WRP10) site, located at 43-000 Cook Street in Palm Desert, California. Phase I would also occur within the WRP10 site, to extend the MVP to deliver imported Colorado River water to the new infiltration ponds, as well as at the MVP Pump Station site in Indio, where two 800-HP pumps and a hydropneumatic tank would be installed within an existing enclosed structure.
- Phase II of the proposed project would occur within the existing Whitewater River Stormwater Channel, located adjacent to the south-southwest of WRP10, and in the southern portion of the existing WRP10 site. In addition, the proposed project includes extension of the existing MVP to convey Colorado River water to Phase II of the project. The MVP is located within the Whitewater River Stormwater Channel (originally constructed in 1937), between the existing MVP Pump Station located at the junction of the Coachella Canal and the Whitewater River Stormwater Channel in Indio, and the WRP10 site in Palm Desert. Figure 2 shows the alignment of the existing MVP and the location of the MVP Pump Station in Indio.

2.4 Project Objectives

In accordance with CEQA Guidelines Section 15124(b):

“A clearly written statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid decision makers in preparing findings or statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project.”

CVWD is a public agency that provides water service, wastewater management, water resources management, flood control and recycled water service to domestic, agricultural, and industrial users in the desert, Coachella Valley area. In 2003, CVWD certified the Program EIR for the Coachella Valley Water Management Plan and State Water Project Entitlement Transfer (hereafter referred to as “the Water Management Plan”). The Water Management Plan evaluated a suite of water management elements to eliminate overdraft of the Coachella Valley groundwater basin. The Water Management Plan elements included water conservation, additional water supplies, source substitution, and groundwater recharge. The proposed project is designed for consistency with CVWD’s goal to eliminate groundwater overdraft in line with the Water Management Plan; as such, objectives of the proposed project include the following:

- Provide an estimated 25,000 acre-feet per year (AFY) of direct groundwater replenishment using imported Colorado River water in the Palm Desert area;
- Enable CVWD to maximize use of its annual allocation of Colorado River water;
- Meet the goals of the Coachella Valley Water Management Plan (CVWD 2002 and 2012) to assure adequate quantities of safe, high-quality water at the lowest cost to CVWD water users;
- Improve local groundwater supply and quality conditions through replenishment activities;
- Upgrade capacity of the existing MVP Pump Station utilizing two empty bays to install 800-HP pumps;
- Implement a new 200-HP pump station at WRP10 to pump Colorado River water from the Backfeed Reservoir to the replenishment ponds;
- Expand existing Secondary Effluent Storage ponds at WRP10; and
- Optimize the availability of recycled water produced at WRP10.

The Colorado River water that CVWD would use for this project (and under existing operations to deliver water within the CVWD jurisdiction) is part of the allocation that CVWD receives per the Quantification Settlement Agreement (QSA) for Colorado River water, which defines the rights of water districts in Southern California to portions of Colorado River water. This water originates at Imperial Dam and is delivered to CVWD via the All American and the Coachella Canal. The QSA quantifies CVWD’s full Colorado River entitlement at 330,000 AFY (SDCWA 2017). CVWD’s “full” allocation would not be used for the proposed project, as most of the allocated water is currently delivered to agricultural users in the lower valley. However, in order for CVWD to utilize all of its allocation, the proposed project would direct the currently unused portion of its allocation for groundwater replenishment purposes. In the absence of the proposed project, CVWD would not be able to fully implement the goals of the Water Management Plan (mentioned above), the primary goal of which is to eliminate the overdraft of local groundwater resources.

2.5 Overview of CVWD Water Supply

CVWD serves the water-related needs of a population of about 300,000 throughout the Coachella Valley in Riverside County, California. CVWD is a special district established by the State Legislature and its service area covers approximately 1,000 square miles. The service area is located primarily in Riverside County, and also includes portions of Imperial County and San Diego County. The following areas of water-related service are provided by CVWD: domestic (drinking) water supply, sanitation (wastewater), irrigation and drainage, non-potable water (recycled wastewater and/or Colorado River water), regional stormwater/flood protection, and groundwater management and replenishment.

CVWD and Desert Water Agency (DWA) jointly operate direct groundwater replenishment programs in the basin. CVWD and DWA jointly prepared the Coachella Valley Water Management Plan to address joint water supply reliability concerns, which the CVWD Board of Directors adopted in September 2002; the Water Management Plan was later updated in 2010 to respond to changing external and internal water supply conditions. The Water Management Plan defines how water supply goals will be met given changing conditions and new uncertainties regarding water supplies, water demands, and evolving federal and state laws and regulations. Objectives of the Water Management Plan include the following:

1. Eliminate groundwater overdraft and its associated adverse impacts, including:
 - Groundwater storage reductions,
 - Declining groundwater levels,
 - Land subsidence, and
 - Water quality degradation;
2. Maximize conjunctive use opportunities;
3. Minimize adverse economic impacts to Coachella Valley water users; and
4. Minimize environmental impacts. (CVWD 2012)

The Water Management Plan addresses overdraft conditions in the basin, where demand for groundwater has annually exceeded the limited natural recharge of the local groundwater basin. Overdraft has caused groundwater levels to decrease in significant portions of the East Valley; groundwater levels in the West Valley have also decreased substantially, except in the areas near the existing Whitewater Recharge Facility where artificial recharge has successfully raised groundwater levels. (CVWD 2012)

The 2010 Water Management Plan Update uses a calculation of change in storage based on long-term local hydrology and imported water deliveries to estimate long-term overdraft. The local hydrology varies from year to year, and therefore a long-term average for water supplies provides a reasonable method for estimating the local inflows, which are dampened by the large storage volume of the local groundwater basin. The groundwater model used for the 2010 Water Management Plan Update indicates that the average annual overdraft for the years 2000 through 2009 was 70,000 AFY; when the 2010 Water Management Plan Update was adopted in January 2012, CVWD and DWA experienced two years of very high recharge with nearly 461,000 acre-feet recharged at Whitewater Recharge Facility. (CVWD 2012)

2.5.1 Water Supply Sources

The Coachella Valley relies on a combination of local groundwater, Colorado River water, State Water Project (SWP) water, and recycled water to meet water demands. The Coachella Canal brings Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Coachella Valley. SWP water is obtained via Colorado River water exchange with The Metropolitan Water District of Southern California (Metropolitan) and delivered at the northwest margin of the Coachella Valley via the Colorado River Aqueduct, as CVWD does not have a direct connection to the SWP. Recycled water is produced at two of CVWD's five water reclamation plants and is blended with Colorado River water for service to its non-potable water customers – primarily golf courses and large landscaped areas. The only direct water source used by CVWD for urban potable water use is local groundwater. The urban water distribution system is defined as the area served by CVWD's groundwater production wells.

CVWD manages water supplies through the policies and programs contained in the Coachella Valley Water Management Plan, which was last updated in 2010, and the Mission Creek and Garnet Hill Subbasins Water Management Plan completed in 2013. The primary goal of these plans is to reliably meet current and future water demands in a cost-effective and sustainable manner. Groundwater is the principal source of domestic water supply, and a primary objective of the project is to replenish local groundwater resources through the infiltration of Colorado River water. Additional information about the local groundwater supply is provided below.

2.5.2 Groundwater Supply and Quality

2.5.2.1 Groundwater Supply

The Coachella Valley Groundwater Basin provides the primary groundwater source for the project area, as described in Section 3.9, *Hydrology and Water Quality*. As described by the California Department of Water Resources (DWR) Bulletin 118, this basin is bounded on the easterly side by the San Bernardino and Little San Bernardino Mountains and on the westerly side by the Santa Rosa and San Jacinto Mountains. The lower or southern boundary is formed primarily by the watershed of the Mecca Hills and by the Salton Sea. Movement of groundwater within the basin is limited and controlled by fault barriers, physical and elevation constrictions in the basin profile, and areas of low permeability. Based on these physical factors, the basin has been subdivided into subbasins and subareas. The boundaries between subbasins are generally based upon faults that are effective barriers to the lateral movement of groundwater.

CVWD obtains groundwater from both the Whitewater River and the Mission Creek Subbasins of the Coachella Valley Groundwater Basin. The Whitewater River Subbasin is a common groundwater source which is shared by numerous public and private groundwater producers. None of the groundwater basins in the Coachella Valley are adjudicated, and there are no legal agreements limiting pumping from the Whitewater River and Mission Creek subbasins. CVWD works with local public water agencies and other Coachella Valley stakeholders to implement the water management plans identified above for the Whitewater River, Mission Creek, and Garnet Hill Subbasins. These plans define a long-term approach for eliminating groundwater overdraft and providing sustainable water supply for the Coachella Valley.

The Coachella Valley Groundwater Basin has been used for urban and agricultural supply since the early 20th century. The basin has been identified by DWR as being in a condition of overdraft since

the 1940s. Overdraft is defined as the condition of a groundwater basin in which the outflows (demands) exceed the inflows (supplies) to the groundwater basin over the long term. The overdraft condition has caused Coachella Valley groundwater levels to decline in some areas, and has raised concerns about water quality degradation and land subsidence.

In-lieu groundwater replenishment using imported Colorado River water began in 1949 when the first deliveries from the Coachella Canal were received in the eastern portion of the Coachella Valley. To further address the overdraft conditions, CVWD and DWA jointly operate direct groundwater replenishment programs in the basin. Recharge activities using imported water commenced in the western portion of Coachella Valley in 1973, at the Whitewater River Groundwater Replenishment Facility. Additionally, recharge activities in the eastern portion of Coachella Valley was commenced in 1997 at the Dike No. 4 pilot recharge facility and expanded by CVWD in 2009; this facility is now called the Thomas E. Levy Groundwater Replenishment Facility (CVWD 2006). CVWD and DWA also began replenishment of the Mission Creek Subbasin in 2003. The water management plans identify the continued use of these recharge facilities as a critical component of the Coachella Valley's water supply.

2.5.2.2 *Groundwater Quality*

Groundwater quality in the Coachella Valley varies with depth, proximity to faults and recharge basins, presence of surface contaminants, and other hydrogeological or human factors. CVWD conducts water quality monitoring in accordance with federal and state drinking water requirements, and analyzes water samples for more than 100 regulated and unregulated substances. Based on the most current water quality report (CVWD 2016), drinking water delivered from CVWD's potable water system supplied from groundwater wells complies with all state and federal drinking water quality regulations.

Two naturally occurring substances, arsenic and chromium-6, are among the over 100 constituents that are monitored in Coachella Valley's groundwater supply. Both of these substances are found in portions for the Coachella Valley groundwater basin and have been identified by the California Department of Public Health as having the potential to cause adverse health effects if ingested at levels above Maximum Contaminant Levels (MCLs) established by the State of California. CVWD already treats some of its groundwater wells to reduce arsenic and chromium-6 levels in the drinking water supply and is conducting ongoing water treatment efforts to reduce chromium-6 levels delivered from additional groundwater wells in accordance with a State approved compliance plan. As discussed below, the groundwater replenishment activities included under the proposed project would have beneficial effects on local groundwater quality.

2.6 Description of Proposed Project

2.6.1 Project Background

As described in Section 2.5, the Coachella Valley relies on a combination of local groundwater, Colorado River water, SWP water, and recycled water to meet water demands. The Coachella Canal brings Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Valley. Because CVWD does not have a direct connection to the SWP, SWP water is obtained via Colorado River water exchange with Metropolitan and delivered to the Coachella Valley via the Colorado River Aqueduct. The proposed project would enable CVWD to receive its full annual allocation of Colorado River water via the Coachella Canal, by providing

storage at the site adjacent to WRP10 and within the Whitewater River Stormwater Channel adjacent to the southern end of the WRP10 site. Recycled water would continue to be produced at the WRP10 site, and blended with Colorado River water for service to non-potable water customers.

2.6.2 Existing Site Characteristics

The existing Phase I site (the existing WRP10 site and adjacent to the north of the existing WRP10 site) is surrounded by security fencing and gates. Security lighting within the WRP10 site is provided on tall poles, with lighting angled downward into the site. A mature grove of tamarisk trees located along the eastern project border provides both visual and audio buffer to adjacent residences in the Toscana residential development. Similarly, a mature grove of tamarisk trees along the southern project border provides visual and audio buffers to residences in the residential developments located on the southern side of the Whitewater River Stormwater Channel. These trees would not be removed as part of the project.

The existing Phase II site (Whitewater River Stormwater Channel) is an existing flood control channel that is regularly maintained by CVWD for the purposes of flood control. This site is not currently surrounded by security fencing and gates; however, the WRP10 site to the north and the Palm Lake and Desert Rose residential developments to the south are surrounded by fencing which abuts this portion of the stormwater channel, thereby restricting public access to this portion of the channel from the north and south. Pedestrian access is possible from Cook Street or Fred Waring Drive; however, there is no sidewalk on the eastern side of Cook Street, which abuts the stormwater channel, and use of the sidewalk on the northern side of Fred Waring Drive, which abuts the stormwater channel, is minimal. The project may include implementation of a wall or fence along the portion of the Cook Street that crosses over the channel; there is already a pedestrian wall in place along the portion of Fred Waring Drive that crosses the channel.

The existing MVP Pump Station is housed within an enclosed structure, which would not be modified under this project, except that additional pumps may be installed within the structure, using currently vacant bays within the pump station.

The existing percolation ponds at CVWD's WRP10 property have been in operation since the 1970s and are currently used for the discharge and disposal of secondary effluent treated at the WRP10 site. CVWD is updating its Non-Potable Water Master Plan and plans to expand the tertiary treatment facility at WRP10 to increase recycled water deliveries and eliminate on-site discharge and disposal of secondary effluent; these activities would occur separately from the proposed project, which would deliver imported Colorado River water to the site for groundwater infiltration in basins located adjacent to the north of the WRP10 site.

The Whitewater River Stormwater Channel is not currently being used for recharge in the area, and consists of an unlined main channel bed between concrete-lined banks. As discussed, Phase II of the proposed project would occur within the stormwater channel between Cook Street and Fred Waring Drive. The existing reach of the stormwater channel between Cook Street and Fred Waring Drive is relatively flat with a slope of approximately 0.0025 foot per foot. The channel is nearly dry all year. There are no transverse structures within the section to hold water and allow percolation. As a result, the existing recharge effectiveness of the channel system is limited compared to capacity. The existing system for recharging groundwater within the river is highly dependent on the number of storms and the storm duration, which control the amount of time that flows are in the channel to percolate. (CVWD 2017)

Imported Colorado River water deposited in the proposed project basins is expected to percolate at varying rates between one to three feet per day, depending upon deposited fine sediment, soil saturation, biofouling, and the local groundwater level. Basin recharge effectiveness is also influenced by the water supply availability and maintenance work. The major water source of the existing basin system is the WRP10 secondary effluent discharge. As shown, water supply during summer months is expected to be much less than during winter months because the reclaimed water is used for watering golf courses. (CVWD 2017)

The proposed project would not co-mingle Colorado River water with treated secondary effluent.

2.6.2.1 Current Land Use Designation and Zoning

The existing WRP10 site (in Palm Desert) and MVP Pump Station (in Indio) occur across several parcels that are zoned either Public Facility (P) or Service Industrial (SI). The proposed project would occur on areas of the WRP10 site zoned Public Facility. The City of Palm Desert General Plan (City of Palm Desert 2016) designates this area of the existing WRP10 site as Public Facilities/Institutional. The Whitewater River Stormwater Channel Parcel adjacent to the WRP10 site is zoned Open Space (OS) and is designated as OS in the City of Palm Desert General Plan. The MVP Pump Station in Indio is located partially within the maintained right-of-way of the Coachella Canal. The Coachella Canal right-of-way is zoned All American Canal (AAC) (City of Indio 2009). The City of Indio General Plan Land Use Diagram (City of Indio 2007) designates the canal right-of-way as Public.

2.6.2.2 Surrounding Land Uses

The area north of the WRP10 site, where Phase I of the project would occur, is bordered as follows:

- **North:** CVWD's Steve Robbins Administrative Building, Operations Building and parking areas, Hovley Lane East, and residential development;
- **East:** a golf course and residential development;
- **South:** Whitewater River Stormwater Channel and residential development; and
- **West:** industrial uses and residential development.

The Whitewater River Stormwater Channel, where Phase II of the project would occur, is bordered as follows:

- **North:** the WRP10 site;
- **East:** Fred Waring Drive;
- **South:** Palm Lake and Desert Rose residential developments; and
- **West:** Cook Street adjacent (no sidewalk for pedestrian use), Palm Desert High School to the southwest, and industrial uses to the northwest.

The MVP Pump Station, from where Colorado River water is pumped for use by the proposed project, is located on CVWD lands near where the Coachella Canal crosses the Whitewater River Stormwater Channel. The MVP Pump Station is bordered as follows:

- **North:** residential development;
- **East:** Whitewater River Stormwater Channel;
- **South:** Whitewater River Stormwater Channel; and
- **West:** residential development.

These sites and surrounding land uses are shown in Figure 2 and Figure 3.

2.6.3 Proposed Groundwater Replenishment Facilities

The proposed project is designed to be developed in two phases, described below for Phase I and Phase II, respectively. Phase I assumes a maximum disturbance area of approximately 13 acres, and Phase II assumes a maximum disturbance area of approximately 51 acres. The project's operational year is anticipated to be 2019, based on information provided by CVWD.

In addition to constructing groundwater replenishment ponds, the project includes upgrading two existing pump stations (housed within existing structures), provision of secondary effluent storage ponds (effluent produced from secondary treatment facilities at WRP10), and water conveyances to deliver water from the existing MVP to groundwater replenishment facilities.

During construction activities, standard noise-related BMPs would be implemented including but not limited to the following: all construction equipment (fixed or mobile) would be equipped with properly operating and maintained mufflers, consistent with manufacturers' standards; all stationary construction equipment would be located so that emitted noise is directed away from noise-sensitive receptors nearest the project sites; haul truck deliveries will be limited to the same hours specified for construction equipment; and truck trips will be limited to the hours of construction activity.

2.6.3.1 Phase I

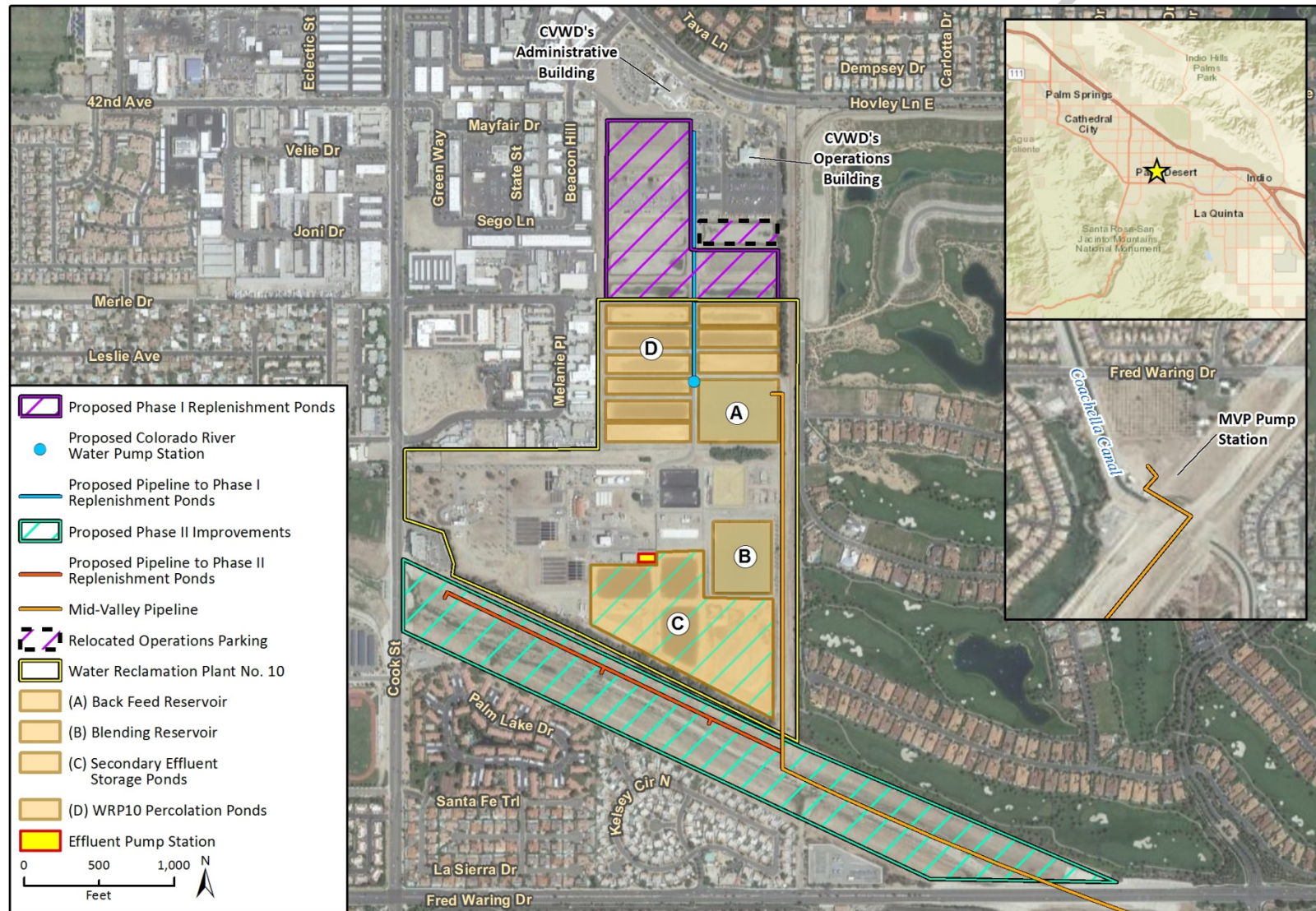
Phase I of the proposed project would occur on and adjacent to the north of CVWD's Water Reclamation Plant No. 10 (WRP10), located at 43-000 Cook Street in Palm Desert, California. Primary components of Phase I of the project are summarized below.

- **Groundwater Replenishment Basins.** The ponds that would be re-purposed under Phase I of the proposed project are located adjacent to the north of CVWD's existing WRP10 site, as shown on Figure 2. Under the proposed project these ponds would be removed from the current WRP10 site operations.

The Colorado River water that would be delivered to this site under the proposed project does not require additional treatment, and would be delivered to the re-purposed ponds for groundwater replenishment. Groundwater replenishment within the re-purposed ponds would be separate from operations at WRP10. There would be no co-mingling of Colorado River water and secondary effluent within the re-purposed ponds as part of the proposed project.

- **WRP10 Pipeline Extension.** Phase I of the proposed project would include an extension of existing water transmission pipeline within the WRP10 site and the Phase I site north of the WRP10 site, to deliver imported Colorado River water through the proposed new pump station (described below) and to the proposed groundwater replenishment basins (described above). This pipeline extension would be consistent in size and design to existing pipelines located within the WRP10 site.
- **New Colorado River Water Pump Station.** In order to deliver imported Colorado River water via the proposed pipeline extension (described above), a new Colorado River water pump station would be installed within the WRP10 site, adjacent to the Back Feed Reservoir, as shown on Figure 2. This new pump station would include a minimum of two pumps with a combined horsepower (HP) of 100 to 200 HP.

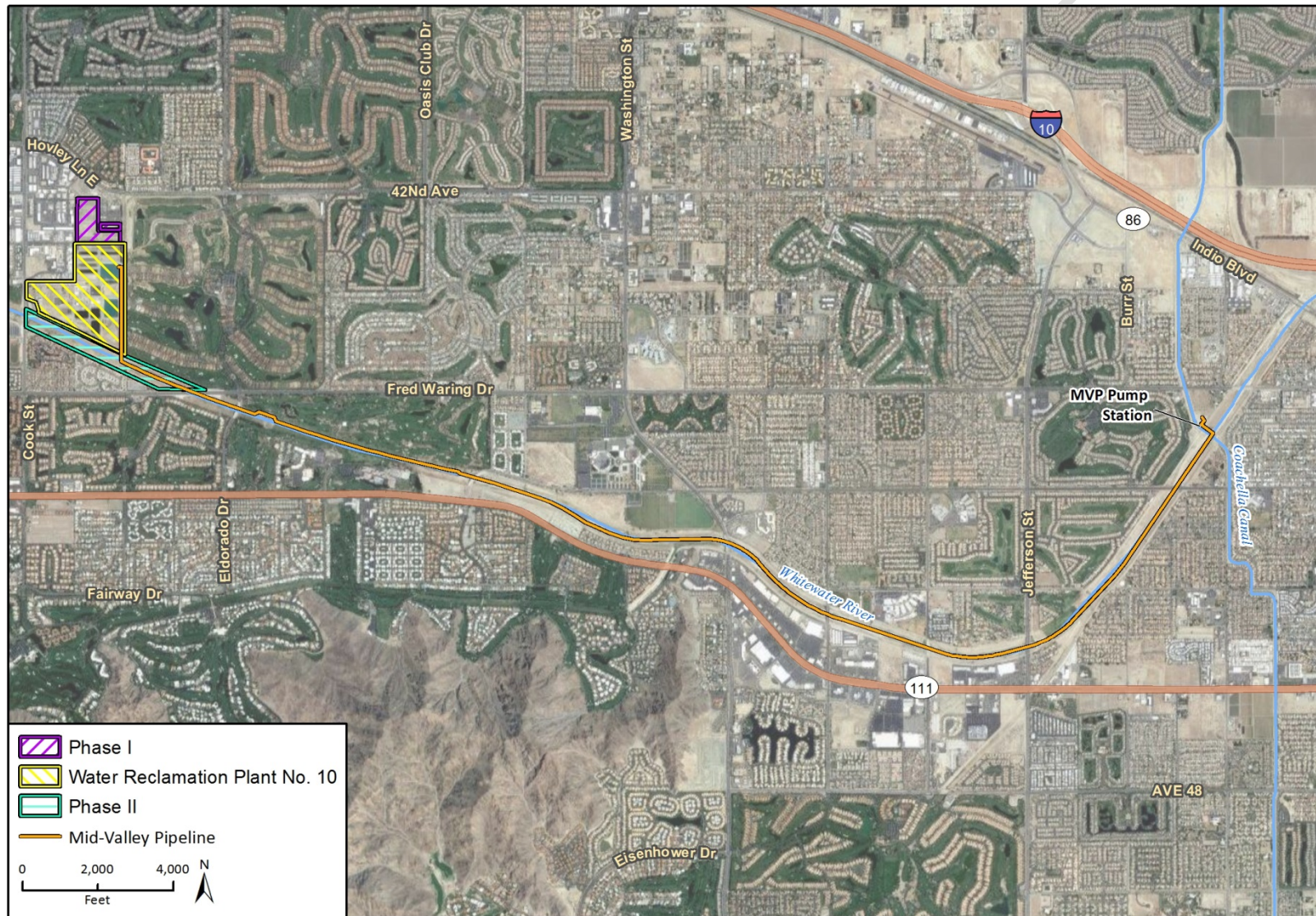
Figure 2 Project Site and Vicinity



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Additional data provided by Coachella Valley Water District, 2017.

Fig.2 Project Site and Vicinity

Figure 3 Existing Mid-Valley Pipeline Alignment



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Additional data provided by Coachella Valley Water District, 2017.

Fig3 MidValleyPipeline

A new permanent sound wall would be installed surrounding the pump station in order to minimize operational noise. As shown on Figure 2, the new pump station would be located within the central portion of the existing WRP10 site where it would be surrounded by existing WRP10 percolation ponds, the existing back feed reservoir, and activities consistent with the proposed project activities and operations.

- **Relocated Operations Parking.** The northeastern-most percolation basin within the WRP10 site would be filled, graded, and compacted to provide parking for operations and maintenance vehicles, which currently occurs in other areas adjacent to the WRP10 site. With this improvement, the parking area would be designated and concentrated to one area. This area is outlined on Figure 2 with a black dashed line.
- **Improved Mid-Valley Pipeline (MVP) Pump Station.** Phase I of the proposed project would install two new 800-HP pumps and a hydropneumatic tank within the existing MVP Pump Station, to facilitate the transmission of imported Colorado River water to the project site. The existing MVP Pump Station is located in the City of Indio approximately 36,000 feet (6.8 miles) downstream of the existing WRP10 site. The pump station is fully enclosed within an existing structure, and under existing conditions includes two empty bays where the new pumps would be installed; neither the structure nor the existing bays would be modified as part of the project.

2.6.3.2 Phase II

Phase II of the proposed project includes the construction of temporary berms using native sediments within the Whitewater River Stormwater Channel located to the south/southeast of the WRP10 site, for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. Phase II of the proposed project also includes the installation of a secondary effluent pump station, revision of lower ponds within the WRP10 site, and relocation of the existing parking area for operational vehicles and equipment.

- **Stormwater Channel Basins.** Phase II of the project would construct berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. These basins would be situated within the existing channel to capture some existing flows in the channel for groundwater replenishment and allow flows from storm events to flow through the channel, as occurs under present conditions. Project design features such as breakaway fencing would be implemented at the upstream and downstream ends of the basins in order to restrict public access to the basins. The temporary berms, fencing, and water conveyance features will maintain the function of the channel for stormwater conveyance.

The Whitewater River Stormwater Channel is presently used for a variety of purposes in addition to flood control; for instance, portions of the channel to the north and the south of the project site are used for golfing purposes. CVWD has a standing Memorandum of Understanding (MOU) with the California Department of Fish and Wildlife (CDFW) for operation and maintenance of the channel. Presently, CVWD mows vegetation within the channel on a regular operations schedule in order to maintain function of the channel for the conveyance of floodwaters, in compliance with the CDFW MOU (CDFW 1977). Implementation of the project would include continuation of these operational activities, including within the proposed percolation ponds.

- **MVP Extension.** In order to provide for transmission of imported Colorado River water from the existing MVP within the Whitewater River Stormwater Channel to the proposed Phase II basins (described above), Phase II would include extension of the existing MVP beyond the WRP10 site, for approximately 0.5 mile, west to Cook Street. The pipeline extension would be configured for consistency with the existing pipeline configuration, at a depth of approximately 20 feet and covered with a backfill material designed to protect the pipeline from scour-related damage during storm events. Figures 2 and 3 show the location of the Phase I and Phase II project sites, as well as the MVP Pump Station.
- **Secondary Effluent Pump Station.** Under present conditions, the southern portion of the WRP10 site includes ponds that are currently used for storing secondary effluent. Secondary effluent is currently able to be delivered to the existing storage ponds, though the existing pump has limited capacity. Therefore, a new secondary effluent pump station would be installed within the existing WRP10 site to improve the routing of effluent to the lower storage ponds as part of the proposed project. The pumps would be housed within the existing enclosed effluent pump station structure, located within the WRP10 site as shown in yellow and outlined in red on Figure 2.
- **Revised Lower Ponds.** To optimize the production and delivery of recycled water, the proposed project would include the construction of new storage ponds within the area designated as “Lower Storage Ponds” on Figure 2 (see item C). These revised ponds would be used to increase storage of secondary effluent to approximately 100 million gallons.

2.6.3.3 Mid-Valley Pipeline

Colorado River water is currently delivered to WRP10 through the MVP, a 54-inch diameter steel pipeline, and a pump station known as the MVP Pump Station (as described in Section 2.3, this pump station is located at the intersection of the Coachella Canal and the Whitewater River Stormwater Channel, downstream of the proposed project site). The 54-inch-diameter buried pipeline is aligned between the pump station and the eastern border of the WRP10 site, a distance of approximately 36,000 feet (6.8 miles), entirely within the Whitewater River Stormwater Channel. In some areas, the existing pipeline is buried at depths of up to 20 feet, for protection from scour during large storm events.

Implementation of Phase II of the proposed project would require an extension of this pipeline, which would occur within the Whitewater River Stormwater Channel, consistent with existing pipeline design and configuration. This extension would occur from the point where the pipeline turns into the eastern side of the WRP10 site, and continue to Cook Street, for a distance of approximately 0.5 mile. Design of the pipeline would include backfilling of the pipeline trench with a low-strength concrete slurry material to the midpoint of the pipeline, protecting it from excessive scour during storms. The remainder of the trench backfill would be native material from the excavation. Air release valves would be installed approximately every 2,500 feet along the alignment, usually near road crossings, extending as 12-inch diameter pipelines from the buried 54-inch pipeline up (and inside) the banks of the Whitewater River Stormwater Channel.

As part of this pipeline extension, the existing MVP would be evaluated for corrosion issues under saturated conditions, to ensure the safe and reliable delivery of Colorado River water included under the proposed project. As a result of this evaluation, design of the proposed pipeline extension may include modification of the existing cathodic protection system, to ensure that corrosion issues do not compromise reliable water delivery. The existing MVP includes two new impressed current

cathodic protection (ICCP) systems, which include a deep-anode groundbed with six anodes at each location. The individual anode leads were installed in junction boxes which contain calibrated shunts for anode current measurements. Cathodic protection implemented for the pipeline extension would be consistent with existing cathodic protection measures.

2.6.3.4 Stormwater and Drainage Features

For on-site stormwater management, the proposed project would incorporate site-specific (desert-appropriate) best management practices (BMPs) to protect receiving waters and minimize impervious areas. By nature of the project being developed to facilitate groundwater recharge, the introduction of impervious surfaces would be minimal. However, design standards outlined in the *Riverside County Whitewater River Region Stormwater Quality Best Management Practice Design Handbook for Low Impact Development* (Riverside County Flood Control and Watershed Conservation District [FCWCD] 2014) would be implemented as applicable to the project site's stormwater drainage features. Under existing conditions, on-site stormwater runoff occurs as sheet flow and roof drainage is directed to the ground (not directly connected to a stormwater conveyance system), to encourage infiltration into the local ground surface. No discharge of stormwater occurs at the WRP10 site. With implementation of the project, these patterns would be retained, with an emphasis placed on limiting site disturbance to the maximum extent practical. The project's storage ponds and detention basins would include low impact development practices to encourage filtration and promote groundwater recharge.

The Phase I portion of the project site is located outside of the 100-year flood zone as designated on the Flood Insurance Rate Map (FIRM) by the Federal Emergency Management Administration (FEMA), while the Phase II portion of the project site is located within the 100-year flood zone (FEMA 2017). The proposed project does not include construction of new structures that would need to be raised above grade for protection from a flood event. As described in Section 2.6.3.2 for Phase II, the new basins within the Whitewater River Stormwater Channel would be designed with breakaway fencing or temporary berms that would facilitate the detention and infiltration of Colorado River water, while also maintaining the flood control function of the channel during storm events; these features would operate without manual intervention.

2.6.3.5 Site Access

Implementation of the proposed project site would not change existing access to the project site; access would continue to be provided via Hovley Lane East and CVWD's property at the WRP10 site. Similarly, access to the pump station sites would continue to be available via Fred Waring Drive (for the MVP Pump Station) and via Cook Street (for the WRP10 pump station). The project site is not accessible to the public, and is only accessed by CVWD staff and maintenance personnel.

Operation of the proposed project would increase existing operation and maintenance activities, as the repurposed basins on the Phase I site and the new basins on the Phase II site would need to be maintained to control vegetation and sediment buildup that would inhibit groundwater replenishment. These activities would occur on an as-needed basis, using vehicles and equipment that are currently stored and utilized at the WRP10 site. Operation and maintenance would not increase vehicular traffic or change site access from existing conditions.

2.6.4 Project Operations

Operation and maintenance of the proposed project would include the following:

- Conveyance of Colorado River water within the Mid-Valley Pipeline (existing and extended) for groundwater infiltration at the project site;
- Maintenance of storage and percolation ponds at the WRP10 site, consistent with existing operations;
- Vegetation and sediment management within the Phase I and Phase II ponds/basins to maintain storage capacity and maximize infiltration capabilities, consistent with existing mowing and pond maintenance operations;
- Operation of pump stations consistent with existing procedures, wherein stations are controlled electronically from CVWD headquarters in Coachella and therefore require minimal site visits, approximately once per week.

No manual intervention would be required for operation of the breakaway fencing or temporary berms. No new CVWD employees are anticipated to be needed to operate the proposed facilities.

2.7 Project Construction Schedule and Activities

Construction of the proposed project would occur over approximately nine months. The project schedule is ultimately driven by a water delivery during the calendar year of 2018 to CVWD. As such, Phase I of the project is planned to begin construction in January 2018 (with completion in June 2018), while Phase II of the project would begin construction in March 2018 (with completion in September 2018).

The sites for both Phase I and Phase II of the project are currently disturbed, and are utilized respectively for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during storm events (Phase II). The Phase I site (adjacent to the north of WRP10) currently accommodates a variety of facilities in addition to the existing ponds, including an on-site parking for operational vehicles and equipment. An existing pump station is located on the WRP10 site, within a closed housing unit; implementation of Phase I of the project would include extension of the MVP pipeline from this pump station to the Phase I ponds located just north of the WRP10 site. The Phase II site (Whitewater River Stormwater Channel) is used for stormwater conveyance and flood control; portions of Phase II of the project would also occur within the current WRP10 site which, as described above, is fully disturbed under existing conditions.

As described, extension of the MVP would occur under Phase II of the project, and would be located within the existing Whitewater River Stormwater Channel, from the point where the existing MVP turns into the WRP10 site. The pipeline extension would be configured for consistency with existing pipeline design (buried to a depth of approximately 20 feet and backfilled with a protective material). Construction of the pipeline extension would occur below ground using standard open-trench construction methods, including the following steps:

- Grading or pavement cutting depending on the location;
- Trench excavation and shoring to stabilize the sides of the trench, if necessary;
- Pipeline installation;
- Trench backfilling and compacting;

- Surface restoration and compaction; and
- Cathodic Protection².

2.7.1 Dewatering Activities

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities; it is anticipated that these activities would only be necessary during installation of the MVP pipeline extension (if at all). This would provide a dry work area to protect waters and preserve the work area. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agriculture lands or stormwater facilities in conformance with the State Water Resources Control Board's Stormwater General Permit for Construction Activities and applicable local discharge requirements.

2.7.2 Vehicles and Equipment

Construction staging consists of the preparation and use of physical locations for the storage of construction-related equipment and materials, such as vehicles and stockpiles. It also includes the parking locations to be used by construction workers. Construction staging and parking of vehicles and equipment would primarily take place both within the boundaries of existing facility sites. The project's contractor will be required to prepare and submit a construction staging plan; the plan will identify all locations where staging will occur, how traffic control and site access will be maintained, and activities to minimize construction disruption to neighboring properties. Additional information about traffic control at construction sites is included in Section 3.16, *Traffic and Transportation*.

2.7.3 Hours and Workforce

As a water district, CVWD is not required to comply with the noise ordinances of local jurisdictions. However, project construction activities would generally occur during normal work hours, consistent with the construction hours established by the City of Palm Desert (7:00 a.m. to 5:30 p.m. on Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturday, and no construction activity on Sunday). Some early morning start times (i.e., earlier than 7:00 a.m.) may be required during summer months with high temperatures; as described above, construction would occur between January and September 2018, and high temperatures may affect the construction schedule.

2.7.4 Utilities

Temporary utility connections may be required for construction. Water use during construction and testing of equipment would be potable water from the on-site system. Power would be provided from existing on-site equipment.

² The existing MVP is a 7.2-mile-long, 52-inch-diameter welded steel pipeline coated with a polyethylene tape system. Two new impressed current cathodic protection (ICCP) systems were installed for this segment of the pipeline, which include a deep-anode grounded with six MMO anodes at each location. The individual anode leads were installed in junction boxes which contain calibrated shunts for anode current measurements.

2.8 Permits and Consultation

CVWD is the CEQA Lead Agency responsible for preparation of this EIR, and has discretionary approval over the proposed project. One of the primary purposes of this EIR is to enable CVWD, responsible agencies, and interested parties to understand the potential environmental effects associated with implementation of the project.

The State CEQA Guidelines Section 15124(d) directs that the project description include identification of agencies expected to use the EIR in their decision-making processes, a list of permits and other approvals that may be required to implement the project, and a list of related local, state and federal consultation requirements. Table 3 provides a list of the federal, state, regional, and local regulatory/permitting agencies, as well as local Native American Tribes that may formally request consultation with CVWD regarding the project, under AB52.

Encroachment permits are not required for the proposed project because CVWD owns the WRP10 property and the property in the stormwater channel in fee. In addition, no work would be done in the adjacent streets that would require an encroachment permit.

Table 3 Potential Permits and Consultation Requirements

Regulating Agency	Potential Permit / Consultation
Federal Agencies	
U.S. Fish and Wildlife Service (USFWS)	Consultation for Endangered Species Act compliance for Phase II, may be required
U.S. Army Corps of Engineers (USACE), Regulatory Division	Clean Water Act (CWA) Section 404 permit for Phase II, for the discharge of dredged or fill material into waters of the United States
State Agencies	
State Water Resources Control Board (SWRCB), RWQCB – Colorado River Basin Region	- National Pollutant Discharge Elimination System Stormwater General Construction Permit and Stormwater Pollution Prevention Plan - Section 401 Water Quality Certification (only if Corps Section 404 permit is required)
State Historic Preservation Office	Consultation for National Historic Preservation Act compliance to meet CEQA, and for the CWA Section 404 permit
CDFW	Streambed Alteration Agreement or Notification for Phase II, may be required
Native American Tribes	
Various local tribes including: - Agua Caliente Band of Cahuilla Indians - Augustine Band of Cahuilla Mission Indians - Cabazon Band of Mission Indians - Cahuilla Band of Indians - Los Coyotes Band of Cahuilla and Cupeño Indians - Morongo Band of Mission Indians - Ramona Band of Cahuilla Indians - Soboba Band of Luiseño Indians - Torres Martinez Desert Cahuilla Indians - Twenty-nine Palms Band of Mission Indians	- Native American consultation - Assembly Bill (AB) 52 Tribal Cultural Resources consultation. As discussed in Section 3.5.3, AB 52 consultation was conducted prior to release of the EIR; as a result, the following tribes requested consultation on the proposed project: the Agua Caliente Band of Cahuilla Indians, and the Twenty-Nine Palms Band of Mission Indians. A copy of the cultural resources report was provided to the tribes, and no concern of specific tribal cultural resources were returned by the tribes. In addition, no request for mitigation relating to tribal cultural resources has been provided.
Regional Agencies	
South Coast Air Quality Management District (AQMD)	Permit to Construct and Permit to Operate¹

Regulating Agency

Potential Permit / Consultation

¹ A Fugitive Dust Control Plan will be submitted by the construction contractor to the AQMD prior to grading/excavation.

2.9 Alternatives

This chapter presents the CEQA alternatives analysis for the Palm Desert Groundwater Replenishment Project. Section 15126.6(a) of the CEQA Guidelines state that an EIR must describe and evaluate a reasonable range of alternatives to a project that would feasibly attain most of the project's basic objectives, but that would avoid or substantially lessen any identified significant adverse environmental effects of the project. The EIR should also evaluate the comparative merits of the project. Specifically, State CEQA Guidelines Section 15126.6 set forth criteria for selecting and evaluating alternatives.

Pursuant to State CEQA Guidelines Section 15124(b), the project description includes a statement of objectives. These objectives have assisted CVWD in developing a reasonable range of alternatives to evaluate in this EIR. The objectives are intended to demonstrate the underlying purpose of the project, and to aid the decision-makers in preparing findings or a statement of overriding considerations, if necessary. Primary objectives of the proposed project are presented in Section 2.4 of this EIR.

2.9.1 Alternatives Assessed in this EIR

In addition to the proposed project, this EIR assesses three alternatives: the No Project Alternative, the Phase I Only Alternative, and the Revised Phase II Alternative. Table 4 below provides an overview of the proposed project and alternatives assessed in this EIR, each of which are described in further detail below the table.

Table 4 Potential Permits and Consultation Requirements

Proposed Project	No Project Alternative	Phase I Only Alternative	Revised Phase II Alternative
- Improve and re-purpose ponds on the WRP10 site and within the WRSC¹ - Construction extension of the MVP within the WRSC - Provide storage capacity to capture and recharge maximum allocation of Colorado River water	- Ponds within the WRP10 site would continue to function as present - No further development within the WRSC - Do not provide capacity to store any allocation of Colorado River water	- Develop recharge ponds north and adjacent to WRP10Do not develop ponds within the WRSC - Do not extend the MVP within the WRSC - Possibly do not provide capacity to store maximum allocation of Colorado River water	- Do not develop recharge ponds north and adjacent to WRP10 - Develop ponds within the WRSC - Extend the MVP within the WRSC - Possibly do not provide capacity to store maximum allocation of Colorado River water

1. WRSC = Whitewater River Stormwater Channel

2.9.1.1 Alternative 1: No Project Alternative

Under Alternative 1, the proposed project would not be implemented, existing operations and maintenance activities at the WRP10 site would continue, and existing vegetation management within the Whitewater River Stormwater Channel would continue. No new groundwater

replenishment ponds would be implemented, and unused ponds located at WRP10 would not be repurposed for replenishing the underlying groundwater basin with Colorado River water. Existing facilities operated and managed by CVWD would not have the capacity to store its allocation of Colorado River water, and increased groundwater replenishment would not occur.

2.9.1.2 Alternative 2: Phase I Only Alternative

Under Alternative 2, only Phase I of the proposed project would be implemented. As described for the proposed project, this would include the re-purposing and improvement of existing ponds located adjacent to the north of the WRP10 site, and extension of pipeline to facilitate delivery of imported Colorado River water to these ponds. Colorado River water would be transmitted to the site via the existing MVP; the MVP would be extended within and to the north of the WRP10 site under Phase I, in order to transmit water from the main MVP located within the stormwater channel (connecting to the MVP Pump Station in Indio). Colorado River water would be deposited in ponds on the northern portion of the WRP10 site and allowed to percolate to the subsurface to replenish the underlying groundwater basin. As with the proposed project and described above in Section 2.5.1, Colorado River water is delivered to the CVWD jurisdiction via the Coachella Canal, which transmits Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Coachella Valley. As described in the Project Description (Section 2.6), Phase I of the proposed project would include the re-purposing of existing ponds located north and adjacent to the WRP10 site. No co-mingling of Colorado River water with secondary effluent would occur as a result of the proposed project.

Phase II of the proposed project would not occur and no construction within the Whitewater River Stormwater Channel would occur. No extension of the MVP would occur. In addition, the secondary effluent pump station and expansion/reconfiguration of the secondary effluent storage area located on the WRP10 site would not be constructed under the Phase I Only Alternative.

With implementation of this alternative, CVWD would not maximize use of its allocation of Colorado River water, minimizing groundwater replenishment benefits in comparison with the proposed project due to the elimination of replenishment basins on the Phase II site. Please see Sections 2.4 and 2.5 for discussion of CVWD's QSA for Colorado River water.

2.9.1.3 Alternative 3: Revised Phase II Alternative

Under Alternative 3, only Phase II of the proposed project would be implemented. As described for the proposed project, this would include the construction of detention/infiltration ponds within the Whitewater River Stormwater Channel, as well as an approximately 0.5-mile extension of the MVP located within the stormwater channel, consistent with the design of the existing MVP within the channel; as such, the pipeline extension would be buried to a depth of approximately 20 feet, and backfilled with a material designed to protect the pipeline extension. Infiltration ponds within the stormwater channel would be located on either side of the pipeline extension, to maximize permeability and infiltration potential.

Secondary effluent ponds in the southern portion of the WRP10 site would not be improved, and a new secondary effluent pump station would not be constructed within the WRP10 site (because in the absence of Phase I of the project, secondary effluent treatment and transmission operations would continue as-is on the WRP10 site, and no modifications to the storage or transmittal of secondary effluent on the WRP10 site would be necessary).

Similar to Alternative 2, discussed above, this alternative may not enable CVWD to maximize use of its allocation of Colorado River water. In order to capture, store, and infiltrate water under this alternative in such a way that CVWD's QSA for Colorado River water would be maximized, additional ponds would be required within the stormwater channel than would occur under the proposed project (please see Sections 2.4 and 2.5 for discussion of CVWD's QSA for Colorado River water). As such, ponds may need to be implemented along the entire stretch of channel between Cook Street and Fred Waring Drive. Although this area is previously disturbed, due to its current use as a stormwater channel, it does not already contain the facilities required for the proposed groundwater replenishment activities, such as are present on the Phase I site (which would not be utilized under this alternative); therefore, environmental impacts associated with project implementation would be amplified in comparison with the proposed project and Alternative 2 (impact analysis provided below).

2.9.2 Alternatives Considered but Eliminated

Prior to identification of the alternatives assessed in detail in this EIR, a series of other alternatives were considered by CVWD, including a series of alternatives for groundwater infiltration that were considered in the Palm Desert Groundwater Replenishment Feasibility Study. Key factors that influenced the alternatives considered in the Palm Desert Groundwater Replenishment Feasibility Study included the following: percolation rate, the size and volume of infiltration basins, groundwater levels, and site geology. Infiltration rates are based on native materials and geology, but can also be influenced by maintenance of basins. The size and volume of basins affect the recharge surface and how much water can be captured and stored. Local groundwater levels are influenced by rainfall and local recharge rates. The most easily influence variables to modify in groundwater recharge basins is the size of the basins and maintaining native recharge rates through proper maintenance of the system.

Alternatives that were considered but eliminated for the purposes of this proposed project are described below, including those that were previously considered in the Palm Desert Groundwater Replenishment Feasibility Study (CVWD 2011).

2.9.2.1 *Northern Levee Pipeline Extension*

In order to facilitate Phase II of the proposed project, an extension of the MVP would be implemented; one configuration of this pipeline extension that was considered but eliminated from further analysis was installing the pipeline extensions from within the WRP10 site through the northern levee of the Whitewater River Stormwater Channel, such that Colorado River water would be conveyed directly between the project's Phase I and Phase II sites. This potential alternative was eliminated from further analysis due to the presence of utility conflicts within the northern levee. Existing utility lines located within the northern levee make it infeasible to install pipeline extensions through the northern levee.

2.9.2.2 *Phase II Upstream of Cook Street*

Phase II of the proposed project is located immediately downstream of Cook Street, between Cook Street and Fred Waring Drive; one configuration of this portion of the project that was considered but eliminated from further analysis was locating Phase II immediately upstream of Cook Street. This potential alternative was eliminated from further analysis because it would require a

substantially longer extension of the MVP and an additional new pump station in order to transmit imported Colorado River water to the Phase II ponds, including tunneling under Cook Street. Due to the additional ground disturbance and energy requirements associated with this potential alternative, it was eliminated from further analysis.

2.9.2.3 Phase II Flashboard Dams

Phase II of the proposed project required the implementation of barriers to low-flow flood events in order to retain imported Colorado River water within the proposed basins to facilitate infiltration. One option considered for these barriers was the use of flashboards, a type of bulkhead used to raise water level and or adjust the flow rate. Flashboard systems require a concrete footing to spread forces from the boards and frames to the channel bed. The structure also acts as energy dissipation when flows overtop the flashboards. Each of the flashboards has to be removed manually, which increases the time and effort required to adjust system settings, which is critical in the time before expected storm events. For minor events, the flashboards can be left in place to capture flood flows for percolation. However, for larger events, the boards require removal to prevent overtopping of the channel banks.

This potential alternative was eliminated from further analysis due to the requirements for pre-storm manual labor, which increases risk and liability associated with providing channel capacity for stormwater flows during large events.

2.9.2.4 Phase II Rubber Dams

As with Phase II flashboard dams, the rubber dam option would offer a variation in design of the Phase II features. Rubber dams were considered for engineering and operational flexibility. The height of rubber dams can be easily, and even automatically, adjusted for water conservation operations. This is particularly helpful for operations during high stormwater flow situations where the system can be kept at a set water level height to encourage water conservation during small events, while the rubber dams would lower themselves to pass larger runoff events. During runoff recession flows, the dams could be kept at safe heights to capture as much water as possible. Rubber dams are also more reliable than sugar berms during storm flows and more flexible than flashboards.

This potential alternative was eliminated from further analysis due to the requirements for pre-storm manual labor, which increases risk and liability associated with providing channel capacity for stormwater flows during large events.

2.10 Cumulative Scenario

The cumulative scenario includes known projects within the City of Palm Desert, as listed below in Table 5 and shown in Figure 4.

Table 5 Cumulative Projects

Location	Project Name and Description	Approval Date	Expiration Date
Parcel 9 of Tentative Parcel Map (TPM) 31730 between Portola Ave/Cook St and Frank Sinatra Dr/Gerald Ford Dr	Desert Wells. Approval of 270 single-family lots.	3/1/2006	3/8/2017
74-255 Gerald Ford Drive (APNs 653-390-083, 653-390-087, 653-390-082)	University Park. Approval of a Tentative Tract Map for 244 single-family lots on 42.2 acre site.	4/4/2006	3/8/2017
36-200 Pacific Avenue (APNs 653-390-064, 653-390-077, 653-390-062)	University Park. Approval of a Tentative Tract Map for 141 single-family homes.	4/4/2006	3/8/2017
74-300 College Drive (APNs 653-390-064, 653-390-077, 653-390-062)	University Park. Approval of a Tentative Tract Map for 72 single-family homes.	4/4/2006	3/8/2017
38-301 Portola Avenue (APNs 620-400-015 and 620-400-016)	Catavina. Approval of a Tentative Tract Map for 159 single-family homes on 18.67 acre site.	5/11/2006	5/11/2017
Northwest corner of University Park Drive and College Drive (APNs 694-190-039, 694-190-044, 694-190-046, 694-190-048)	University Park. Approval of an amendment to approved Tentative Tract map 36342 for 196 residential homes to allow: 11 condominium lots totaling 78 condominium units; 69 single-family attached homes; 49 single-family detached homes; and a private recreation facility.	5/4/2011	5/3/2017
74-555 Hovley Lane East	Canterra Apartments. Construction of 612 apartment units. Half of the 306 units have been built, and the remaining 306 is remaining.	1987-2000	N/A
49-425 JFK Trail (APN 655-300-017)	Tentative Parcel Map 36502 to subdivide a 2.09-acre site into four parcels (three single-family lots and one retention basin lot)	5/6/2014	5/6/2016
50-044 Canyon View Drive (APN 771-550-012)	Notice of Exemption and a Tentative Parcel Map to subdivide a 1.31-acre parcel into two parcels within Canyon View Estates.	8/19/2014	8/19/2016
South side of Dick Kelly Drive, between Cortesia Way and Dinah Shore Drive (APN 694-130-024)	A Negative Declaration of Environmental Impact, a Precise Plan, and a Tentative Tract Map to subdivide 30+ acres into 111 single-family home lots and one 8+ acre lot for future multi-family development.	12/2/2014	12/2/2016
50-090 Canyon View Drive (APN 771-550-013)	Notice of Exemption in accordance with CEQA, and approval of a Tentative Parcel Map to subdivide a 2.27-acre parcel into three (3) parcels within Canyon View Estates in Ironwood Country Club.	1/20/2015	1/20/2017
152 acres north of Gerald Ford Drive, south of Pacific Union Railroad, east of Portola Avenue and west of Technology Drive	Mitigated Negative Declaration of Environmental Impact, a Development Agreement, a Specific Plan, a General Plan Amendment and a Change of Zone to establish land use designations, a Tentative Parcel Map to establish nine (9) parcels within the Specific Plan Area, and a Tentative Tract Map to subdivide 38+ acres into 166 single-family home lots, located on 152	3/26/2016	4/26/2036 (20 year DA)

Coachella Valley Water District
Palm Desert Groundwater Replenishment Project

Location	Project Name and Description	Approval Date	Expiration Date
	acres north of Gerald Ford Drive, south of Pacific Union Railroad, east of Portola Avenue and west of Technology Drive.		
DESERT ARC Campus 73-255 Country Club Drive	Arc Village. Notice of Exemption for the approval of a 36-unit multi-family residential project, with an 8,200 sq. ft. clubhouse facility to be located on the Desert Arc Campus. The residential units will be made available to adults with developmental disabilities.	3/17/2016	3/17/2018
75-300 Gerald Ford Drive (APN 653-410-022)	Gerald Ford Business Park. A 100,500 square foot mixed use retail/office center with a two-story parking structure, including one 4,500 square foot bank, four retail/restaurant spaces totaling 16,000 square feet, 2 two-story office/retail buildings totaling 62,000 square feet.	8/1/2006	8/24/2017
75-144 Gerald Ford Drive (APNs 653-690-076, 653-690-077)	Candlewood Suites. 88-room hotel with a height of 52 feet, and an associated restaurant pad.	11/1/2007	8/14/2016
44-450 Monterey Avenue (APN 627-033-002)	Delio Office Building. A 17,600 square foot professional office building.	12/1/2008	12/4/2016
45-640 HIGHWAY 74 (APNs 627-281-011, 627-281-014, 627-281-013, 627-281-015, 627-281-017, 627-281-018)	Rosewood Hotel. 82-Room Hotel and 59-Unit Residential Condominium project with ancillary uses and amenities on a 4.97 +/- acre site.	10/13/2011	10/13/2021 with possible extensions
74-200 Country Club Drive	Conditional Use Permit to install telecommunication antennas and equipment, and a Notice of Exemption for building modifications to remove an existing 40-foot tall spire and construct a 40-foot tall cupola in its place to screen the antennas at the Palm Desert Oasis Seventh- Day Adventist Church.	8/19/2014	8/19/2016
72-850 El Paseo	Conditional Use Permit to install a telecommunication tower and equipment shelter at the Palms to Pines Shopping Center.	1/20/2015	1/20/2016
152 acres north of Gerald Ford Drive, south of Pacific Union Railroad, east of Portola Avenue and west of Technology Drive	Mitigated Negative Declaration of Environmental Impact, a Development Agreement, a Specific Plan, a General Plan Amendment and a Change of Zone to establish land use designations, a Tentative Parcel Map to establish nine (9) parcels within the Specific Plan Area, and a Tentative Tract Map to subdivide 38+ acres into 166 single-family home lots, located on 152 acres north of Gerald Ford Drive, south of Pacific Union Railroad, east of Portola Avenue and west of Technology Drive.	3/26/2016	4/26/2036 (20 year DA)
40-004 Cook Street	Notice of Exemption in accordance with CEQA; and consideration of a Conditional Use Permit to install a new 48-foot tall Verizon Telecommunication tower.	4/7/2015	4/7/2016

Figure 4 Cumulative Projects

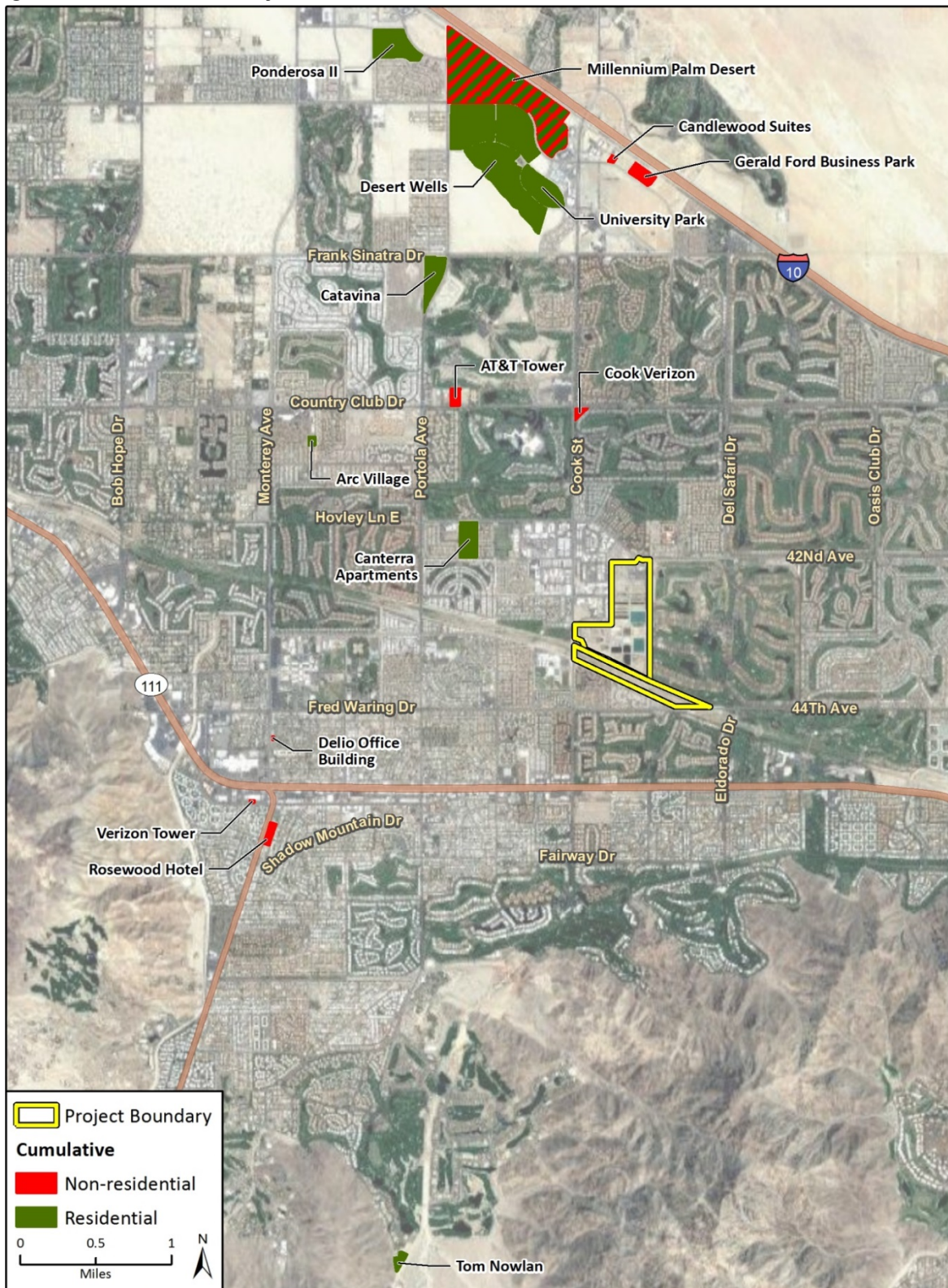


Fig 4 Cumulative Projects

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3 Environmental Impact Analysis

This section identifies and characterizes possible environmental effects of the Palm Desert Groundwater Replenishment Project for each of the environmental issue areas identified in the *CEQA Guidelines* Appendix G Checklist. Issues and concerns identified during the public scoping period are assessed in this analysis.

A “Significant effect” is defined by the *CEQA Guidelines* §15382 as:

“...a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

In this section, the assessment of each environmental issue area begins with a discussion of the environmental setting related to the issue, including the applicable regulatory environment, followed by the impact analysis. In the impact analysis, the first subsection identifies the methodologies used and the impact significance thresholds, which are those criteria adopted by CVWD and identified in Appendix G of the *CEQA Guidelines*. The next subsection describes each impact of the proposed project, mitigation measures for potentially significant impacts, and the level of significance following implementation of mitigation. The significance of individual impacts is identified per the following guidelines:

- **Significant and Unavoidable:** An impact that cannot be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires a Statement of Overriding Considerations to be issued if the project is approved per §15093 of the *CEQA Guidelines*.
- **Less than Significant with Mitigation Incorporated:** An impact that can be reduced to below the threshold level given reasonably available and feasible mitigation measures. Such an impact requires findings under §15091 of the *CEQA Guidelines*.
- **Less than Significant:** An impact that may be adverse, but does not exceed the threshold levels and does not require mitigation measures. However, mitigation measures that could further lessen the environmental effect may be suggested if readily available and easily achievable.
- **No Impact:** The proposed project would have no effect on environmental conditions or would reduce existing environmental problems or hazards.

Project-specific mitigation measures are identified following each environmental impact discussion where it is determined that an impact is potentially significant and mitigable to a less-than-significant level. In cases where a mitigation measure for an impact could have a significant environmental impact in another issue area, such impacts are discussed and evaluated as a secondary (or “residual”) impact. The impact analysis for each environmental issue area concludes with a discussion of cumulative effects, which evaluates the impacts associated with the proposed project in conjunction with other planned and pending developments in the area.

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The Executive Summary of this EIR summarizes all impacts and mitigation measures that apply to the proposed project.

3.1 Aesthetics

This section addresses the potential aesthetic and visual quality impacts that could occur with implementation of the proposed project. Aesthetic resources, also referred to as visual resources, are defined as the visible built and natural landscape features that can be seen by the public for a given area. This section describes the existing visual setting in the vicinity of each project site, and evaluates the potential effects of the project on visual resources.

3.1.1 Environmental Setting

3.1.1.1 *Concepts and Terminology*

Visual or aesthetic resources are generally defined as both the natural and built features of the landscape that contribute to the public's experience and appreciation of the environment. Depending on the extent to which a project's presence would alter the visual character and quality of the environment, a visual or aesthetic impact may occur. Familiarity with the following terms and concepts will aid the reader in understanding the information in this section.

Visual Character

Visual character is a general description of the visual attributes of a particular land use setting and the unique set of landscape features. The purpose of defining the visual character of an area is to establish the baseline visual quality of each project site that is most likely to be perceived by the viewing public. For suburban areas, visual character is typically described on the neighborhood level or in terms of areas with common land use, and/or landscaping and urban design features. For natural and open space settings, visual character is most commonly described in terms of areas with common landscape attributes (such as landform, vegetation, or desert features).

Visual Quality

Visual quality is defined as the overall visual impression or attractiveness of a site or locale as determined by its aesthetic qualities (such as color, variety, vividness, coherence, uniqueness, harmony, and pattern). Natural and built features combine to form perspectives with varying degrees of visual quality, which are rated in this analysis as low, moderate, and high, as follows:

- **Low.** The location is lacking in natural or cultural visual resource amenities typical of the region. A site with low visual quality will have aesthetic elements that are relatively unappealing and perceptibly uncharacteristic of the surrounding area.
- **Moderate.** The location is typical or characteristic of the region's natural or cultural visual amenities. A site with moderate visual quality maintains the visual character of the surrounding area, with aesthetic elements that do not stand out as either contributing to, or detracting from, the visual character of an area.
- **High.** The location has visual resources that are unique or exemplary of the region's natural or cultural scenic amenities. A site with high visual quality is likely to stand out as particularly appealing and makes a notable positive contribution to the visual character of an area.

Affected Viewers and Exposure Sensitivity

Affected viewers and exposure conditions address the variables that affect viewers and their visual exposure to proposed project facilities. The identification of viewer types and volumes describes the type and quantity of potentially affected viewers within the visual study area. Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual conditions. Sensitive viewers are those who have a strong stake or interest in the quality of the landscape and have a greater level of concern towards changes that degrade or detract from the visual character of an area. Examples of viewers with elevated concern for visual quality include travelers on designated scenic routes and users of public recreational areas.

Viewer exposure considers some or all of the following factors: landscape visibility (the ability to see the landscape); viewing distance (the proximity of viewers to the project sites); viewing angle (the line of sight to the facility sites); extent of visibility (whether the line of sight is open and panoramic to the facility sites or restricted by terrain, vegetation, and/or structures); and duration of view. Generally, viewer sensitivity relates to the level of interest or concern the public has for a particular aesthetic resource.

Visual Sensitivity

Visual sensitivity is the overall measure of a site's susceptibility to adverse visual changes. Visual sensitivity is rated as high, moderate, or low and is determined based on the combined factors of visual quality, viewer types and volumes, and visual exposure to the project sites, as described above. A setting's overall visual sensitivity is the measure of its susceptibility to significant visual impacts that would result from project-caused visual change. Thus, significant adverse impacts are typically unlikely in a setting with low overall sensitivity.

3.1.1.2 Visual Study Area

For the purposes of this evaluation, the aesthetics or visual study area (also called viewshed³) for each project site is that area from which either the facilities themselves or construction activities would be visible to the public. Phase I of the proposed project, located adjacent and north of CVWD's existing Water Reclamation Plant No. 10 (WRP10) is largely blocked from views in the surrounding area, due to grade changes, a brick wall which surrounds the WRP10 site, and existing vegetation (tamarisk groves along the eastern and southern borders of the WRP10 site). Phase II of the proposed project is located within the Whitewater River Stormwater Channel between Cook Street and Fred Waring Drive, and would be visible to motorists and pedestrians along Cook Street and Fred Waring Drive, as well as from the backyards of residential properties adjacent to the south of the stormwater channel. As described in Section 2.0, Project Description, implementation of Phase II of the proposed project may require an extension of the Mid-Valley Pipeline, which would occur within the stormwater channel, consistent with the existing pipeline and design configuration. In general, Phase I and Phase II sites are more visible to immediately adjacent properties and roadways than to the general viewing public. Because the visual study area boundaries for each Phase depend on existing site and vicinity conditions (i.e., viewshed, structures, and vegetation), an assessment of each site individually is important in identifying affected viewers and describing the visual quality and character of that location.

³ A viewshed is an area of land, water, or other urban or environmental element that is visible to the human eye from a fixed vantage point.

Field reconnaissance for the proposed project was conducted in May, 2017. Observations of the proposed Phase I WRP10 site, and Phase II Whitewater River Stormwater Channel site and Mid-Valley Pipeline Extension, were performed to identify the visual study area and take representative photographs of existing visual conditions. Photographs are included in this section to document the existing visual conditions of the proposed Phase I and Phase II sites and adjacent areas. Figure 5 depicts existing views of proposed project sites from publically accessible locations.

3.1.1.3 Visual Character of the Project Area

All of the project facilities would be located in central portion of the Coachella Valley in the City of Palm Desert, in central Riverside County, with the exception of the MVP Pump Station which is located in the City of Indio (the MVP Pump Station is within a fully-enclosed structure which would not be altered with implementation of the project). The Coachella Valley is characterized by developed urban and suburban areas surrounded by undeveloped desert on the valley floor, and the San Jacinto mountain ranges on the west and Little San Bernardino Mountains to the east. The Valley has a dramatic elevation change, from approximately 500 feet at the valley floor to approximately 10,000 feet at the surrounding mountain peaks. Specifically, elevations in Palm Desert range from approximately 300 to 1,000 feet above mean sea level. Open spaces within the project area include suburban spaces such as golf courses and parks, and natural desert areas both within the urban environment and at the outskirts of developed areas. Large agricultural parcels are located in communities in the southern portion of Coachella Valley.

The following provides a general description of the community where project facilities would be located, the City of Palm Desert. The visual description of individual facility sites is provided in Table 6 and Figure 5.

Palm Desert

Palm Desert is situated on the floor of the Coachella Valley and is surrounded by mountains and native desert land between the cities of Rancho Mirage and La Quinta. The Santa Rosa Mountains to the west and the San Jacinto Mountains to the south provide a natural and scenic backdrop. Palm Desert is characterized by planned residential developments served by golf courses and country clubs. The visual character of the area may be best described as that of a suburban community, with low-density residential development and open space areas surrounding a central downtown business and commercial district.

Table 6 Summary of Visual Sensitivity Descriptions

Photo # and Location	Visual Quality (Low/Med/High)	View and Exposure Conditions	Visual Sensitivity (Low/Med/High)
Photo 1 View from within the WRP10 site, along the eastern border, looking to the north towards the existing operational parking area	Low	View from within the WRP10 site, looking north along the eastern site boundary, next to the Back Feed Reservoir ("A" on Figure 2). Nearest sensitive receptors are in the Toscana development located on the opposite site of the brick wall behind the fence on the right side of the photo. CVWD Administration and Operations buildings in the background.	Low (no public visibility)

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Photo # and Location	Visual Quality (Low/Med/High)	View and Exposure Conditions	Visual Sensitivity (Low/Med/High)
Photo 2 Within the WRP10 site, view to the south along the eastern WRP10 border	Low	View from within the WRP10 site, looking south along the eastern site boundary, through the fence boundary towards the brick wall (~6 feet tall) which marks the border of the Toscana residential development. Back Feed Reservoir ("A" on Figure 2) is to the right (out of view).	Low (no public visibility)
Photo 3 View to the east from Melanie Place towards the western border of the WRP10 site	Low	View to the east from Melanie Place, towards the western border of the WRP10 site, across the NAPA Auto Parts parking lot. Poles for security lighting within the WRP10 site are visible in the distance. Grade separation on the western border of the WRP10 site obstructs visibility from outside the site.	Low (some public visibility of security lighting from industrial business parking areas)
Photo 4 View to the east from Melanie and Merle, towards the northern portion of the WRP10 site	Low	View to the east from Melanie Place at Merle Drive, towards the western border of the WRP10 site. Tamarisk trees on the eastern boundary of the WRP10 site are visible in the far background. Grade separation on the western border for the WRP10 site obstructs visibility from outside the site.	Low (some public visibility of security lighting from industrial business parking areas)
Photo 5 View to the north/northwest towards Cook Street from the CVWD access road along the southern levee of the stormwater channel	Low	View to the north/northwest from the CVWD access road on the southern levee of the Whitewater River Stormwater Channel, looking across the Whitewater River Stormwater Channel towards Cook Street and culverts. Phase II of the project would occur in this channel, from Cook Street proceeding downstream (towards the right) to Fred Waring Drive. Public views are from vehicles and pedestrians on Cook Street (no sidewalk on the downstream side of Cook Street), and from business parking lot on northern side of the Whitewater River Stormwater Channel.	Low (public visibility is mobile, from the roadway)
Photo 6 View to the east/southeast from the southern levee of the stormwater channel towards the WRP10 site	Low	View to the east/southeast from the southern levee of the Whitewater River Stormwater Channel. Tamarisk trees on the opposite (northern) side of the Whitewater River Stormwater Channel provide the southern border of the WRP10 site. Phase II of the project would occur in the Whitewater River Stormwater Channel in the foreground. The Palm Lake and Desert Rose residential developments are located to the right, on the southern side of the Whitewater River Stormwater Channel (separated by access road, fencing, and yards).	Low (residential visibility is limited to backyard areas)
Photo 7 View to the west from the CVWD access road on the southern levee of the stormwater channel – backyards of residences in Palm Lake on the left	Low	View to the west from the southern levee of the Whitewater River Stormwater Channel – culverts under Cook Street shown in the distance. The backyards of residences in the Palm Lake development are on the left. Phase II ponds would occur in the Whitewater River Stormwater Channel to the right.	Low (residential visibility is limited to backyard areas)

Photo # and Location	Visual Quality (Low/Med/High)	View and Exposure Conditions	Visual Sensitivity (Low/Med/High)
Photo 8 View to the east along Fred Waring Drive, from the southeastern portion of the channel, where it is traversed by the road	Low	View to the east along Fred Waring Drive, from the southern levee of the Whitewater River Stormwater Channel (downstream boundary of the Phase II site). The fence and levee shown would not be modified under the project.	Low (public visibility is mobile, from the roadway)
Photo 9 View to the west, towards the WRP10 site, from the western end of Via Cortana within the Toscana residential development	Low	View to the west from within the Toscana residential development towards the southeastern portion of the WRP10 site. Tamarisk trees within the WRP10 site are visible; the WRP10 site (Phase I of the project) is otherwise blocked from view due to grade separation, landscaping, and brick wall).	Low (no public visibility)
Photo 10 View to the north, along the pedestrian pathway that runs along the western border of the Toscana residential development	Low	View to the north, along the bicycle / pedestrian pathway along the western border of the Toscana residential development. WRP10 site to the left/west, on the other side of approximately 15-20 feet of landscaped area and a brick wall on a slope on the border of the Toscana development.	Low (no public visibility)

3.1.2 Regulatory Framework

3.1.2.1 Federal

No federal regulations relative to scenic or visual resources would be applicable to the proposed project.

3.1.2.2 State

California Scenic Highway Program

In 1963, the State of California established the Scenic Highway Program to develop a system of State roadways whose adjacent corridors contained scenic resources worthy of protection and enhancement. Sections 260 through 263 of the State Streets and Highways Code establish the Scenic Highways Program and require local government agencies to take the following actions to protect the scenic appearance of the scenic corridor:

- Regulate land use and density of development,
- Provide detailed land and site planning,
- Prohibit off-site outdoor advertising and control on-site outdoor advertising,
- Pay careful attention to and control earthmoving and landscaping, and
- Scrutinize the design and appearance of structures and equipment.

There are no designated scenic highways within the aesthetics study area (Caltrans 2017).

Figure 5 Site Photographs



Photo 1: View from within the WRP10 site, along the eastern border, looking to the north towards the existing operational parking area



Photo 2: View from within the WRP10 site, along the eastern border, looking to the south towards the privacy wall surrounding the Toscana residential development



Photo 3: View to the east from Melanie Place towards the western border of the existing WRP10 site



Photo 4: View to the east from Melanie and Merle, towards the northern portion of the WRP10 site



Photo 5: View to the north/northwest towards Cook Street from the CVWD access road along the southern levee of the stormwater channel



Photo 6: View to the east/southeast from the southern levee of the stormwater channel towards the WRP10 site



Photo 7: View to the west from the CVWD access road on the southern levee of the stormwater channel - backyards of residences in Palm Lake on the left



Photo 8: View to the east along Fred Waring Drive, from the southeastern portion of the channel, where it is traversed by the road



Photo 9: View to the west, towards the WRP10 site, from the western end of Via Cortana within the Toscana residential development



Photo 10: View to the north, along the pedestrian pathway that runs along the western border of the Toscana residential development

3.1.2.3 Local

CVWD Development Design Manual

The CVWD Development Design Manual provides comprehensive procedural and technical requirements for the planning, design and construction of CVWD service infrastructure required for new development. The document provides general information and the requirements for processing a new development, presents drawing format, right-of-way procedures, inspection requirements and CVWD service function technical design standards.

3.1.3 Impacts and Mitigation Measures

3.1.3.1 *Significance Criteria*

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Have a substantial adverse effect on a scenic vista.*
- b. *Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway corridor.*
- c. *Substantially degrade the existing visual character or quality of the site and its surroundings.*
- d. *Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.*

3.1.3.2 *Approach to Analysis*

The aesthetics impact analysis addresses the short-term (construction-related) and long-term (operations and maintenance-related) impacts on scenic resources, scenic vistas, and the visual character of project sites and their surrounding areas. The visual impact analysis is based on field observations of project sites and surrounding viewsheds conducted in May of 2017, site and aerial photographs, computer-aided street-view tours (Google Earth), and review of relevant planning documents.

Construction Impacts

The evaluation of temporary visual impacts during construction considers whether construction activities would substantially degrade the existing visual character or quality of the site or surrounding area and the duration over which this change would occur.

Operational Impacts

Permanent visual impacts from facility siting and operation are assessed based on the project's potential to have a substantial adverse effect on scenic vistas, substantially damage scenic resources, or substantially degrade the existing visual character or quality of a site and its surroundings after the facility is constructed and operational. The analysis of permanent visual impacts focuses on those sites at which above-ground facilities would be constructed.

Areas of No Project Impact

The pipeline extension that may occur under the implementation of Phase II, as described in Section 2.6.3.3 of the *Project Description*, would be underground; after construction is completed, the pipeline extension would not be visible and is not expected to result in permanent changes that affect scenic views, scenic resources, the visual quality of the surrounding area, or introduction of light and glare. Therefore, the visual impacts associated with the operations of the project pipelines are not discussed further in this analysis.

As explained below, the proposed project would not result in impacts related to one of the above-listed significance criteria.

- b. Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway corridor.*

The project site is located approximately 2.31 miles from both State Route (SR) 74, an officially designated State Scenic Highway, and from SR 111, an eligible State Scenic Highway that has not been officially designated (Caltrans 2017); therefore, this criterion is not applicable and is not discussed further.

3.1.3.3 Construction Impacts and Mitigation Measures

The evaluation of temporary visual impacts during construction considers whether construction activities would substantially degrade the existing visual character or quality of the site or surrounding area and the duration over which this change would occur.

IMPACT AE-1 PROJECT CONSTRUCTION WOULD NOT HAVE A SUBSTANTIAL ADVERSE IMPACT ON A SCENIC VISTA, RESOURCE, OR ON THE VISUAL CHARACTER OF A SITE OR ITS SURROUNDINGS. (LESS THAN SIGNIFICANT)

Construction of project facilities could result in temporary changes in the vicinity of construction sites due to presence of construction vehicles, equipment and materials, stockpiles, and exposed soils. Construction activities would be temporarily visible from public vantage points, particularly from Cook Street and Fred Waring Drive, where there are views into the Phase II site.

Phase I of the project is located within and adjacent to the north of the existing WRP10 site, which is largely shielded from public view due to grade change, a brick wall surrounding the site, and existing vegetation in the form of mature tamarisk trees. In addition, this site is fully disturbed, and project uses would be consistent with existing uses.

Phase II of the project is located within the Whitewater River Stormwater Channel, which is visible from Cook Street, Fred Waring Drive, and the backyards of some residences located adjacent to the southern levee of the stormwater channel. Ground disturbance associated with construction of Phase II would be visible from these vantage points. However, there are no scenic vistas or high-quality visual resources in the vicinity.

Similarly, extension of the Mid-Valley Pipeline would be visible from the surrounding areas, but would occur in a previously disturbed area and would not affect scenic vistas or high-quality visual resources. Therefore, construction activities associated with the proposed project would have a less than significant aesthetics impact.

IMPACT AE-2 PROJECT CONSTRUCTION WOULD NOT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE THAT WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA. (LESS THAN SIGNIFICANT)

Project construction activities would generally occur during normal work hours, consistent with the construction hours established by the City of Palm Desert (7:00 a.m. to 5:30 p.m. on Monday through Friday, 8:00 a.m. to 5:00 p.m. on Saturday, and no construction activity on Sunday). Nighttime construction is not required. However, some early morning start times (i.e., earlier than 7:00 a.m.) may be required during summer months with high temperatures. This construction activity would not require additional lighting. Some glare may be introduced through the presence of construction vehicles and equipment; however, the project site and area are previously developed and the presence of such vehicles and equipment is typical. Therefore, potential impacts during construction associated with light or glare would be less than significant.

3.1.3.4 Operation Impacts and Mitigation Measures

IMPACT AE-3 PROPOSED PROJECT FACILITIES WOULD NOT HAVE A SUBSTANTIAL ADVERSE IMPACT ON A SCENIC VISTA, RESOURCE, OR ON THE VISUAL CHARACTER OF A SITE OR ITS SURROUNDINGS. (LESS THAN SIGNIFICANT)

Following construction of the proposed project, activities associated with operation and maintenance of Phase I would be consistent with ongoing activities at the WRP10 site, and no new impacts to visual resources would be introduced. Operation and maintenance of Phase II of the project would include the retention of Colorado River water within the Whitewater River Stormwater Channel, which is typically dry and partially vegetated; therefore, the presence of Phase II facilities would represent a change in the existing visual environment. However, as previously described, there are no scenic vistas or high-quality visual resources in the area. Underground components of the project (i.e., pipelines) would not be visible after construction and would not result in adverse permanent changes that affect the visual quality of the surrounding area. Therefore, potential impacts would be less than significant.

IMPACT AE-4 PROJECT OPERATION WOULD NOT CREATE A NEW SOURCE OF SUBSTANTIAL LIGHT OR GLARE THAT WOULD ADVERSELY AFFECT DAY OR NIGHTTIME VIEWS IN THE AREA. (LESS THAN SIGNIFICANT)

The Phase I project site is currently equipped with security lighting mounted on tall poles, some of which are visible from outside the WRP10 (please see the site photos provided in Figure 5). This lighting is manually operated, and employed as needed for security and/or nighttime repairs and maintenance. This lighting would not be modified as a result of the project.

The Phase II site is not currently equipped with lighting. Lighting similar to that existing on the Phase I site may be implemented and manually controlled as needed for security and/or nighttime repairs and maintenance. During operation and maintenance of the project, this would be a new source of light. However, as with lighting at the Phase I site, lighting at the Phase II site would be angled down and only employed as needed, such that surrounding land uses would not be directly exposed to new or intrusive lighting as a result of the project. Therefore, potential impacts would be less than significant.

3.1.3.5 Cumulative Impacts

The geographic scope for cumulative impact analysis on aesthetic resources consists of Phase I located within and adjacent to the north of the existing WRP10 site, Phase II located within the

Whitewater River Stormwater Channel, the extension of the Mid-Valley Pipeline located in previously disturbed areas, and the immediate vicinity around each of these sites that is visible from the same public vantage points. This includes project facilities visible to viewers who can also view proposed CVWD construction areas and operation of facilities from public rights of way in all areas where project facilities are proposed. This discussion also considers the mass and scale of the proposed project's facilities as they relate to other projects proposed by development entities in the area of the proposed project facilities. Based on review of the cumulative projects obtained the City of Palm Desert where project facilities are located (City of Palm Desert 2015; City of Palm Desert 2016), no cumulative projects have been identified in the same viewshed of the project sites. The nearest approved non-residential project, a new 48-foot tall Verizon Telecommunication tower, would be located one mile northwest of the project site at the corner of Country Club Drive and Cook Street; therefore, is outside of the viewshed of the project site. The nearest approved residential project, Canterra Apartments, would be located approximately one mile west of the project site, south of Hovley Lane; therefore, is outside of the viewshed of the project site.

Phase I and II of the proposed project would occur on sites currently used for similar purposes. The re-purposing of existing ponds within CVWD's existing WRP10 would not contribute to cumulative aesthetic impacts at this site. The construction of temporary berms to create detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin within the Whitewater River Channel, would not contribute to cumulative aesthetics impacts, as the channel is presently used for a similar purpose, flood control. Additionally, implementation of the project may require the extension of the Mid-Valley Pipeline, which would occur within the Whitewater River Stormwater Channel consistent with the existing pipeline design and configuration. Phase I, Phase II, and the Mid-Valley Pipeline extension are generally located within existing communities and surrounded by existing residential, commercial, and other land uses. The project site is located in an area with low visual sensitivity, and there are no planned projects in the immediate vicinity that would contribute to cumulative aesthetic impacts. There would be no significant cumulative impacts on aesthetics or scenic views and resources from the project phases. There would be no significant construction or operational cumulative impacts related to aesthetics as a result of all proposed project facilities.

3.2 Agriculture and Forestry Resources

This section describes existing agricultural and forest resources within the project area, federal, State and local regulatory setting, and analyzes the potential for the project to significantly affect such resources through displacement or conversion of these resources.

3.2.1 Environmental Setting

The proposed project is located in the Coachella Valley in central Riverside County, within the incorporated cities of Palm Desert and Indio. Phase I of the proposed project would be located adjacent to the north of CVWD's existing WRP10 site in Palm Desert. Phase II of the proposed project would be located within the Whitewater River Stormwater Channel south/southeast of WRP10 in Palm Desert. Upgrades to the capacity of the existing MVP Pump Station would also occur as part of the project; as described, the pump station is located in the City of Indio.

3.2.1.1 Forest Resources

Section 12220(g) of the California Public Resources Code defines forest land as "land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation and other public benefits." There are no forest lands within the project site, as the site is largely developed with existing WRP10 facilities (Phase I) and as a stormwater channel (Phase II).

3.2.1.2 Agricultural Resources

The California Natural Resources Agency, Department of Conservation (DOC), Division of Land Resource Protection, maps important farmlands throughout California through the Farmland Mapping and Monitoring Program. Important farmlands are classified into the categories listed below on the basis of soil surveys developed by the United States Department of Agriculture, irrigation status, and current land use.

- **Prime Farmland.** This category represents farmland with the best combination of physical and chemical characteristics for long-term agricultural production. Prime farmland has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed. In addition, the land must have been used for irrigated agricultural production in the last four years to qualify under this category.
- **Farmland of Statewide Importance.** This category is similar to Prime Farmland in that it has a good combination of physical and chemical characteristics for crop production. The difference is that Farmland of Statewide Importance has minor shortcomings, such as greater slopes and less ability to store moisture.
- **Unique Farmland.** This category represents land that has been 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 of California. Unique Farmland must have been cropped at some time during the four years prior to the mapping date.

- **Farmland of Local Importance.** This category applies to land of importance to the local agricultural economy, as determined by the county in which it is located. This land is either currently producing crops or has the capability of production, but does not meet the criteria of the preceding categories.
- **Grazing Land.** Grazing Land is land on which the vegetation is suited to the grazing of livestock.
- **Urban and Built-up Land.** This land is occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures on a 10-acre parcel.
- **Other Land.** This is land that is not included in any of the categories above and may include low density rural developments, brush, timber, wetland, confined livestock areas, strip mines, and gravel pits, among other land types.

For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land constitute 'agricultural land' (Public Resources Code Section 21060.1). The "Urban and Built-up Land" and "Other Land" categories are used for reporting changes in land use as required for the biennial farmland conversion report.

All land within the project site boundary has been mapped and classified by the California Department of Conservation's Farmland Mapping and Monitoring Program as either "Urban and Built-up Land" or "Other Land" categories (California DOC 2016a). All adjacent properties have also been mapped as either of these two categories. Thus, 'agricultural land' does not occur within or adjacent to the project site. Per the 2014 Land Conservation Act Status Report (California DOC 2015) and the most recent Land Conservation Act Map (California DOC 2016b), no lands within or adjacent to the project site are under a Williamson Act contract.

3.2.2 Regulatory Framework

3.2.2.1 *Federal*

Farmland Protection Policy Act

The Farmland Protection Policy Act requires an evaluation of the relative value of farmland that could be affected by decisions sponsored in whole or part by the federal government. The Farmland Protection Policy Act is intended to minimize the impact federal programs have on the unnecessary and irreversible conversion of farmland to nonagricultural uses. It assures that, to the extent possible, federal programs are administered to be compatible with State, local units of government, and private programs and policies to protect farmland (United States Department of Agriculture n.d.). For the purpose of Farmland Protection Policy Act, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to Farmland Protection Policy Act requirements includes forest land, pastureland, cropland, or other land. The project site is not any of these types of land, and therefore is not considered optimal for crop farming by the United States Department of Agriculture.

3.2.2.2 State

California Land Conservation Act

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, is the State's primary program aimed at conserving private land for agricultural and open space use. It is a voluntary, locally-administered program that offers reduced property taxes on lands whose owners place enforceable restrictions on land use through contracts between the individual landowners and local governments. As described above, no lands within or adjacent to the project site are under a Williamson Act contract.

3.2.2.3 Local

There are no local regulations governing agriculture and forestry resources that apply to the project site.

3.2.3 Impacts and Mitigation Measures

3.2.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would:

- 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.*
- b. *Conflict with existing zoning for agricultural use, or a Williamson Act contract.*
- c. *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)).*
- d. *Result in the loss of forest land or conversion of forest land to non-forest use.*
- e. *Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.*

3.2.3.2 Approach to Analysis

This analysis evaluates the potential for project facilities 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 project facilities to farmland mapped on California DOC Farmland Mapping and Monitoring Program Important Farmland Series Maps as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and to maps of Williamson Act contracts and zoning maps for the study area. This analysis also evaluates the potential for the project to locate facilities on parcels zoned for agricultural uses, forest land, timberland, or timberland zoned Timber Production.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to any of the five above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- 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.*

There are no lands within the project site or adjacent to the project site that have been mapped as Farmland by the California DOC Farmland Mapping and Monitoring Program (California DOC 2016a). Therefore, the proposed project would convert any Farmland to a non-agricultural use. The proposed project would have no impact.

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

The project site and adjacent properties are not zoned for agricultural use. As described above, no lands within the project site or adjacent to the project site are under a Williamson Act contract (California DOC 2016b). Thus, the proposed project would not conflict with any existing zoning for agricultural use or a Williamson Act contract. The proposed project would have no impact.

- c. 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)).*

The project site is zoned Public Facility, Open Space, and Residential-Low District. The project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There are no forest lands within the project site, as the site is largely developed with existing WRP10 facilities, Whitewater River Stormwater Channel, and the existing MVP Pump Station. The Phase I site is zoned Public Facility, the Phase II site is zoned Open Space, and the area surrounding the MVP pump station site is zoned Residential-Low District. Thus, the proposed project would not conflict with any zoning for forest land or timberland. The proposed project would have no impact.

- d. Result in the loss of forest land or conversion of forest land to non-forest use; or*

The project site is not zoned for forest land, timberland, or timberland zoned Timberland Production. There are no forest lands within the project site, as the site is largely developed with existing WRP10 facilities, Whitewater River Stormwater Channel, and the existing MVP Pump Station. The current development and facilities within the project site preclude the use of 10 percent or more for timber production. Thus, the proposed project would not result in the loss of forest land or conversion of forest land to a non-forest use. The proposed project would have no impact.

- e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.*

As described above, all land within and adjacent to the project site is mapped by the California DOC Farmland Mapping and Monitoring Program as either “Urban and Built-up Land” or “Other Land” categories (California DOC 2016a). Farmland, including Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land does not occur

within or adjacent to the project site. There are no portions of the project site or adjacent properties that are zoned for agriculture, forest land, or timberland. The project site is largely developed with the existing WRP10 facilities, Whitewater River Stormwater Channel, and MVP Pump Station, which preclude use of 10 percent or more of the site for timber production. The proposed project would have no impact because agricultural and forest resources are not present within or adjacent to the project site.

3.2.3.3 Construction Impacts and Mitigation Measures

As discussed above, there would be no agriculture or forestry resources impacts related to or resulting from the proposed project. Construction of the proposed project would have no impact on agriculture or forestry resources.

3.2.3.4 Operation Impacts and Mitigation Measures

As discussed above, there would be no agriculture or forestry resources impacts related to or resulting from the proposed project. Operation of the proposed project would have no impact on agriculture or forestry resources.

3.2.3.5 Cumulative Impacts

The proposed project would have no direct or indirect impacts to agriculture or forest resources. Therefore, the proposed project would not have a cumulatively considerable contribution to cumulative impacts on agriculture or forest resources. No impact would occur.

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3.3 Air Quality

This section describes the existing air quality conditions within the Coachella Valley and the potential impacts on air quality from the project. Information for this section is based in part on data from the SCAQMD and California Air Resources Board (CARB). Greenhouse gases and global climate change are discussed in Section 3.7, *Greenhouse Gas Emissions*.

3.3.1 Environmental Setting

3.3.1.1 Climate

The project area is within the Salton Sea Air Basin (SSAB) which is bounded by the San Jacinto Mountains to the west, Mojave Desert to the north and east, and the Mexico border to the south. The SSAB includes Imperial County and most of the low desert areas of central Riverside County.

The regional climate of the Coachella Valley is classified as arid continental, and is characterized by hot, dry summers, moderate to cool winters, gusty high winds, and large diurnal variations in temperature. This arid condition produces low soil moisture, which is responsible for one of the main air pollution problems in the region – fugitive dust.

Temperatures during the hottest months reach above 105 degrees Fahrenheit during the day and drop to the mid-70s in the morning; during the coldest months, temperatures reach approximately 70 degrees Fahrenheit during the day and drop to approximately 40 degrees Fahrenheit in the morning. Most of the rainfall in the Coachella Valley occurs from November through March. However, precipitation also falls in August and September when tropical storms move north from Mexico.

Frequent gusty winds occur in the Coachella Valley, primarily during the spring and early summer months. Prevailing wind direction is from the northwest. At times, large-scale weather patterns move into the Coachella Valley through mountain passes from the west, causing high winds. In addition, summer thunderstorms produce wind gusts.

3.3.1.2 Air Pollutants

Air pollutant emissions within the SSAB are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources⁴. Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat. Area sources are widely distributed and include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment. Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

⁴ Under the FCAA, major sources are defined as stationary sources with the potential to emit more than 10 tons per year (tpy) of any one hazardous air pollutant (HAP) or more than 25 tpy of any combination of HAPs; all other sources are considered area sources.

The definitions of the six primary criteria pollutants, including ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulates less than 10 and 2.5 microns in diameter (PM₁₀ and PM_{2.5}), and lead (Pb) are provided below.

Ozone

Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROG). NO_x is formed during the combustion of fuels, while reactive organic gases are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it mostly occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO is a local pollutant that is found in high concentrations only near a source of carbon monoxide. The major source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Health effects from CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, reduced lung capacity and impaired mental abilities.

Nitrogen Dioxide

NO₂ is a by-product of fuel combustion, with the primary source being motor vehicles and industrial boilers and furnaces. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts rapidly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. Nitrogen dioxide is an acute irritant. A relationship between NO₂ and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. NO₂ absorbs blue light and causes a reddish brown cast to the atmosphere and reduced visibility. It can also contribute to the formation of PM₁₀ and acid rain.

Suspended Particulates

Atmospheric particulate matter is comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The particulates that are of particular concern are PM₁₀ (which measures no more than 10 microns in diameter) and PM_{2.5}, (a fine particulate measuring no more than 2.5 microns in diameter). The characteristics, sources, and potential health effects associated with the small particulates (those between 2.5 and 10 microns in diameter) and PM_{2.5} can be different. Major man-made sources of PM₁₀ are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer, PM_{2.5} particulates are generally associated with combustion processes as well as being formed in the atmosphere as a secondary pollutant through chemical reactions. PM_{2.5} is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the small and fine particulate matter that is inhaled into the lungs remains there, which can cause permanent lung damage. These

materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Sulfur Dioxide

SO₂ is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal, and from chemical processes occurring at chemical plants and refineries.

Lead

Lead occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the SSAB. The use of leaded gasoline is no longer permitted for on-road motor vehicles; therefore, most lead combustion emissions are associated with off-road vehicles. Other sources of lead include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

Toxic Air Contaminants

Toxic air contaminants are airborne substances that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. Toxic air contaminants are different than the "criteria" pollutants previously discussed in that ambient air quality standards have not been established for them, largely because there are hundreds of air toxics and their effects on health tend to be local rather than regional.

3.3.2 Regulatory Framework

The federal and state governments have been empowered by the federal and state Clean Air Acts to regulate the emission of airborne pollutants. The United States Environmental Protection Agency (USEPA) is the federal agency designated to administer air quality regulation, while CARB is the state equivalent. Local control in air quality management is provided by CARB through multi-county and county-level Air Pollution Control Districts (APCDs). CARB establishes statewide air quality standards and is responsible for the control of mobile emission sources, while the local APCDs are responsible for enforcing standards and regulating stationary sources. Coachella Valley is under the jurisdiction of the SCAQMD, a multi-county APCD.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of various pollutants. Federal and state standards have been established for ozone, CO, NO₂, SO₂, PM₁₀ and PM_{2.5}, and lead. The national and state ambient air quality standards have been set at levels whose concentrations could be generally harmful to human health and welfare and to protect the most sensitive persons from illness or discomfort with a margin of safety. Table 7 illustrates the current federal and state ambient air quality standards.

Table 7 Current Federal and State Ambient Air Quality Standards

Pollutant	Federal Standard	California Standard
Ozone	0.070 ppm (8-hr avg)	0.07 ppm (8-hr avg) 0.09 ppm (1-hr avg)
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	100 ppb (1-hr avg) 0.053 ppm (annual avg)	0.18 ppm (1-hr avg) 0.03 ppm (annual avg)
Sulfur Dioxide	0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 75 ppb (1-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1-hr avg)
Lead	1.5 µg/m ³ (3-month avg)	1.5 µg/m ³ (30-day avg)
Particulate Matter (PM ₁₀)	150 µg/m ³ (24-hr avg)	20 µg/m ³ (annual avg) 50 µg/m ³ (24-hr avg)
Fine Particulate Matter (PM _{2.5})	12 µg/m ³ (annual avg) 35 µg/m ³ (24-hr avg)	12 µg/m ³ (annual avg)

Source: CARB 2016
ppm = parts per million, ppb = parts per billion, µg/m³ = micrograms per cubic meter

3.3.2.1 Current Ambient Air Quality

The SCAQMD monitors air pollutant levels to assure that the air quality standards are met, and if they are not met, develop strategies to meet the standards. Depending on whether or not the standards are met or exceeded, the air basin is classified as being in “attainment” or as “nonattainment.”

The Coachella Valley Planning Area is a federal nonattainment area that is part of a sub-region of Riverside County in the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east. The Coachella Valley is designated by USEPA as a nonattainment area for the 2008 8-hour ozone National Ambient Air Quality Standard (NAAQS) of 0.075 ppm, and for the former 1997 8-hour ozone NAAQS of 0.08 ppm. For both federal 8-hour ozone standards, the Coachella Valley is classified as a “severe-15” ozone nonattainment area, indicating that the area has 15 years from the nonattainment designation date to attain the NAAQS. The Coachella Valley is also still designated as a nonattainment area for PM₁₀, due to windblown dust events that recur in the area, with a classification of “serious.” The Coachella Valley is in attainment of the current federal standards for NO₂, CO, lead, and SO₂. Table 8 illustrates the attainment status of the Coachella Valley portion of the SSAB.

Table 8 Attainment Status of the Coachella Valley Portion of the Salton Sea Air Basin

Pollutant	National Standard	Designation	California Standard	Designation
Ozone				
	8-Hour (0.070 ppm)	Pending – Expect Nonattainment (Severe)	1-Hour (0.09 ppm)	Nonattainment
	8-Hour (0.075 ppm)	Nonattainment (Severe-15)	8-Hour (0.070 ppm)	Nonattainment
Particulate Matter (PM_{2.5})				
	24-Hour (35 µg/m ³)	Unclassifiable/Attainment	Annual (12.0 µg/m ³)	Attainment
	Annual (12.0 µg/m ³)	Unclassifiable/Attainment		
Particulate Matter (PM₁₀)				
	24-hour (150 µg/m ³)	Nonattainment (“serious”)	24-Hour (50 µg/m ³)	Nonattainment
			Annual (20 µg/m ³)	Nonattainment
Carbon Monoxide (CO)				
	1-Hour (35 ppm)	Unclassifiable/Attainment	1-Hour (20 ppm)	Attainment
	8-Hour (9 ppm)	Unclassifiable/Attainment	8-Hour (9.0 ppm)	Attainment
Nitrogen Dioxide (NO₂)				
	1-Hour (100 ppb)	Unclassifiable/Attainment	1-Hour (0.18 ppm)	Attainment
	Annual (0.053 ppm)	Unclassifiable/Attainment	Annual (0.030 ppm)	Attainment
Sulfur Dioxide (SO₂)				
	1-Hour (75 ppb)	Unclassified**	1-Hour (0.25 ppm)	Attainment
	24-Hour (0.14 ppm)	Designations Pending	24-Hour (0.04 ppm)	Attainment
	Annual (0.03 ppm)	Unclassifiable/Attainment		
Lead				
	3-Months Rolling (0.15 µg/m ³)	No Attainment Information	30-Day Average (1.5 µg/m ³)	Attainment

Source: SCAQMD 2017a

**Unclassified (USEPA/Federal definition): Any area that cannot be classified on the basis of available information as meeting or not meeting the national primary or secondary ambient air quality standard for that pollutant.

In an effort to monitor the various concentrations of air pollutants throughout the SSAB, the SCAQMD has divided the region into 38 source receptor areas (SRAs) in which over 30 monitoring stations operate. The project is located within SRA 30, which covers the Coachella Valley area. Ambient air pollutant concentrations within SRA 30 are monitored in Palm Springs.

Table 9 provides a summary of ambient air quality measured through the period of 2014 to 2016. As of 2016, ambient ozone and PM₁₀ concentrations in SRA 30 regularly exceed both national and state standards, while standards for the other criteria pollutants have not been exceeded during this period.

Table 9 Summary of Ambient Air Quality in the Coachella Valley Area (SRA 30)

Pollutant	Air Quality Standards	Year		
		2014	2015	2016
Ozone				
Maximum 1-hour concentration in ppm		0.108	0.102	0.103
Number of days exceeding State 1-hour standard	0.09 ppm	9	3	6
Maximum 8-hour concentration in ppm		0.093	0.093	0.092
Number of days exceeding national 8-hour standard	0.075 ppm	55	47	46
Number of days exceeding State 8-hour standard	0.070 ppm	61	51	48
Nitrogen Dioxide (NO ₂)				
Maximum 1-hour concentration in ppm		0.046	0.041	0.042
Number of days exceeding State 1-hour standard	0.25 ppm	0	0	0
Particulate Matter <10 microns (PM ₁₀)				
Maximum 24-hour concentration in µg/m ³		313.8	199.0	447.2
Number of days exceeding State 24-hour standard	50 µg/m ³	1	1	1
Number of days exceeding national 24-hour standard	150 µg/m ³	2	2	n/a
Particulate Matter <2.5 microns (PM _{2.5})				
Maximum 24-hour concentration in µg/m ³		15.5	22.7	14.7
Number of days exceeding national 24-hour standard	0.25 µg/m ³	n/a	n/a	n/a

Source: CARB 2017d

3.3.3 Air Quality Management

Under state law, the SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District is in non-compliance. The SCAQMD updates the plan every three years. Each iteration of the SCAQMD's Air Quality Management Plan (AQMP) is an update of the previous plan and has a 20-year horizon. SCAQMD released the final 2016 AQMP in March 2017, which is a comprehensive and integrated plan primarily focused on addressing ozone standards. The plan is a regional and multi-agency effort (SCAQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). State and federal planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the latest applicable growth assumptions, Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), and updated emission inventory methodologies for various source categories.

The Coachella Valley is under the SCAQMD's jurisdiction. Chapter 7 of the 2016 AQMP "Current and Future Air Quality – Desert Nonattainment Areas," describes the air quality status of the Coachella Valley, including emissions inventories, designations, and current and future air quality.

3.3.4 Regulatory Framework

3.3.4.1 *Federal*

The federal government has been empowered by the Federal Clean Air Act (FCAA) to regulate the emission of airborne pollutants and has established ambient air quality standards for the protection of public health. The USEPA is the federal agency designated to administer air quality regulation.

Federal Clean Air Act

USEPA is charged with implementing national air quality programs. USEPA's air quality mandates are drawn primarily from the FCAA. The FCAA was passed in 1963 by the U.S. Congress and has been amended several times. The 1970 FCAA amendments strengthened previous legislation and laid the foundation for the regulatory schemes of the 1970s and 1980s. In 1977, Congress again added several provisions, including non-attainment requirements for areas not meeting NAAQS and the Prevention of Significant Deterioration program. The 1990 FCAA amendments represent the latest in a series of federal efforts to regulate the protection of air quality in the United States. The FCAA allows states to adopt more stringent standards or to include other pollution species.

NAAQS

As discussed above, the FCAA requires USEPA to establish primary and secondary NAAQS for a number of criteria pollutants. The air pollutants for which standards have been established are considered the most prevalent air pollutants that are known to be hazardous to human health. NAAQS have been established for the following pollutants: ozone, CO, SO₂, PM₁₀, PM_{2.5}, and lead.

Title III of the Federal Clean Air Act

Hazardous air pollutants (HAPs) are the air contaminants identified by USEPA as known or suspected to cause cancer, other serious illnesses, birth defects, or death. The FCAA requires USEPA to set standards for these pollutants and reduce emissions of controlled chemicals. Specifically, Title III of the FCAA requires USEPA to promulgate National Emissions Standards for Hazardous Air Pollutants (NESHAP) for certain categories of sources that emit one or more pollutants that are identified as HAPs. The FCAA also requires USEPA to set standards to control emissions of HAPs through mobile source control programs. These include programs to reformulate gasoline, national low emissions vehicle standards, Tier 2 motor vehicle emission standards, gasoline sulfur control requirements, and heavy-duty engine standards.

HAPs tend to be localized and are found in relatively low concentrations in ambient air. However, they can result in adverse chronic health effects if exposure to low concentrations occurs for long periods of time. Many HAPs originate from human activities, such as fuel combustion and solvent use. Emission standards may differ between "major sources" and "area sources" of the HAPs/TACs. Under the FCAA, major sources are defined as stationary sources with the potential to emit more than 10 tons per year (tpy) of any one hazardous air pollutant (HAP) or more than 25 tpy of any combination of HAPs; all other sources are considered area sources. Mobile source air toxics (MSAT) are a subset of the 188 HAPs. Of the 21 HAPs identified by the USEPA as MSATs, a priority list of six HAPs was identified that include: diesel exhaust, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. While vehicle miles traveled in the United States is expected to increase by 64 percent over the period from 2000 to 2020, emissions of MSATs are anticipated to decrease

substantially as a result of efforts to control mobile source emissions (by 57 to 67 percent depending on the contaminant).

3.3.4.2 State

The state government has been empowered by the California Clean Air Act (CCAA) to regulate the emission of airborne pollutants and has established ambient air quality standards for the protection of public health. CARB is the state equivalent of the USEPA in California. CARB establishes air quality standards and is responsible for control of mobile emission sources.

California Clean Air Act

The CCAA, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practical date. CARB, which is part of the California Environmental Protection Agency (CalEPA), is the agency responsible for coordination and oversight of the State and local air pollution control programs in California, and for implementing the requirements of the CCAA. CARB oversees local district compliance with California and federal laws, approves local air quality plans, submits the State Implementation Plans (SIPs) to the USEPA, monitors air quality, determines and updates area designations and maps, and sets emissions standards for new mobile sources, consumer products, small utility engines, off-road vehicles, and fuels.

CAAQS

The CCAA requires CARB to establish CAAQS. Similar to the NAAQS, CAAQS have been established for the following pollutants: ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, lead, vinyl chloride, hydrogen sulfide, sulfates, and visibility-reducing particulates. In most cases, the CAAQS are more stringent than the NAAQS pollutants. The CCAA requires that all local air districts endeavor to achieve and maintain the CAAQS by the earliest practical date. The CCAA specifies that local air districts should focus particular attention on reducing the emissions from transportation and area-wide emission sources, and provides districts with the authority to regulate indirect sources.

Tanner Air Toxics Act and Air Toxics Hot Spots Information and Assessment Act

Toxic Air Contaminants (TACs) in California primarily are regulated through the Tanner Air Toxics Act (AB 1807) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (AB 2588; Hot Spots Act). As discussed above, HAPs/TACs are a broad class of compounds known to cause morbidity or mortality (cancer risk). HAPs/TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

AB 1807 sets forth a formal procedure for CARB to designate substances as TACs. Research, public participation, and scientific peer review are necessary before CARB can designate a substance as a TAC. To date, CARB has identified more than 21 TACs and adopted USEPA's list of HAPs as TACs. In 1998, diesel particulate matter (DPM) was added to CARB's list of TACs. Once a TAC is identified, CARB adopts an Airborne Toxic Control Measure for sources that emit that particular TAC. If a safe threshold exists at which no toxic effect occurs from a substance, the control measure must reduce

exposure below that threshold. If no safe threshold exists, the measure must incorporate Best Available Control Technology to minimize emissions.

The Hot Spots Act requires existing facilities that emit toxic substances above a specified level to prepare a toxic emissions inventory and a risk assessment if the emissions are significant, notify the public of significant risk levels, and prepare and implement risk reduction measures.

Diesel Exhaust and Diesel Particulate Matter

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to CARB, diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by CARB, and are listed as carcinogens either under State Proposition 65 or under the Federal Hazardous Air Pollutants programs.

CARB reports that recent air pollution studies have shown an association that diesel exhaust and other cancer-causing toxic air contaminants emitted from vehicles are responsible for much of the overall cancer risk from TACs in California. Particulate matter emitted from diesel-fueled engines (DPM) was found to comprise much of that risk. CARB has adopted and implemented a number of regulations for stationary and mobile sources to reduce emissions of DPM. Several of these regulatory programs affect medium and heavy duty diesel trucks that represent the bulk of DPM emissions from California highways. These regulations include the solid waste collection vehicle rule, in-use public and utility fleets, and the heavy-duty diesel truck and bus regulations. In 2011, CARB approved the latest regulation to reduce emissions of DPM and nitrogen oxides from existing on-road heavy-duty diesel fueled vehicles. The regulation requires affected vehicles to meet specific performance requirements between 2012 and 2023, with all affected diesel vehicles required to have 2010 model-year engines or the equivalent by 2023. These requirements are phased in over compliance period and depend on the model year of the vehicle. With implementation of CARB's Risk Reduction Plan, DPM concentrations are expected to be reduced by 85 percent in 2020 from the estimated year 2000 level. As emissions are reduced, risks associated with exposure to emissions also are expected to be reduced.

CARB Air Quality and Land Use Handbook

In April 2005, CARB released the final version of its Air Quality and Land Use Handbook: A Community Health Perspective. This guidance document is intended to encourage local land use agencies to consider the risks from air pollution before they approve the siting of sensitive land uses (e.g., residences) near sources of air pollution, particularly TACs (e.g., freeway and high traffic roads, commercial distribution centers, rail yards, ports, refineries, dry cleaners, gasoline stations, and industrial facilities). These advisory recommendations include general setbacks or buffers from air pollution sources. However, unlike industrial or stationary sources of air pollution, the siting of new sensitive land uses does not require air quality permits or approval by air districts, and as noted above, the CARB handbook provides guidance only rather than binding regulations.

CAPCOA Health Risk Assessments for Proposed Land Use Projects

The California Air Pollution Control Officer's Association (CAPCOA) is a consortium of air district managers throughout California, which provide guidance material to address air quality issues in the state. As a follow up to CARB's 2005 Air Quality and Land Use Handbook, CAPCOA prepared the

Health Risk Assessments for Proposed Land Use Projects. This guidance document was released to ensure that the health risk of projects were identified, assessed, and avoided or mitigated, if feasible, through the CEQA process. The CAPCOA guidance document provides recommended methodologies for evaluating health risk impacts for development projects.

3.3.4.3 Local

Local control in air quality management is provided by CARB through county-level or regional (multi-county) APCDs. The local APCD is responsible for enforcing standards and regulating stationary sources.

SCAQMD Coachella Valley PM₁₀ State Implementation Plan

SCAQMD and Coachella Valley municipalities have adopted and implemented PM₁₀ controls through SIPs, SCAQMD Rules 403 and 403.1, local dust control ordinances, and clean streets management programs. Nevertheless, the attainment date for serious non-attainment areas, such as the Coachella Valley, to meet the PM₁₀ NAAQS was 2001 and it became apparent that the Valley would not be able to demonstrate attainment by that date. The 2002 SIP was then prepared and included Most Stringent Measure requirements and California Ambient Air requirements for an extension of the PM₁₀ attainment date to 2006 (SCAQMD 2002). The 2002 SIP was approved by USEPA in April 2003. The 2002 SIP was updated in 2003 with respect to emissions inventories, emission budgets, and attainment modeling (SCAQMD 2003). The 2003 update was approved by USEPA in March 2004.

SCAQMD and Municipal Fugitive Dust Control Regulations

SCAQMD Rule 403 (Fugitive Dust) contains regulations intended to reduce dust generation from construction activities and agricultural operations within SCAQMD jurisdiction. Rule 403.1 (Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources) is a companion regulation to Rule 403, and establishes special requirements for fugitive dust sources in the Coachella Valley, a non-attainment area for PM₁₀. In addition, the proposed pipeline would be constructed through the cities of La Quinta, Indian Wells, Indio and Palm Desert, which have adopted local dust control ordinances that incorporate many of the Rules 403 and 403.1 requirements. These local ordinances are:

- City of Indian Wells Municipal Code, Chapter 8.20, Fugitive Dust Control
- City of Indio Code of Ordinances, Title XV, Chapter 152, Dust Control
- City of La Quinta Municipal Code, Chapter 6.16, Fugitive Dust Control
- City of Palm Desert Municipal Code, Chapter 24.12, Fugitive Dust (PM₁₀) Control

In general, these regulations prohibit construction activities from generating visible dust in the atmosphere beyond the property line of the emission source. The requirements of SCAQMD Rules 403 and 403.1 and local ordinances that are applicable to the proposed project are summarized below.

- For any potentially dust-generating activity (including earth-moving, construction, demolition, disturbed surface area, or vehicular movement), applicable best available control measures (BACM) listed in Table 1 of Rule 403 [and/or Coachella Valley BACM listed in the Coachella Valley Fugitive Dust Control Handbook (Coachella Valley Association of

Governments [CVAG] 2003]] must be used. [SCAQMD Rule 403(d)(2); Indian Wells Section 82.410(a); La Quinta Section 6.16.040.A.1; Palm Desert Section 24.12.040.A.1]

- For any operation with a disturbed surface area greater than one acre (*the proposed project involves a disturbed surface area greater than one acre*), a water application system as identified in the Coachella Valley Fugitive Dust Control Handbook must be operated, if watering is the selected control measure. [Indian Wells Section 8.20.410(b); La Quinta Section 6.16.040.A.2; Palm Desert Section 24.12.040.A.2]
- For any operation, vehicle track-out (sand, gravel, soil and other bulk materials that have been released onto a paved road from vehicles and equipment) must be removed at the conclusion of each workday or within one hour if track-out extends for greater than 25 feet from the site access point. [SCAQMD Rule 403(d)(4); Indian Wells Section 8.20.420(f); La Quinta Section 6.16.040.B.6; Palm Desert Section 24.12.040.B.6]
- For activities with a disturbed surface area of five or more acres (the proposed project involves a disturbed surface area greater than five acres) or with a daily import/export of 100 cubic yards or more of bulk material, vehicle track-out must be reduced by installing and maintaining one or more of the following at each site egress to a paved public road: a gravel pad; paved surface extending at least 100 feet and at least 20 feet wide; wheel shaker/wheel spreading device; or a wheel washing system. [SCAQMD Rule 403(d)(5); Indian Wells Section 8.20.420(g); La Quinta Section 6.16.040.B.7; Palm Desert Section 24.12.040.B.7]
- For any earth-moving operation, at least one of the following short-term stabilization methods must be implemented during non-working hours: a) maintain soils in damp condition; b) establish a stabilized surface through watering; or c) application of a chemical dust suppressant. [Indian Wells Section 8.20.420(d); La Quinta Section 6.16.040.B.4; Palm Desert Section 24.12.040.B.4]
- Within 10 days of ceasing activity, at least one of the following long-term stabilization methods must be used for any disturbed surface area where construction activities are not scheduled to occur for at least 30 days: revegetation with 75 percent ground coverage, or establishment of a stabilized surface by watering or application of chemical stabilizer with physical access restriction to the surrounding area. [Indian Wells Section 8.20.420(e); La Quinta Section 6.16.040.B.5; Palm Desert Section 24.12.040.B.5]
- For any activity with a disturbed surface area of more than 5,000 square feet, a Fugitive Dust Control Plan must be prepared and be approved by SCAQMD. The plan must be prepared pursuant to the provisions of the Coachella Valley Fugitive Dust Control Handbook and must be kept on-site at all times. [SCAQMD Rule 403.1(e)]
- For a project with a disturbed surface area of 50 or more acres (the proposed project involves a greater disturbed surface area than 50 acres), an Environmental Observer must be on-site or available on-site within 30 minutes of initial contact. The Environmental Observer must: 1) be hired by the property owner or developer, 2) have dust control as the sole or primary responsibility, 3) have completed the SCAQMD Coachella Valley Dust Control Class and has been issued a Certificate of Completion of the class, and 4) be identified in the Fugitive Dust Control Plan as having the authority to employ sufficient dust mitigation to ensure compliance with the Fugitive Dust Control Plan and the fugitive dust regulations of the City and SCAQMD. [Indian Wells Section 8.20.420(i); La Quinta Section 6.16.040.B.9; Palm Desert Section 24.12.040.B.9]. CVWD has certified Environmental Observers on staff.

- A portion of the proposed project area (the eastern end of the proposed pipeline alignment and the proposed pumping station site) is located within the Coachella Valley Blowsand Zone as defined in Rule 403.1. The Blowsand Zone is the corridor extending 2 miles on either side of the I-10 Freeway beginning at the SR-111/I-10 junction and continuing southeast to the I-10/Jefferson Street interchange in Indio. Requirements of SCAQMD Rule 403.1(d) relating to activities within the Blowsand Zone include the following:
- Any operations in the Blowsand Zone must stabilize new man-made deposits of bulk material within 24 hours of making such bulk material deposits. Stabilization procedures must include one or more of the following: a) application of water to at least 70 percent of the surface area of any bulk material deposits at least three times for each day that there is evidence of wind driven fugitive dust; b) application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least 6 months; or c) installation of wind breaks of such design so as to reduce maximum wind gusts to less than 25 miles per hour in the area of the bulk material deposits. [SCAQMD Rule 403.1(d)(2)]
- Any operations in the Blowsand Zone must stabilize new deposits of bulk material originating from off-site undisturbed natural desert areas within 72 hours. Stabilization procedures must include one or more of the following: a) application of water to at least 70 percent of the surface area of any bulk material deposits at least three times for each day that there is evidence of wind driven fugitive dust; or b) application of chemical stabilizers in sufficient concentration so as to maintain a stabilized surface for a period of at least 6 months. [SCAQMD Rule 403.1(d)(3)]
- For any project that disturbs the soil surface due to excavation, grading or building construction must first provide adequate dust control upon the site. Water trucks must be provided in sufficient numbers to maintain a stable soil surface. Upon completion of the grading work the surface must be treated or stabilized in the following manner acceptable to the city [Indio Section 152.01(A) and (B)]:
 - A portable sprinkler system installed and maintained in operation until the surface of the soil has been found to be permanently stabilized;
 - Planting of grass or other ground cover acceptable to the city and continuously watered until such grass or ground cover has reached a sufficient height and density to maintain the soil; and/or
 - The continuous operation of water trucks to keep the soil wet and stable.

3.3.5 Sensitive Receptors

Ambient air quality standards have been established to represent the levels of air quality considered sufficient, with a margin of safety, to protect public health and welfare. They are designed to protect that segment of the public most susceptible to respiratory distress, such as children under the age of 14, the elderly over 65, persons engaged in strenuous work or exercise, and people with cardiovascular and chronic respiratory diseases. The majority of sensitive receptor locations are therefore schools and hospitals. Sensitive receptors likely to be affected by air quality impacts associated with project construction include single-family residences adjacent to the project site, approximately 100 feet to the east and south and Pam Desert High School (74910 Aztec Rd, Palm Desert, CA 92260), located approximately 400 feet southwest of the site.

3.3.6 Impact Analysis

3.3.6.1 Methodology for Analysis

The analysis of the project's air quality impacts follows the guidance and methodologies recommended in Appendix G of the State CEQA Guidelines.

Construction Emissions

The California Emissions Estimator Model (CalEEMod version 2016.3.1) was used to estimate construction emissions from off-road equipment and fugitive dust generated during the construction phase. The CalEEMod program quantifies emissions associated with the use of off-road equipment, on-road worker commute, as well as, construction delivery and haul trucks. Fugitive dust emissions are quantified for grading and site preparation activities/earthwork, truck loading, demolition, and vehicle trips on paved and unpaved surfaces. The program calculates fugitive dust associated with on-site earthwork, including on-site grading and site preparation phases, based on the construction equipment to be used (e.g., crawler tractors, graders, dozers, scrapers), hours of use, and the estimated area of disturbance calculated for each piece of equipment.

The proposed project was modeled in two phases. Phase I assumes a maximum disturbance area of approximately 13 acres, and Phase II assumes a maximum disturbance area of approximately 51 acres. The project's operational year is anticipated to be 2019, based on information provided by CVWD. Because no construction schedule or equipment list was available at the time of analysis, CalEEMod defaults were used for construction phase lengths and the number and type of equipment used during each phase, except for the addition of a trencher. It was assumed the project would comply with all applicable regulatory standards, including SCAQMD Rule 403, which requires watering of disturbed ground surfaces to maintain soils in a damp condition during earth-moving activities; it was assumed watering would occur two times a day.

Operational Emissions

Operational emissions are typically comprised of mobile source emissions, emissions associated with energy consumption, and area source emissions. The proposed project would not increase the number of vendor trips or employee trips, but would use electricity to pump water. However, the project would be connected to the electricity grid and operation of the pumps would use electricity generated offsite and supplied by Southern California Edison. Although consumption of electricity may indirectly result in criteria pollutant emissions associated with the production of electricity, electricity production may occur outside of the air basin, and is accounted for as part of the CEQA review process at the source of production, rather than at individual consumers; therefore, emissions associated with electricity consumption are not subject to basin-specific thresholds, and are not discussed further in this analysis. (However, emissions of greenhouse gases associated with electricity consumption are accounted for at the consumer because impacts associated with greenhouse gas emissions are global, rather than regional. Refer to Section 3.7, *Greenhouse Gas Emissions*, for a discussion of potential greenhouse gas emissions impact associated with the project's consumption of electricity.)

Operation of Phase II of the project would also include the occasional (approximately every five years) repair or replacement of the temporary berms; these activities would include earth movement, but over the project lifetime are anticipated to require comparable equipment usage as currently used within the channel to maintain its capacity through regular mowing, vegetation

removal, and sediment clearing. CalEEMod was used to calculate the emissions for repair or replacement of the temporary berms.

3.3.6.2 *Thresholds of Significance*

Pursuant to Appendix G of the State CEQA Guidelines, air quality impacts related to the proposed project would be considered significant if the project would:

1. Conflict with or obstruct implementation of the applicable air quality plan;
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standard (including releasing emissions which exceed qualitative thresholds for ozone precursors);
4. Expose sensitive receptors to substantial pollutant concentrations; and/or
5. Create objectionable odors affecting a substantial number of people.

The State CEQA Guidelines further state that the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the determinations above.

SCAQMD has developed CEQA significance criteria for project construction. These criteria are published in the CEQA Air Quality Handbook (SCAQMD 1993). A new guidance document, the Air Quality Analysis Guidance Handbook, is currently in preparation by SCAQMD. Portions of this new document, including a revised significance threshold table, are available on SCAQMD website (SCAQMD 2017b). Table 10 shows the significance thresholds established by SCAQMD (2017b). Project emissions above these threshold levels are deemed significant by SCAQMD.

Table 10 SCAQMD Air Quality Significance Thresholds

Pollutant	Mass Daily Thresholds
	Construction Thresholds (lbs/day)
NO _x	100
VOC*	75
PM ₁₀	150
PM _{2.5}	55
SO _x	150
CO	550
Lead	3

Source: SCAQMD 2017b

* VOC = Volatile Organic Compounds

Localized Significance Thresholds

In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities and have been developed for NO_x, CO, PM₁₀ and PM_{2.5}. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each SRA, distance to the sensitive receptor, and project size; LSTs have been developed for emissions within construction areas up to five acres in size. However, LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008a). As such, LSTs are typically applied only to construction emissions as the majority of operational emissions are associated with project-generated vehicle trips.

The project site is located in SRA 30, Coachella Valley (SCAQMD 2008a). The SCAQMD provides lookup tables for project sites that measure one, two, three, four, or five acres. Phase I of the project would involve approximately 13 acres of grading and Phase II would involve approximately 51 acres of grading and trenching. However, this analysis assumes that there would be no more than five acres under active construction at one time, and relies on the five-acre LSTs for significance determinations. The five-acre LSTs provide a more stringent threshold for construction emissions compared to the analysis of emissions over a larger area. LSTs are provided for receptors at a distance of 82 to 1,640 feet (25 to 500 meters) from the project site boundary. Sensitive receptors closest to the project site are single-family residential units approximately 100 feet east and south. Table 11 lists SCAQMD LSTs for construction.

Table 11 SCAQMD LSTs for Construction (SRA 30)

Pollutant	Allowable emissions from a 5-acre site in SRA 30 for a receptor 100 feet away (lbs/day)
Gradual conversion of NO _x to NO ₂	425
CO	5,331
PM ₁₀	67
PM _{2.5}	19

Source: SCAQMD 2009

3.3.7 Project Impacts

IMPACT AQ-1 CONSTRUCTION OF THE PROPOSED PROJECT WOULD RESULT IN TEMPORARY GENERATION OF AIR POLLUTANTS, WHICH WOULD AFFECT LOCAL AIR QUALITY. SHORT-TERM EMISSIONS WOULD EXCEED SCAQMD THRESHOLDS FOR NO_x. (LESS THAN SIGNIFICANT WITH MITIGATION)

This impact addresses significance criteria 1 through 4. Construction of the proposed project would result in the temporary generation of vehicle and equipment exhaust and fugitive dust. The project schedule is ultimately driven by a water delivery during the 2018 calendar year to CVWD.

Construction of the proposed project would occur over one year; at the earliest, Phase I of the project is planned to begin construction in January 2018 (with completion in December 2018), while Phase II of the project would begin construction in March 2018 (with completion in September 2018).

Phase I of the project involves re-purposing existing ponds, construction of new lower storage ponds, and modification to the piping and controls associated with the percolation ponds, including extension of the MVP within the WRP10 site to deliver imported Colorado River water to the replenishment ponds. In addition, the northeastern-most percolation pond (shown on Figure 2) would be re-purposed and removed from the WRP10 site operations.

Phase II of the project includes the construction of temporary berms and extension of the MVP within the Whitewater River Stormwater Channel, as well as installation of a new secondary effluent pump station (shown on Figure 2).

Within each phase it is assumed that all construction activities would occur at the same time to estimate a worst reasonable-case scenario. It is highly unlikely that the worst emissions from each phase would occur at the same time because that would require that all of the most intense parts of construction to occur concurrently. This would require additional equipment, in place of sharing equipment amongst phases. As a result, the analysis provides a worst reasonable-case scenario for construction emissions and would represent the maximum level of impacts even with a variation in schedule. In addition, the order shown above does not necessarily indicate the order in which the individual phases would occur.

Ozone precursors (NO_x and ROG would) be emitted by the operation of construction equipment, while PM₁₀ would be emitted by activities that disturb the soil, such as grading and excavation. Emissions would also be generated by construction employees traveling to and from the construction site, as well as trucks hauling materials to and from the site. Construction-related emissions could result in adverse health risks to nearby sensitive receptors if emission thresholds are exceeded.

Off-Road Equipment. Off-road equipment includes equipment powered by USEPA-defined non-road engines. The off-road equipment exhaust emissions were calculated with emissions factors within the CalEEMod model. The results provided the total peak emissions for each phase that would occur if all pieces of equipment needed for that phase were used on the same day for a total of eight hours. This is a conservative estimate; actual emissions are expected to be lower since it is unlikely that all construction equipment would operate simultaneously. Off-road equipment exhaust emissions are included in the project construction emissions.

Construction-related emissions were calculated using CalEEMod (see Appendix B for assumptions and calculations). For the purposes of modeling, it was assumed that the project would comply with SCAQMD Rule 403, which identifies measures to reduce fugitive dust and is required by enforcement authority SCAQMD. As described in the regulatory environment, local control in air quality management is provided by CARB through county-level or regional (multi-county) APCDs; the project would occur in compliance with the SCAQMD Coachella Valley PM₁₀ State Implementation Plan and SCAQMD and Municipal Fugitive Dust Control Regulations. In addition, the following conditions, which would be required to reduce fugitive dust in compliance with SCAQMD Rule 403, were included in CalEEMod for the grading phase of construction.

1. **Minimization of Disturbance.** Construction contractors should minimize the area disturbed by clearing, grading, earth moving, or excavation operations to prevent excessive amounts of dust.

2. **Soil Treatment.** Construction contractors should treat all graded and excavated material, exposed soil areas, and active portions of the construction site, including unpaved on-site roadways to minimize fugitive dust. Treatment shall include, but not necessarily be limited to, periodic watering, application of environmentally safe soil stabilization materials, and/or roll compaction as appropriate. Watering shall be done as often as necessary, and at least twice daily, preferably in the late morning and after work is done for the day.
3. **Soil Stabilization.** Construction contractors should monitor all graded and/or excavated inactive areas of the construction site at least weekly for dust stabilization. Soil stabilization methods, such as water and roll compaction, and environmentally safe dust control materials, shall be applied to portions of the construction site that are inactive for over four days. If no further grading or excavation operations are planned for the area, the area shall be seeded and watered until landscape growth is evident, or periodically treated with environmentally safe dust suppressants, to prevent excessive fugitive dust.
4. **No Grading During High Winds.** Construction contractors should stop all clearing, grading, earth moving, and excavation operations during periods of high winds (20 miles per hour or greater, as measured continuously over a one-hour period).
5. **Street Sweeping.** Construction contractors should sweep all on-site driveways and adjacent streets and roads at least once per day, preferably at the end of the day, if visible soil material is carried over to adjacent streets and roads.

Table 12 summarizes the estimated maximum daily emissions of pollutants for the project. The table also shows the maximum daily on-site emissions (as mentioned previously LSTs only apply to on-site emissions and not to mobile emissions or off-site emissions).

Table 12 Project Construction Emissions

Construction Phase	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Phase I (2018 maximum lbs/day)	7.6	81.3	54.1	0.1	7.2	5.2
Phase II (2018 maximum lbs/day)	5.7	63.7	38.7	0.1	7.1	4.4
Total (2018 maximum lbs/day)	13.3	145.0	92.8	0.2	14.3	9.6
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	Yes	No	No	No	No
On-Site Emissions	11.0	127.2	75.5	0.2	12.6	8.5
Local Significance Thresholds (On-Site only)	n/a	425	5,331	n/a	67	19
Threshold Exceeded?	n/a	No	No	No	No	No

See Appendix A for CalEEMod results. Winter emissions were used for a conservative estimate.

Total emissions would be less than SCAQMD thresholds for all pollutants, except for NO_x. Based on the preliminary construction schedule, grading, and construction activities, the project would generate NO_x emissions that exceed the 100 lbs/day threshold.

Potential mitigation to reduce NO_x emissions from combined construction of the project components to below SCAQMD thresholds would be to prevent the overlapping of Phase I and Phase II between March and June. Even though this would reduce construction emissions to below the SCAQMD threshold, this measure would extend the construction timeframe for the project and prevent the project from meeting its objective of water delivery during the calendar year of 2018 to CVWD. Therefore, this mitigation measure would not be feasible.

Therefore, because construction activities associated with the project may generate NO_x emissions that exceed the 100 lbs/day threshold, air quality impacts associated with construction of the project would be significant but mitigable. Mitigation would still be implemented, in order to minimize the potential severity of this impact.

Mitigation Measures

Mitigation Measure AQ-1 would apply to the proposed project.

Mitigation Measure AQ-1. Best Available Technology (BACT) for Construction Equipment

Construction equipment shall utilize Tier 3 or Tier 4 compliant engines for diesel-fueled construction equipment during all construction activities at the project site.

Timing	During construction of the project
Party Responsible for Implementation	Construction contractor
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Coachella Valley Water District shall inspect construction activities at the onset of project implementation and on a weekly basis during project construction to ensure that Tier 3 or Tier 4 compliant diesel- fueled engines are utilized during project construction.

Table 13 summarizes construction-related emissions with implementation of Mitigation Measure AQ-1.

Table 13 Project Construction Emissions with Mitigation

Construction Phase	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Phase I (2018 maximum lbs/day)	2.6	43.3	58.1	0.1	5.3	3.7
Phase II (2018 maximum lbs/day)	1.7	32.0	40.2	0.1	5.6	3.1
Total (2018 maximum lbs/day)	4.3	75.3	98.3	0.2	10.9	6.8
<i>SCAQMD Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>150</i>	<i>55</i>
Threshold Exceeded?	No	No	No	No	No	No
On-Site Emissions	3.2	63.8	78.6	0.2	9.6	5.9
<i>Local Significance Thresholds (On-Site only)</i>	<i>n/a</i>	<i>425</i>	<i>5,331</i>	<i>n/a</i>	<i>67</i>	<i>19</i>
Threshold Exceeded?	n/a	No	No	No	No	No

See Appendix A for CalEEMod results. Winter emissions were used for a conservative estimate.

Significance After Mitigation

With implementation of Mitigation Measure AQ-1, construction-related emissions would be less than significant.

IMPACT AQ-2 OPERATION OF THE PROPOSED PROJECT WOULD NOT EXCEED SCAQMD THRESHOLDS OR EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS. (LESS THAN SIGNIFICANT)

This impact addresses significance criteria 3 and 4. As previously noted, the project would use electricity to pump water and would be connected to the electricity grid, utilizing electricity generated offsite and supplied by Southern California Edison. Although consumption of electricity may indirectly result in criteria pollutant emissions associated with the production of electricity, electricity production would occur at locations remote from the project and therefore would not expose nearby sensitive receptors to substantial pollutant concentrations.

In addition, as described previously, the project would also include the occasional repair or replacement of the temporary berms, after large storm events; these activities would only occur on an as-needed basis, approximately every five years. The frequency of repair would depend on degradation resulting from large storm events. The types of vehicles and equipment that would be utilized to conduct repair or replacement of the temporary berms would be the same types of vehicles and equipment that are presently used within the stormwater channel for regular maintenance activities including vegetation clearing and sediment removal. Table 14 shows estimated emissions associated with repair and/or replacement of the temporary berms, assuming one bulldozer operating for eight hours per day, for approximately one month every five years. As shown below, emissions would not exceed SCAQMD thresholds. Therefore, emissions associated with the operation of the proposed project would be less than significant.

Table 14 Project Emissions from Repair of the Temporary Berms

Phase	Estimated Maximum Daily Emissions (lbs/day)					
	ROG	NO _x	CO	SO _x	PM ₁₀	PM ₂₅
Berm Reconstruction (2023 max lbs/day)	3.4	34.5	28.5	0.06	11.8	5.1
SCAQMD Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No
On-Site Emissions	3.3	34.5	28.1	0.1	6.0	3.0
Local Significance Thresholds (on-site only)	n/a	425	5,331	n/a	67	19
Threshold Exceeded?	No	No	No	No	No	No

See Appendix A for CalEEMod results. Winter emissions were used for a conservative estimate.

IMPACT AQ-3 THE PROPOSED PROJECT WOULD CONTINUE TO UTILIZE ODOR PREVENTION TECHNOLOGY AND WOULD NOT EMIT ODORS. (LESS THAN SIGNIFICANT)

This impact addresses significance criterion 4. The objective of the proposed project is to provide an estimated 25,000 AFY of direct groundwater replenishment using imported Colorado River water in the Palm Desert area. This would enable CVWD to receive the maximum requested annual allocation of Colorado River water. The project involves improvements to the existing site to facilitate the transportation and storage of an increased water supply to the project site. These include expanding storage infrastructure already present at WRP10. During construction of the project, the use of vehicles and equipment on the project site could produce odors associated with emissions; however, construction vehicles and equipment are regularly present in the project area and project-related usage would not introduce an unusual or long-term odor to the area. During operation of the project, the technology that is currently employed to prevent objectionable odors from large-scale water storage would continue to be employed with the proposed project. Therefore, impacts associated with odors would be less than significant and no mitigation would be required.

IMPACT AQ-4 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH THE APPLICABLE AIR QUALITY PLAN (LESS THAN SIGNIFICANT WITH MITIGATION).

This impact addresses Significance Criterion 1. A project would be inconsistent with the SCAQMD's Air Quality Management Plan (AQMP) if (1) it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP, or (2) it would result in an increase in the frequency or severity of existing air quality violations or contribute to new violations. As discussed in the project description, the project would not generate population, housing, or employment. As discussed above under Impact AQ-1, total emissions would be less than SCAQMD thresholds for all pollutants, except for NO_x. With implementation of Mitigation Measure AQ-1, NO_x emissions would be reduced to a less-than-significant level. Therefore, impacts resulting from conflicts with an applicable air quality plan would be less than significant with mitigation incorporated.

3.3.7.1 Cumulative Impacts

Cumulative impacts to air quality are evaluated under two sets of thresholds for CEQA and the SCAQMD. The SCAQMD's approach to determining cumulative air quality impacts for criteria air pollutants is to first determine whether or not the proposed project would result in a significant project-level impact to regional air quality based on SCAQMD significance thresholds. If the project does not exceed SCAQMD thresholds, then the lead agency needs to consider the additive effects of related projects only if the proposed project is part of an ongoing regulatory program or is contemplated in a program EIR. If there are related projects in the vicinity (one-mile radius) of the sites that are part of an ongoing regulatory program or are contemplated in a Program EIR, then the additive effect of the related projects should be considered.

The proposed project is not part of an ongoing regulatory program. Therefore, the SCAQMD recommends consideration of project-specific air quality impacts to determine the potential cumulative impacts to regional air quality. As discussed under Impact AQ-1, daily emissions of construction-related pollutants may temporarily exceed SCAQMD significance thresholds for NO_x, but the implementation of mitigation requiring use of BACT for construction equipment would ensure that impacts would be less than significant. By applying the SCAQMD cumulative air quality impact methodology, implementation of the proposed project would result in an addition of criteria pollutants such that cumulative impacts, in conjunction with related projects, would occur. Therefore, the project's contribution to cumulative regional air quality impacts would be cumulatively considerable.

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3.4 Biological Resources

This section identifies biological resources present on the project site and assesses the project's impacts on those resources. The discussion of biological resources incorporates the results of the Biological Resources Assessment (BRA) completed in June 2017 by Rincon Consultants, included as Appendix B to this EIR. This analysis also relies upon the November 2012 (Revised 2014) Jurisdictional Delineation Report Whitewater River and Coachella Valley Stormwater Channels, Riverside County California prepared by ICF International for CVWD. A biological field reconnaissance-level survey was completed on May 11, 2017 as part of the BRA. The 2017 field reconnaissance surveys documented existing site conditions and the potential presence of sensitive biological resources, including sensitive plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds.

3.4.1 Environmental Setting

3.4.1.1 *Regional Setting*

The geomorphology and climate of the Coachella Valley has created diverse habitats that support a wide array of plant and animal species. The regional setting and physical and environmental conditions of the valley have a direct effect on the types of habitat and biological resources that have adapted to these unique and sometimes extreme conditions. In particular, geographic location, soils, climate, and topography are the most influential factors shaping the regional environment.

3.4.1.2 *Project Site Setting*

The project site occurs within the relatively flat-lying alluvial floor of the Coachella Valley and is situated on public property. The project is surrounded by commercial, recreational, and residential development and lies within the boundary of the Coachella Valley Multiple Species Conservation Plan (Coachella Valley MSHCP) planning area, but is not within any specific Coachella Valley MSHCP Conservation Area.

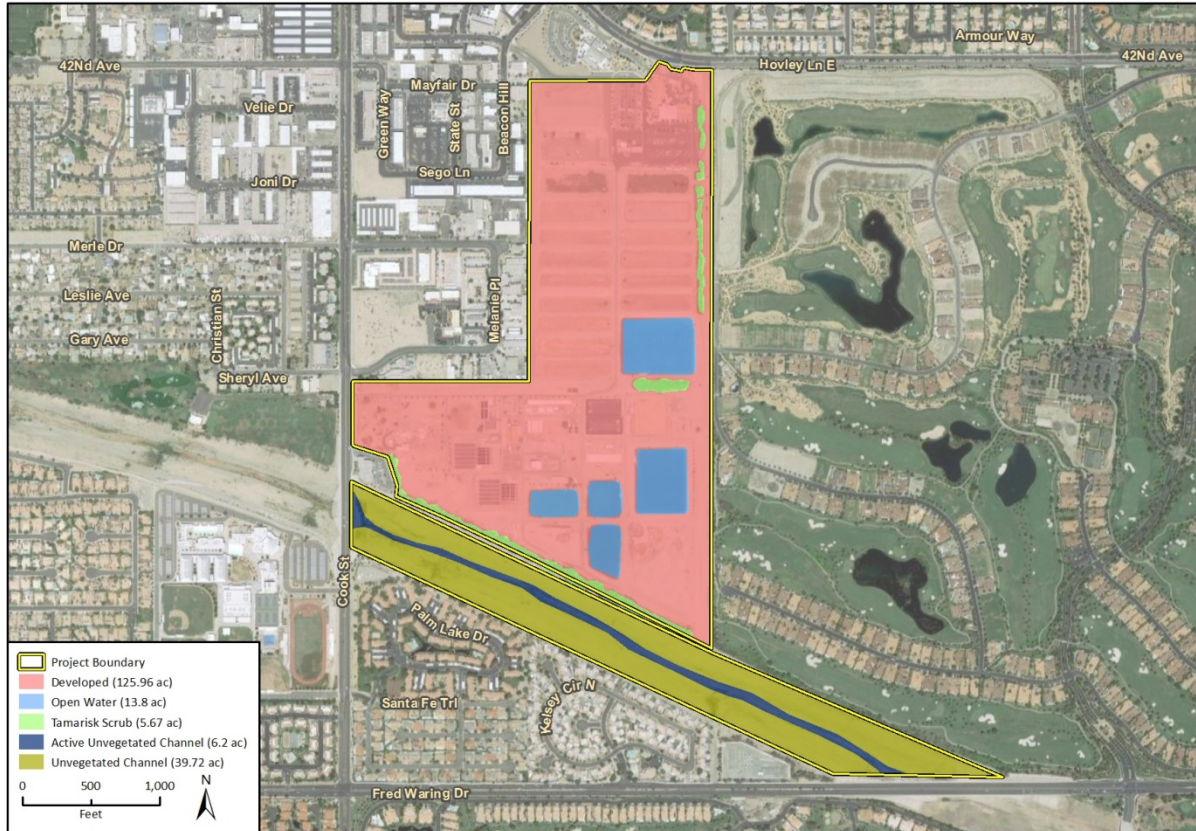
The project site includes the existing WRP10 site, as well as areas adjacent to the north of the WRP10 site and a reach of the Whitewater River Stormwater Channel. The WRP10 site is a developed public facility consisting of multiple percolation basins and infrastructure for wastewater treatment and reuse for the Coachella Valley Region. The infrastructure portion of the facility is relatively flat with single-story buildings, maintenance roads, and large-scale underground utilities (water conveyance pipes). Multiple flat-bottom detention basins are also located within the north and east portions of the WRP10. Elevation of WRP10 ranges from approximately 210 feet Above Mean Sea Level (amsl) in the northern extent descending to approximately 160 feet amsl in the southern extent. The Whitewater River Stormwater Channel was originally constructed in 1937 to divert the discharge of the Whitewater River into a well-defined channel. It descends from approximately 160 feet amsl at the western end to approximately 140 feet amsl in the eastern extent within the project site.

Vegetation

As described in the BRA, four vegetation communities or land cover types were mapped within the project site, including tamarisk scrub, non-vegetated channel, urban/developed lands, and open

water in detention basins. These communities are mapped on Figure 6. The project site supports primarily non-native plant species with some native species intermixed within the four vegetation communities observed. No sensitive habitats were observed on-site.

Figure 6 Biological Resources



Tamarisk Scrub

The tamarisk scrub habitat type on the project site corresponds to the *Tamarix* spp. semi-natural shrubland stands. Tamarisk scrub is dominated by the non-native and highly-invasive tamarisk (*Tamarix* spp.). Within the project site there are approximately 5.67 acres of tamarisk scrub. Tamarisk stands have been installed on the project site as windbreaks and are limited to the tree rows. Ravens have been known to occupy and nest in the tamarisk scrub within the project site.

Non-Vegetated Floodplain or Channel

Non-vegetated floodplain or channel includes aquatic features composed of the sandy, gravelly, or rocky fringe of waterways or developed/constructed and managed flood channels. These aquatic features lack vegetation on a relatively permanent basis, either because of erosional processes or active maintenance activity. Variable water lines inhibit the growth of vegetation, although some weedy species of grasses may grow along the outer edges of the wash. Vegetation may exist but is usually less than 10 percent total cover.

Approximately 52.30 acres of the Whitewater River Stormwater Channel are within the project site. This feature is a graded and managed flood control facility within which a small active low flow channel is present and, at times, re-established during periodic channel maintenance activities by

the CVWD. Small, sparse stands of willow (*Salix lasiolepis* and *Salix laevigata*), cattail (*Typha latifolia*) and both native and nonnative herbaceous vegetation such as curly dock (*Rumex crispus*), sandmatt (*Euphorbia serpens*), rabbitsfoot grass (*Polypogon monspeliensis*), beach burr (*Ambrosia chamissonis*), cocklebur (*Xanthium strumarium*) and Russian thistle (*Salsola tragus*) occur along the low flow channel between the periodic maintenance activities.

Urban/Developed

Urban/developed areas are land cover types that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported and cannot persist. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation.

Approximately 125.96 acres of urban development lie within WRP10. Plant species observed in this land cover type include ornamental landscape species such as Mexican fan palm (*Washingtonia robusta*), Peruvian pepper (*Shinus molle*), and ironbark eucalyptus (*Eucalyptus sideroxylon*). Herbaceous weedy species such as knotweed (*Polygonum lapathifolium*), cheeseweed (*Malva parvifolia*), and mustards (*Hirschfeldia incana* and *Sisymbrium irio*) were also observed within the developed area.

Fresh Water (Open Water)

This land cover type is comprised of year-round bodies of fresh water in the form of lakes, streams, ponds or rivers. This includes those portions of water bodies that are usually covered by water and contain less than 10 percent vegetative cover. At the time of the survey conducted for the proposed project, approximately 13.80 acres of detention basins on the WRP10 site contained reclaimed water, as shown on Figure 6. The amount and acreage of impounded water at the WRP10 site changes regularly, and the acreage of open water subsequently also fluctuates.

Wildlife

The project site and surrounding areas provide habitat suitable for common wildlife species that occur in vegetation communities and land cover types as described above. Common avian species observed/detected on or adjacent to the project site include mallard duck (*Anas platyrhynchos*), common teal (*Anas crecca*), bufflehead (*Bucephala albeola*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), Costa's hummingbird (*Calypte costae*), cliff swallow (*Petrochelidon pyrrhonota*), and Say's phoebe (*Sayornis saya*). The western fence lizard (*Sceloporus occidentalis*), a common reptile, was also observed. Mammals previously observed in the survey area include coyote (*Canis latrans*), bobcat (*Lynx rufus*), California ground squirrel (*Otospermophilus beecheyi*), raccoon (*Procyon lotor*), and black rat (*Rattus rattus*) (Rincon 2017).

Fish species such as bass (*Micropterus* sp.), grass carp (*Ctenopharyngodon idella*), common perch (*Perca* sp.), and common molly (*Poecilia* sp.) are known to occupy the ponds. No amphibian species were observed during the reconnaissance survey.

3.4.1.3 Special Status Biological Resources

The BRA identified 92 special status species with known occurrences within five miles of the project site through a query of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDDB). The BRA defines special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS and

National Marine Fisheries Service (NMFS) under the ESA; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA or Native Plant Protection Act; those recognized as Species of Special Concern (SSC) by the CDFW; and plants occurring on lists 1 and 2 of the CNPS California Rare Plant Rank (CRPR) system, per the following definitions:

- **List 1A** = Plants presumed extinct in California;
- **List 1B.1** = Rare or endangered in California and elsewhere; seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat);
- **List 1B.2** = Rare or endangered in California and elsewhere; fairly endangered in California (20-80 percent occurrences threatened);
- **List 1B.3** = Rare or endangered in California and elsewhere, not very endangered in California (<20 percent of occurrences threatened or no current threats known);
- **List 2** = Rare, threatened or endangered in California, but more common elsewhere.

In addition, special-status species are ranked globally (G) and subnationally (S) 1 through 3 based on NatureServe's (2010) methodologies:

- **G1 or S1:** Critically Imperiled Globally or State-wide
- **G2 or S2:** Imperiled Globally or State-wide
- **G3 or S3:** Vulnerable to extirpation or extinction Globally or State-wide

Plant communities are also considered special-status biological resources if they have limited distributions, have high value for sensitive wildlife, contain special-status species, or are particularly susceptible to disturbance. The CDFW ranks special-status communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB.

Special Status Plant Species

The BRA identifies 56 special-status plant species reported from the vicinity of the greater project area. Of these, all are considered to be absent or not expected to occur due to a lack of potentially suitable habitat and/or the project site occurring outside or at the edge of the species' geographic range or elevational range.

Special Status Animal Species

The BRA identifies 36 special status animal species reported from the vicinity of the project site. Of these, 32 are considered to be absent or not expected to occur due to a lack of potentially suitable habitat.

Three special-status bird species were found to have a low potential to occur within Phase II of the project site (the Whitewater River Stormwater Channel) during migration or while foraging. However the project site does not present suitable nesting habitat these species. These species are:

- Golden eagle (*Aquila chrysaetos*, Fully Protected)
- Prairie falcon (*Falco mexicanus*, Watch List)
- Loggerhead shrike (*Lanius ludovicianus*, CDFW Species of Special Concern)

All of these bird species have been reported in the vicinity (5 miles) of the project site and therefore potential for these species to occur (at least during migration or while foraging) is present. One

special-status bird species was found to a moderate potential to occur within Phase II of the project site.

- Burrowing owl (*Athene cunicularia*, CDFW Species of Special Concern)

Burrowing owl and loggerhead shrike are covered species under the Coachella Valley MSHCP.

Nesting Bird Habitat

The Project site contains habitat that can support nesting birds, including raptors, protected under the California Fish and Game Code (CFGF) Section 3503 and the Migratory Bird Treaty Act (MBTA) (16 U.S.C. §§ 703–712). These laws make it unlawful to take, possess, or needlessly destroy the nest or eggs of any migratory bird or bird of prey. While no nesting birds or owl burrows were observed during the field reconnaissance survey, ravens have been reported to nest in the tamarisk tree rows. The trees within the urban/developed portion of the site could also contain nests of several common native birds that are tolerant of urban conditions.

Special Status Plant Communities

The CNDDDB documents no special-status vegetation or habitat communities within a five-mile radius of the project site. No special-status vegetation communities were observed on or adjacent to the site during the field reconnaissance survey.

3.4.1.4 Jurisdictional Waters and Wetlands

No potential jurisdictional waters of the U.S. and/or state (including wetlands) were observed within the WRP10, where all work in Phase I of the proposed project would occur.

A formal jurisdictional delineation report has been prepared for the CVWD which contains the segment of the Whitewater River Storm Channel within Phase II of the project (ICF International, revised 2014). This delineation mapped 5.82 acres of unvegetated ephemeral channel as waters of the U.S. and state and 46.47 acres of jurisdictional waters of the state. Within the project site the Whitewater River storm channel is maintained as a flood control channel. The project site does not occur within and/or adjacent to the Coachella Valley MSHCP Whitewater Floodplain Conservation Area.

3.4.1.5 Wildlife Corridors

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around “checkerboard” residential development. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The project site occurs within the planning boundary of the Coachella Valley MSHCP area but is not a part of any specific Coachella Valley MSHCP Conservation Area. The project site lies adjacent to the Coachella Valley MSHCP Conservation Area (Santa Rosa and San Jacinto Mountains Conservation Area). The conservation area provides a biological corridor and linkage between the San

Jacinto/Santa Rosa Mountains, the San Bernardino Mountains, and Joshua Tree National Park. The proposed project would not affect any Conservation Areas. The proposed project would occur within a previously developed and routinely managed area and is not anticipated to have an incremental effect on localized and urban adapted wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement.

3.4.2 Regulatory Framework

The following is a summary of the regulatory context under which biological resources are managed at the federal, state, and local level. Agencies with responsibility for protection of biological resources within the project site include:

- U.S. Fish and Wildlife Service (federally listed species, candidate and proposed species for federal listing, and migratory birds);
- U.S. Army Corps of Engineers (waters of the United States, including wetlands);
- California Department Fish and Wildlife (state listed and fully-protected species, and other special status plants, wildlife and habitats, including streams, rivers, lakes and riparian vegetation); and
- Colorado River Regional Water Quality Control Board (waters of the State).

A number of federal and/or State statutes provide a regulatory structure that guides the protection of biological resources. The following discussion provides a summary of those laws that are most relevant to biological resources in the project site.

3.4.2.1 *Federal*

Federal agencies with jurisdiction within the project site include the U.S. Army Corps of Engineers and United States Fish and Wildlife Service (USFWS).

U.S. Army Corps of Engineers (USACE)

Under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act (RHA), the USACE has authority to regulate activities resulting in the discharge of dredged or fill material into waters of the United States, including wetlands. The USACE administers the federal policy embodied in Executive Order 11990, which, when implemented, is intended to result in no-net-loss of wetland functions, values or area. In achieving the goals of the CWA and RHA, the USACE seeks to avoid adverse impacts and to offset unavoidable adverse impacts on existing aquatic resources. Any fill or adverse modification of waters of the U.S. and/or associated wetlands would require a permit from the USACE prior to the start of work. Typically, permits issued by the USACE include as a condition of the project prescribed mitigation to offset unavoidable impacts to wetlands in a manner that achieves the goal of no-net-loss of wetlands.

U.S. Fish and Wildlife Service (USFWS)

The USFWS implements the Migratory Bird Treaty Act (16 United States Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). The USFWS implements ESA (16 USC § 153 et seq) for terrestrial and freshwater species. Projects that would result in “take” of any federally listed threatened or endangered species are required to obtain permits from the

USFWS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of ESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. “Take” under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of ESA; however, the USFWS advise project applicants that they could be elevated to listed status at any time.

3.4.2.2 State

State agencies with jurisdiction within the project site include the Regional Water Quality Control Board (RWQCB) and California Department of Fish and Wildlife (CDFW).

Colorado River Regional Water Quality Control Board (CRRWQCB)

The State Water Resources Control Board (SWRCB) and the local Colorado River Regional Water Quality Control Board (CRRWQCB) have jurisdiction over “waters of the State,” pursuant to the Porter-Cologne Water Quality Control Act. These are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to “isolated” waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The CRRWQCB enforces actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

California Department of Fish and Wildlife (CDFW)

CDFW derives its authority from the Fish and Game Code of California. Fish and Game Code Section 2050 *et. seq.* (e.g., CESA) prohibits take of state listed threatened, endangered or fully protected species. Take under CESA is restricted to direct mortality of a listed species and does not prohibit indirect harm by way of habitat modification. The CDFW also prohibits take for species designated as Fully Protected under the Code.

California Fish and Game Code Sections 3503, 3503.5, and 3511 describe unlawful take, possession, or destruction of birds, nests, and eggs. Fully protected birds (Section 3511) may not be taken or possessed except under specific permit. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

Species of Special Concern is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. Species of Special Concern do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is intended by the CDFW for use as a management tool to include these species into special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 *et seq.*). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare. Under Section 1913(c) of the NPPA, the owner of land where a rare or

endangered native plant is growing is required to notify the department at least 10 days in advance of changing the land use to allow for salvage of plant.

Perennial and intermittent streams and associated riparian vegetation, when present, are also under the jurisdiction of the CDFW. Section 1600 et seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over work within the stream zone (which could extend to the 100-year flood plain) consisting of, but not limited to, the diversion or obstruction of the natural flow or changes in the channel, bed, or bank of any river, stream or lake.

3.4.2.3 Regional

Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan focusing on the conservation of species and their associated habitats in the Coachella Valley region of Riverside County. The overall goal of the Coachella Valley MSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth.

The Coachella Valley MSHCP covers 27 sensitive plant and wildlife species (Coachella Valley MSHCP covered species) as well as 27 natural communities. Covered species include both listed and non-listed species that are adequately conserved by the Coachella Valley MSHCP. The overall provisions for the plan are subdivided according to specific resource conservation goals that have been organized according to geographic areas defined as Conservation Areas. These areas are identified as Core, Essential, or Other Conserved Habitat for sensitive plant, invertebrate, amphibian, reptile, bird, and mammal species, Essential Ecological Process Areas, and Biological Corridors and Linkages.

The approval of the Coachella Valley MSHCP and execution of the Implementing Agreement (IA) allows signatories of the IA to issue take authorizations for all species covered by the Coachella Valley MSHCP, including State and federally listed species as well as other identified covered species and/or their habitats. The CVWD is a signatory to the IA.

Each participating city or local jurisdiction within the Coachella Valley imposes a development mitigation fee for new development projects within its jurisdiction. With payment of the mitigation fee and compliance with the requirements of the Coachella Valley MSHCP, full mitigation in compliance with CEQA, the National Environmental Policy Act (NEPA), CESA, and ESA is granted.

As stated above, the project site occurs within the planning boundary of the Coachella Valley MSHCP, but is not a part of any specific Coachella Valley MSHCP Conservation Area. However, the project site is near to the Santa Rosa and San Jacinto Mountains Coachella Valley MSHCP conservation area, which occurs approximately two miles to the south (CVAG 2007).

3.4.2.4 Local

City of Palm Desert General Plan

The Environmental Resources Element of the City of Palm Desert General Plan provides the following policies applicable to the proposed project:

- **Policy 3.2 Grading and vegetation removal.** Limit grading and vegetation removal of new development activities to the minimum extent necessary to reduce erosion and sedimentation.

- **Policy 3.3 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.

3.4.3 Impacts and Mitigation Measures

This impact analysis is based on the BRA prepared by Rincon Consultants for the Project in June 2017, as well as review of aerial photography and topographic maps and available literature regarding the existing biological resources.

CEQA, Chapter 1, Section 21001(c) states that it is the policy of the State of California to “prevent the elimination of fish and wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.” Environmental impacts relative to biological resources may be assessed using impact significance criteria encompassing CEQA guidelines and federal, state and local plans, regulations, and ordinances.

3.4.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Have substantial adverse effects, 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 CDFW or USFWS.*
- b. *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.*
- c. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- 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.*
- e. *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- 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.*

3.4.3.2 Approach to Analysis

Habitat Assessment

The assessments for the replenishment facilities were conducted first through extensive literature and database searches, and field surveys. On-site habitats were assessed based on the presence or absence of suitable habitat components (e.g., soils, vegetation and topography) characteristic of the potentially occurring special-status species determined by the literature review. Printed maps and

exhibits were used to locate the assessment sites and facility boundaries. Binoculars were used to identify species of wildlife too distant to identify with the naked eye. A digital camera was used to take representative photographs of the existing site conditions, wildlife habitat, unique features and wildlife and can be found in the BRA, which is included as an appendix to this EIR. All flora and fauna observed or otherwise detected on the project site were recorded in field notes and are included in Attachment C to the BRA.

Jurisdictional Waters Analysis

The results of the 2014 *Jurisdictional Delineation Report Whitewater River and Coachella Valley Stormwater Channels Riverside County, California* (ICF International 2014) were ground-truthed and confirmed during Rincon's field reconnaissance survey. The analysis in this EIR is based upon the 2014 *Jurisdictional Delineation Report*.

Areas of No Project Impact

The proposed project is not expected to impact sensitive plant communities as no sensitive plant communities are present. In addition, the proposed project would not result in impacts related to the criteria listed below, as described.

- b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.*

The CNDDDB documents no special-status vegetation or habitat communities within a five-mile radius of the project site. No sensitive plant communities were observed on the project site during the field reconnaissance survey. No sensitive plant communities are present; therefore, there will be no impact. In addition, operation of the project would include activities within the WRP10 site, MVP Pump Station, and continued use of the Whitewater River Stormwater Channel for flood control, as well as groundwater infiltration. Project maintenance and operation activities are not expected to result in significant adverse impacts to biological resources and therefore, there would be no impact.

3.4.3.3 Construction Impacts and Mitigation Measures

IMPACT BIO-1 THE PROJECT WOULD HAVE A SUBSTANTIAL ADVERSE EFFECT, EITHER DIRECTLY OR INDIRECTLY, OR THROUGH HABITAT MODIFICATIONS, ON SPECIES IDENTIFIED AS A CANDIDATE, SENSITIVE, OR SPECIAL STATUS SPECIES (INCLUDING SPECIES LISTED AS THREATENED OR ENDANGERED) IN LOCAL OR REGIONAL PLANS, POLICIES, OR REGULATIONS, OR BY THE CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE OR U.S. FISH AND WILDLIFE SERVICE. (LESS THAN SIGNIFICANT WITH MITIGATION)

The project site contains suitable nesting habitat for burrowing owl and common native birds. While no nesting birds or owl burrows with burrowing owl sign (whitewash, pellets and feathers) were observed during the field reconnaissance survey at the project site, they nonetheless could occur at the time of construction. In particular, ravens are known to nest in the tamarisk tree rows. The proposed project could adversely affect raptors (including burrowing owl) and nesting birds if construction occurs while they are present on or adjacent to the site through direct mortality or abandonment of nests. The loss of a nest due to construction activities would be a violation of CFGC Section 3503, 3503.5, 3513 and 3800, and the MBTA.

No other impacts to special status species would occur as no other species were identified as having the potential to occur at the project site.

Mitigation Measures

Mitigation Measure BIO-1 would apply to the proposed project.

Mitigation Measure BIO-1. Nesting Bird and Burrowing Owl Avoidance

Project-related activities should occur outside of the bird breeding season (typically February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season (February 1 through August 31), then no more than one week prior to initiation of ground disturbance and/or vegetation removal, a nesting bird and raptor pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 300-foot buffer (500-foot for raptors), where feasible. If the proposed project is phased, a subsequent pre-construction nesting bird and raptor survey may be required prior to each phase of construction within the project site.

- Pre-construction nesting bird and raptor surveys shall be conducted during the time of day when birds are active and should be of sufficient duration to reliably conclude presence/absence of nesting birds and raptors on-site and within the designated vicinity. A report of the nesting bird and raptor survey results, if applicable, shall be submitted to the lead agency for review and approval prior to ground and/or vegetation disturbance activities.
- If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for song birds, and up to 250 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.
- A pre-construction survey for the burrowing owl is shall be completed on the project site prior to any ground-disturbing activities since suitable habitat exists on site. The direct take of a burrowing owl, or any raptor, must be avoided. If the burrowing owl is found to be present, avoidance measures would be required, as described further below. In addition, if a burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owls have completed their nesting activities.
- The pre-construction survey for the burrowing owl shall occur no less than 14 days (in accordance with the Staff Report on Burrowing Owl Mitigation [CDFW 2012]) and no more than 30 days (in accordance with CVWD's Operations and Maintenance Manual) prior to ground breaking activities. Additionally, a final survey must be conducted within 24 hours of the initiation of ground disturbance activities in accordance with the CDFW 2012 protocol. If no burrowing owls are detected during those surveys, implementation of ground disturbance activities could proceed without further consideration of this species assuming there is no lapse between the surveys and construction as the protocol states "time lapses between project activities trigger subsequent take avoidance surveys including but not limited to a final survey conducted within 24 hours prior to ground disturbance."

- If burrowing owls are detected on-site, no ground-disturbing activities, such as vegetation clearance or grading, shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an occupied burrow during the breeding season (February 1 to August 31), unless otherwise authorized by CDFW. During the non-breeding (winter) season (September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with CDFW.
- Compensatory mitigation may be required for permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat such that the habitat acreage, number of burrows and burrowing owls impacted are replaced based on the guidance provided in Appendix A of the CDFW Burrowing Owl Staff Report (CDFW 2012).
- Where habitat will be temporarily disturbed, restore the disturbed area to pre-project condition including decomposing soil and re-vegetating. Permanent habitat protection may be warranted if there is the potential that the temporary impacts may render a nesting site (nesting burrow and satellite burrows) unsustainable or unavailable depending on the time frame, resulting in reduced survival or abandonment.
- If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31), where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with the 2012 CDFW Staff Report on Burrowing Owl Mitigation.

Timing	Before ground disturbing activities
Party Responsible for Implementation	Qualified Biologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	If construction is to occur during the nesting season (February 1 to August 31), a qualified biologist shall complete a nesting bird survey (within one week of ground disturbance) and burrowing owl survey (no less than 14 days and no more than 30 days prior to ground disturbing activities). Results shall be submitted to Coachella Valley Water District.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1 would reduce impacts to a less than significant level by ensuring avoidance of nesting birds and burrowing owl.

IMPACT BIO-2 THE PROJECT WOULD 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. (LESS THAN SIGNIFICANT WITH MITIGATION)

The project site does not support wetlands. However, Phase II includes the construction of temporary berms using native sediments within the Whitewater River Stormwater Channel for the purposes of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. These berms are considered temporary because they will be replaced whenever they are washed out by high flow events; depending upon the magnitude of the flood event that washes berms away, they may be replaced in slightly different locations, but always within the project's disturbance area. In addition, a subsurface extension of the Mid-Valley Pipeline to provide water to the recharge ponds is proposed. Construction of the berms and the pipeline extension could result in the discharge of sediments into the low flow channel, but given downstream uses (including a golf course in the channel), such discharge would not have a significant adverse effect to protected biological habitats or species. Because of the lack of biological resources associated with this maintained channel, no direct biological impact would be anticipated. In addition, the area is disturbed on an ongoing basis through regular maintenance of the channel, which entails removing debris and vegetation. Maintenance of the berms (including replacement after storm events) would involve disturbance in this same area, resulting in no change in existing conditions. The berms would also not substantially alter the hydrologic characteristics of the channel, especially as compared to peak flow events. However, the proposed Phase II activity is subject to regulation by the CDFW, Colorado River Basin RWQCB, and USACE and proceeding without the appropriate authorizations and permits would be considered a potentially significant impact as it would conflict with adopted regulatory policies intended to reduce environmental effects.

Mitigation Measures

Mitigation Measure BIO-2 would apply to the proposed project.

Mitigation Measure BIO-2. Consultation with Regulatory Agencies

Prior to initiation of Phase II of the project, CVWD shall consult with CDFW, the USACE, and the Colorado River Basin RWQCB. This consultation may result in CVWD being required to apply for permits authorizing the construction of the berms and the installation of the pipeline extension within the un-vegetated Whitewater River Stormwater Channel. CVWD shall comply with all permit conditions when implementing the proposed activities, including any seasonal timing restrictions, impact avoidance measures, limitations on construction means and methods, site restoration, compensatory mitigation, and reporting requirements.

Timing	Prior to initiation of Phase II of the project
Party Responsible for Implementation	Coachella Valley Water District
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Coachella Valley Water District shall consult with resource agencies

IMPACT BIO-3 THE PROJECT WOULD NOT 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. (LESS THAN SIGNIFICANT)

The project site does not occur within a Coachella Valley MSHCP Conservation Area. The proposed project would occur within a previously developed and managed area and is not anticipated to cause any habitat fragmentation in the region, nor is the proposed project anticipated to have significant impact on regional wildlife movement. The temporary recharge basins within the Whitewater River Stormwater Channel would be protected from human egress by “break-away” fencing that is anticipated to be chain link or similar. Such fencing would be relatively permeable to local, urban adapted wildlife and avian species and would not be expected to limit localized wildlife movement through this urban area. It is noted that the increase in open water availability associated with the recharge ponds could potentially increase the number of water-related birds, such as ducks, and other wildlife at the site.

IMPACT BIO-4. THE PROJECT WOULD NOT CONFLICT WITH LOCAL POLICIES OR ORDINANCES PROTECTING BIOLOGICAL RESOURCES, SUCH AS A TREE PRESERVATION POLICY OR ORDINANCE. ADDITIONALLY, THE PROJECT WOULD NOT CONFLICT WITH THE PROVISIONS OF AN ADOPTED HABITAT CONSERVATION PLAN, NATURAL COMMUNITY CONSERVATION PLAN, OR OTHER APPROVED LOCAL, REGIONAL OR STATE HABITAT CONSERVATION PLAN. (LESS THAN SIGNIFICANT)

The proposed project will not conflict with any local policies or ordinances due to participation in the Coachella Valley MSHCP; operation and maintenance activities within the channel is a covered activity under the Coachella Valley MSHCP. The proposed project is within the Coachella Valley MSHCP plan area, but not within any specific Coachella Valley MSHCP Conservation Area. The proposed project is about 2 miles from the nearest Coachella Valley MSHCP Conservation Area and would not have any direct or indirect impacts to this area and will not conflict with the Coachella Valley MSHCP Conservation Objectives.

3.4.3.4 Operation Impacts and Mitigation Measures

As described above (Areas of No Project Impact), operation and maintenance activities would not result in adverse impacts to biological resources and therefore, there would be no impact.

3.4.3.5 Cumulative Impacts

According to Section 15130 of the *CEQA Guidelines*, cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The area of analysis for cumulative effects consists of the project site and surrounding area. The project occurs within a previously developed and actively managed area. The Coachella Valley MSHCP has analyzed cumulative effects within the region of the proposed project under CEQA, NEPA, CESA, and FESA. This analysis considers the types of other projects that would occur in the project area and how associated impacts may combine with similar impacts of other projects to result in cumulative effects. However, through compliance with the Coachella Valley MSHCP, project effects will be offset, and as a result, the cumulative impacts to sensitive biological resources would be less than significant.

Any potential cumulative impacts to jurisdictional waters will be offset through the regulatory permitting process (e.g., CWA Section 404 and 401, CFGC Section 1600 *et seq.* and California Water Code (CWC) Section 13000 *et seq.*) with compensatory mitigation pursued at the watershed level. As a result, the cumulative impacts to aquatic resources would be less than significant.

3.5 Cultural, Tribal Cultural, and Paleontological Resources

This section assesses potential impacts to cultural, tribal cultural, and paleontological resources from the proposed project.

3.5.1 Cultural Setting

3.5.1.1 *Prehistoric Context*

The prehistoric chronology for Southern California is generally divided into the following periods: the Early man Horizon (ca. 10000-6000 B.C.), the Milling Stone Horizon (6000-3000 B.C.), the Intermediate Horizon (3000 B.C.- A.D. 500), and the Late Prehistoric Horizon (A.D. 500- Historic Contact).

The Early Man Horizon (ca. 10000-6000 B.C.) is generally characterized by an economy with a diverse mixture of hunting and gathering, including a significant focus on aquatic resources on the coast and on inland Pleistocene lakeshores (Dillon 2002).

The Milling Stone Horizon (6000-3000 B.C.) is defined by a widespread use of milling stones indicating a subsistence strategy focused on collecting plant foods (Wallace 1955: 219). The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968). Variability in artifact collections over time and from the coast to inland sites indicates that Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007:220).

The Intermediate Horizon (3000 B.C.- A.D. 500) is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods (Wallace 1955). During the Intermediate Horizon, a noticeable trend occurred toward greater adaptation to local resources including a broad variety of fish and land mammals. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

During the Late Prehistoric Horizon (A.D. 500- Historic Contact) the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon (Wallace 1955). More classes of artifacts were observed during this period and high quality exotic lithic materials were used for small finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphalt for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955:223).

3.5.1.2 *Ethnographic Overview*

The project site is situated within the territory of the Cahuilla (Bean 1978). The term Cahuilla likely derived from the native word *káwiya*, meaning “master” or “boss” (Bean 1978:575). Traditional Cahuilla ethnographic territory extended west to east from the present-day city of Riverside to the

central portion of the Salton Sea in the Colorado Desert, and south to north from the San Jacinto Valley to the San Bernardino Mountains.

Cahuilla villages were usually located in canyons or on alluvial fans near a source of accessible water. Each lineage group maintained their own houses (kish) and granaries, and constructed ramadas for work and cooking. Sweat houses and song houses (for non-religious music) were also often present. Each community also had a separate house for the lineage or clan leader. A ceremonial house, or kiš ʔámnawet, associated with the clan leader was where major religious ceremonies were held. Houses and ancillary structures were often spaced apart, and a “village” could extend over a mile or two. Each lineage had ownership rights to various resource collecting locations (Bean 1978).

The Cahuilla hunted a variety of game, including mountain sheep, cottontail, jackrabbit, mice, and wood rats, as well as predators such as mountain lion, coyote, wolf, bobcat, and fox. Various birds were also consumed, including quail, duck, and dove, plus various types of reptiles, amphibians, and insects. A wide variety of tools and implements were employed by the Cahuilla to gather and collect food resources. For the hunt, these included the bow and arrow, traps, nets, slings and blinds for hunting land mammals and birds, and nets for fishing. Rabbits and hares were commonly brought down by the throwing stick; however when communal hunts were organized for these animals, the Cahuilla often utilized clubs and very large nets.

Foodstuffs were processed using a variety of tools, including portable stone mortars, bedrock mortars and pestles, basket hopper mortars, manos and metates, bedrock grinding slicks, hammerstones and anvils, and many others. Food was consumed from a number of woven and carved wood vessels and pottery vessels. The ground meal and unprocessed hard seeds were stored in large finely woven baskets, and the unprocessed mesquite beans were stored in large granaries woven of willow branches and raised off the ground on platforms to keep it from vermin. Pottery vessels were made by the Cahuilla, and also traded from the Yuman-speaking groups across the Colorado River and to the south.

The Cahuilla had adopted limited agricultural practices by the time Euro-Americans traveled into their territory. Bean (1978:578) has suggested that their “proto-agricultural techniques and a marginal agriculture” consisting of beans, squash and corn may have been adopted from the Colorado River groups to the east. Certainly by the time of the first Romero Expedition in 1823-24, they were observed growing corn, pumpkins, and beans in small gardens localized around springs in the Thermal area of the Coachella Valley. The introduction of European plants such as barley and other grain crops suggest an interaction with the missions or local Mexican rancheros. Despite the increasing use and diversity of crops, no evidence indicates that this small-scale agriculture was anything more than a supplement to Cahuilla subsistence, and it apparently did not alter social organization.

By 1819, several Spanish mission outposts, known as assistencias, were established near Cahuilla territory at San Bernardino and San Jacinto. Cahuilla interaction with Europeans at this time was not as intense as it was for native groups living along the coast. This was likely due to the local topography and lack of water, which made the area less attractive to colonists. By the 1820s, however, European interaction increased as mission ranchos were established in the region and local Cahuilla were employed to work on them.

The Bradshaw Trail was established in 1862 and was the first major east-west stage and freight route through the Coachella Valley. Traversing the San Geronimo Pass, the trail connected gold mines on the Colorado River with the coast. Bradshaw based his trail on the Cocomaricopa Trail,

with maps and guidance provided by local Native Americans. Journals by early travelers along the Bradshaw Trail told of encountering Cahuilla villages and walk-in wells during their journey through the Coachella Valley. The continued influx of immigrants into the region introduced the Cahuilla to European diseases. The single worst recorded event was a smallpox epidemic that swept through Southern California in 1862-63, significantly reducing the Cahuilla population. By 1891, only 1,160 Cahuilla remained within what was left of their territory, down from an aboriginal population of 6,000–10,000 (Bean 1978:583-584). By 1974, approximately 900 people claimed Cahuilla descent, most of whom resided on reservations.

Between 1875 and 1891, the United States established ten reservations for the Cahuilla within their traditional territory. These reservations include: Agua Caliente, Augustine, Cabazon, Cahuilla, Los Coyotes, Morongo, Ramona, Santa Rosa, Soboba, and Torres-Martinez (Bean 1978:585). Four of the reservations are shared with other groups, including the Chemehuevi, Cupeño, and Serrano.

3.5.1.3 Historic Overview

CVWD was organized in 1918 with the task of protecting local water sources in the Valley (CVWD 1968). To that aim, CVWD's first task was to acquire the water rights of the Whitewater River, and later established the Coachella Branch of the All American Canal to supplement natural water sources supplying the valley. The work of CVWD provided the water necessary for the establishment of the valley's numerous golf courses and resorts.

The City of Palm Desert, in which the WRP10 and Whitewater River Stormwater Channel areas are located, was founded by Randall, Carl, Clifford, and Phil Henderson in the mid-1940s. The Henderson brothers purchased 1,600 acres in hopes of establishing a winter resort for celebrities. They organized the Palm Desert Corporation, which developed real estate and promoted the town, and by 1947 had a high enough population to establish a post office. In 1951, the communities of Palm Village and Palm Desert merged to form the modern core of the city. In 1973, the City of Palm Desert was incorporated as the 17th city in Riverside County (City of Palm Desert 2014).

3.5.2 Geologic Setting

The proposed project area is within the United States Geological Survey (USGS) La Quinta, 7.5-minute quadrangle. The project area crosses both the Peninsular Ranges and Colorado Desert Geomorphic Provinces, two of 11 major provinces in the state (California Geological Survey [CGS] 2002). The Peninsular Ranges province is characterized by its northwest trending valleys and faults that branch from the San Andreas Fault (CGS 2002). The Colorado Desert province is a low-lying desert depression, dominated by the Salton Sea, created by active branches of the San Andreas and San Jacinto fault zones (CGS 2002).

The Peninsular Ranges comprise rocks that range in age from the Paleozoic to the Quaternary, with the majority of rocks belonging to a Jurassic to Cretaceous batholith that intrudes a Triassic to Jurassic metasedimentary sequence (Todd et al. 2003). This batholith was emplaced across the North American and Pacific plate boundary in the Mesozoic and is composed of an older, western portion of tonalite, gabbro, and granodiorite and a younger, eastern portion of less mafic granitics (Todd et al. 2003). The project is located within this eastern portion and crosses into the northern reach of the Colorado Desert province, north of the Salton Sea (trough). The Colorado Desert province is mainly characterized by ancient shorelines of the now-extinct Lake Cahuilla.

The proposed project area includes three (3) geologic units mapped at the surface (Figures 1 and 2: Attachment A): Quaternary (Holocene) alluvium (Qa), Quaternary (Holocene) sand and gravel of the Whitewater River (Qg), and Quaternary (Holocene) aeolian sand (Qs) (Dibblee and Minch 2008). All three units consist of sand with varying amounts of clay (Qa) and gravel (Qg) and are generally late Holocene in age at the surface. These sediments become older (early Holocene and Pleistocene) at varying but unknown depths. The nearest known fossil locality in similar sediments (from Pleistocene sediments underlying Holocene aeolian sands in the City of Indian Wells, approximately 1 km north of the project, along Washington Street) contained vertebrate fossils (locality listed as CA-RIV-5876 in the City of Indian Wells General Plan).

3.5.3 Regulatory Framework

This section includes a discussion of the applicable state and local laws, ordinances, regulations, and standards governing cultural, tribal cultural, and paleontological resources, which must be adhered to before and during implementation of the proposed project.

3.5.3.1 State

California Environmental Quality Act

Cultural Resources

CEQA requires a lead agency to analyze whether historic and/or archaeological resources may be adversely impacted by a proposed project. Under CEQA, a “project that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment” (California Public Resources Code Section 21084.1). Answering this question is a two-part process: first, the determination must be made as to whether the proposed project involves cultural resources; second, if cultural resources are present, the proposed project must be analyzed for a potential “substantial adverse change in the significance” of the resource.

CALIFORNIA REGISTER OF HISTORICAL RESOURCES

The California Register of Historical Resources (CRHR) is a guide to cultural resources that must be considered when a government agency undertakes a discretionary action subject to CEQA. The California Register helps government agencies identify, evaluate, and protect California’s historical resources, and indicates which properties are to be protected from substantial adverse change (Pub. Resources Code, Section 5024.1(a)). The California Register is administered through the State Office of Historic Preservation (OHP) that is part of the California State Parks system.

A cultural resource is evaluated under four California Register criteria to determine its historical significance. A resource must be significant at the local, state, or national level in accordance with one or more of the following criteria set forth in the State CEQA Guidelines at Section 15064.5(a)(3):

- 1) It is associated with events that have made a significant contribution to the broad pattern of California’s history and cultural heritage;
- 2) It is associated with the lives of persons important in our past;
- 3) It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

- 4) It has yielded, or may be likely to yield, information important in prehistory or history.

In addition to meeting one or more of the above criteria, the California Register requires that sufficient time must have passed to allow a “scholarly perspective on the events or individuals associated with the resource.” Fifty years is used as a general estimate of the time needed to understand the historical importance of a resource according to OHP publications. The California Register also requires a resource to possess integrity, which is defined as “the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association.” Archaeological resources can sometimes qualify as “historical resources” [State CEQA Guidelines, Section 15064.5(c)(1)].

According to CEQA, all buildings constructed over 50 years ago and that possess architectural or historical significance may be considered potential historic resources. Most resources must meet the 50-year threshold for historic significance; however, resources less than 50 years in age may be eligible for listing on the CRHR if it can be demonstrated that sufficient time has passed to understand their historical importance.

In addition, if a project can be demonstrated to cause damage to a unique archaeological resource, the lead agency may require reasonable efforts to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b], and [c]).

Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- 1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; or
- 2) Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- 3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Two other programs are administered by the state: California Historical Landmarks and California “Points of Historical Interest.” California Historical Landmarks are buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. California Points of Historical Interest are buildings, sites, features, or events that are of local (city or county) significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value.

Impacts to significant cultural resources that affect the characteristics of any resource that qualify it for the National Register of Historic Places (NRHP) or adversely alter the significance of a resource listed in or eligible for listing in the CRHR are considered a significant effect on the environment. These impacts could result from physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired (CEQA Guidelines, Section 15064.5 [b][1], 2000). Material impairment is defined as demolition or alteration in an adverse manner [of] those characteristics of an historical resource

that convey its historical significance and that justify its inclusion in, or eligibility for inclusion in, the California Register... (CEQA Guidelines, Section 15064.5[b][2][A]).

Tribal Cultural Resources

ASSEMBLY BILL 52

As of July 1, 2015, California Assembly Bill 52 of 2014 (AB 52) was enacted and expands CEQA by defining a new resource category, “tribal cultural resources.” Assembly Bill 52 establishes that “A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (Public Resources Code Section 21084.2). It further states that the lead agency shall establish measures to avoid impacts that would alter the significant characteristics of a tribal cultural resource, when feasible (Public Resources Code Section 21084.3).

Public Resources Code Section 21074(a)(1)(A) and (B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and meets either of the following criteria:

- a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
- b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 establishes a formal project consultation process for California Native American tribes and lead agencies regarding tribal cultural resources, referred to as government-to-government consultation. Per Public Resources Code Section 21080.3.1.(b), the AB52 consultation process must begin prior to release of an EIR. Native American tribes to be included in the formal consultation process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

In April 2017, CVWD distributed AB 52 consultation letters for the proposed project, including project information and a map to each of the seven (7) Native American tribes previously requesting to consult on CVWD projects. In addition, CVWD distributed the AB 52 letter and project materials to several additional local Native American tribes and various Bureau of Indian Affairs agencies. The tribal governments that were provided an AB 52 consultation letter, as well as, the CEQA Notice of Preparation & Notice of Scoping Meeting letter, include the following list of recipients below:

- Agua Caliente Band of Cahuilla Indians
- Augustine Band of Cahuilla Indians
- Cabazon Band of Mission Indians
- Soboba Band of Luiseno Indians
- Torres Martinez Desert Cahuilla Indians
- Twenty-Nine Band of Mission Indians
- Bureau of Indian Affairs - Pacific Region (Sacramento)
- Bureau of Indian Affairs - Southern California Agency (Riverside)
- Bureau of Indian Affairs - Palm Springs Agency
- Cahuilla Band of Indians

- Los Coyotes Band of Cahuilla and Cupeno Indians
- Morongo Band of Mission Indians
- Ramona Band of Cahuilla Indians

To date, two (2) Native American tribes responded to the AB 52 letter: the Agua Caliente Band of Cahuilla Indians, and the Twenty-Nine Palms Band of Mission Indians. As requested, a copy of the cultural resource report was provided. No concern of specific tribal cultural resources has been provided, and no request for mitigation relating to tribal cultural resources has been provided. A copy of CVWD's AB 52 consultation letter is included in Appendix C.

Paleontological Resources

The California Environmental Quality Act (CEQA) (Chapter 1, §21002) states that:

It is the policy of the state that public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects, and that the procedures required by this division are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects.

The CEQA Guidelines (Article 1, §15002(a)(3)) also state that CEQA is intended to 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. If paleontological resources are identified during the Preliminary Environmental Analysis Report, or other initial project scoping studies (e.g., Preliminary Environmental Study), as being within the proposed project area, the sponsoring agency must take those resources into consideration when evaluating project effects. The level of consideration may vary with the importance of the resource.

Public Resources Code Section 5097.5

Section 5097.5 of the California Public Resources Code states:

No person shall knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands. Violation of this section is a misdemeanor.

As used in this P Public Resources Code RC section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof. Consequently, local agencies are required to comply with Public Resources Code 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

3.5.3.2 Local

The City of Palm Desert General Plan (2010)

The City of Palm Desert General Plan, in Section 6: Environmental Resources, addresses cultural and paleontological resources. together, in Goal 9: Cultural Resources and Sites. The following policies relate specifically to cultural, tribal cultural, and paleontological resources:

9.1 Disturbance of Human Remains. In areas where there is a high chance that human remains may be present, the City will require proposed projects to conduct a survey to establish occurrence of human remains, if any. If human remains are discovered on proposed project sites, the project must implement mitigation measures to prevent impacts to human remains in order to receive permit approval.

9.2 Discovery of Human Remains. Require that any human remains discovered during implementation of public and private projects within the City be treated with respect and dignity and fully comply with the California Native American Graves Protection and Repatriation Act and other appropriate laws.

9.3 Tribal Coordination. Require notification of California Native American tribes and organizations of proposed projects that have the potential to adversely impact cultural resources.

9.4 Protected Sites. Require sites with significant cultural resources to be protected.

9.5 Preservation of Historic Resources. Encourage the preservation of historic resources, when practical. When it is not practical to preserve a historic resource in its entirety, the City will require the architectural details and design elements of historic structures to be preserved during renovations and remodels as much as feasible.

Policy 9.6: Paleontological Resources. Require any paleontological artifacts found within the City or its Sphere of Influence to be reported to the City and temporarily loaned to local museums the Western Science Center for Archaeology and Paleontology in Hemet, CA.

Policy 9.7: Mitigation and Preservation of Cultural Resources. Require development to avoid archaeological and paleontological resources, whenever possible. If complete avoidance is not possible, require development to minimize and fully mitigate the impacts to the resources.

The City of Indio General Plan 2020 (1993)

The City of Indio General Plan, in Goals and Policy Report: Environmental Resources, includes the following goal and policies relating to cultural and paleontological resources:

Goal CR-1: Preserve historic, archaeological, and paleontological resources for their scientific, educational, aesthetic, and cultural values.

Policy CR-1.1: Cultural Resources Constraints. Identify through appropriate research the presence and significance of historical, archaeological, and paleontological resources (sites) and encourage land use planning that uses this information during the earliest stage of environmental review and/or during a project's conceptual design phase.

Policy CR-1.2: Historic Preservation. Encourage the preservation of significant prehistoric or historic archaeological sites, historic buildings or structures, area of traditional cultural significance, or paleontological formations/fossils.

3.5.4 Impacts and Mitigation Measures

3.5.4.1 Significance Criteria

Potential impacts on cultural, tribal cultural, and paleontological resources are analyzed based on the potential for the Project to impact the resources described above, or any as yet unidentified resources during construction or operation.

Cultural Resources

The analysis of cultural resources impacts is based on empirical research presented in the Phase I Cultural Resources study and the Peer Review prepared for the proposed project. The full report is included as Appendix C of this EIR. The methodologies and significance thresholds employed for the cultural resources impact analyses are described below and in the *Regulatory Setting*, above.

In accordance with Appendix G of the State *CEQA Guidelines*, an impact to Cultural Resources or Tribal Cultural Resources is considered significant if it can be demonstrably argued that the project would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5;
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5;
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
4. Disturb any human remains, including those interred outside of dedicated cemeteries; and
5. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or
 - ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The significance of an archaeological deposit and subsequently the significance of any impact are determined by the criteria established in the *State CEQA Guidelines*, as provided in the *Regulatory Setting*.

If an archaeological resource does not meet either the historical resource or the more specific “unique archaeological resource” definition, impacts do not need to be mitigated (13 Public Resources Code 15064.5 (e)). Where the significance of a site is unknown, it is presumed to be significant for the purpose of the EIR investigation.

Tribal Cultural Resources

Potential impacts on tribal cultural resources (TCRs) are analyzed based on the potential for the Project to impact any tribal cultural resources during construction or operation. The significance of a TCR and subsequent significance of any impact is determined by, among other things, consideration of whether or not that resource has heritage value to California Native Americans.

Paleontological Resources

The Society for Vertebrate Paleontology (SVP) broadly defines significant paleontological resources as follows (SVP 2010, page 11):

“Fossils and fossiliferous deposits consisting of identifiable vertebrate fossils, large or small, uncommon invertebrate, plant, and trace fossils, and other data that provide taphonomic, taxonomic, phylogenetic, paleoecologic, stratigraphic, and/or biochronologic information. Paleontological resources are considered to be older than recorded human history and/or older than middle Holocene (i.e., older than about 5,000 radiocarbon years).”

Significant paleontological resources are determined to be fossils or assemblages of fossils that are unique, unusual, rare, diagnostically important, or are common but have the potential to provide valuable scientific information for evaluating evolutionary patterns and processes, or which could improve our understanding of paleochronology, paleoecology, paleophylogeography, or depositional histories. New or unique specimens can provide new insights into evolutionary history; however, additional specimens of even well represented lineages can be equally important for studying evolutionary pattern and process, evolutionary rates, and paleophylogeography. Even unidentifiable material can provide useful data for dating geologic units if radiocarbon dating is possible. As such, common fossils (especially vertebrates) may be scientifically important, and therefore considered significant.

The SVP (2010) describes sedimentary rock units as having high, low, undetermined, or no potential for containing significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. While these standards were specifically written to protect vertebrate paleontological resources, all fields of paleontology have adopted these guidelines. Rincon has evaluated the paleontological sensitivity of the proposed project site according to the following SVP (2010) categories:

High Potential (Sensitivity)

Rock units from which significant vertebrate or significant invertebrate fossils or significant suites of plant fossils have been recovered are considered to have a high potential for containing significant non-renewable fossiliferous resources. These units include but are not limited to, sedimentary formations and some volcanic formations which contain significant nonrenewable paleontological resources anywhere within their geographical extent, and sedimentary rock units temporally or lithologically suitable for the preservation of fossils. Sensitivity comprises both (a) the potential for yielding abundant or significant vertebrate fossils or for yielding a few significant fossils, large or small, vertebrate, invertebrate, or botanical and (b) the importance of recovered evidence for new and significant taxonomic, phylogenetic, ecologic, or stratigraphic data. Areas which contain potentially datable organic remains older than Recent, including deposits associated with nests or middens, and areas which may contain new vertebrate deposits, traces, or trackways are also classified as significant.

Low Potential (Sensitivity)

Sedimentary rock units that are potentially fossiliferous, but have not yielded fossils in the past or contain common and/or widespread invertebrate fossils of well documented and understood taphonomic, phylogenetic species and habitat ecology. Reports in the paleontological literature or field surveys by a qualified vertebrate paleontologist may allow determination that some areas or units have low potentials for yielding significant fossils prior to the start of construction. Generally, these units will be poorly represented by specimens in institutional collections and will not require protection or salvage operations. However, as excavation for construction gets underway it is possible that significant and unanticipated paleontological resources might be encountered and would require a change of classification from Low to High Potential and, thus, require monitoring and mitigation if the resources are found to be significant.

Undetermined Potential (Sensitivity)

Specific areas underlain by sedimentary rock units for which little information is available are considered to have undetermined fossiliferous potentials. Field surveys by a qualified vertebrate paleontologist to specifically determine the potentials of the rock units are required before programs of impact mitigation for such areas may be developed.

No Potential

Rock units of metamorphic or igneous origin are commonly classified as having no potential for containing significant paleontological resources.

In general terms, for geologic units with high sensitivity, full-time monitoring typically is recommended during any project-related ground disturbance. For geologic units with low sensitivity, protection or salvage efforts typically are not required. For geologic units with undetermined sensitivity, field surveys by a qualified paleontologist are usually recommended to specifically determine the paleontological potential of the rock units present within the study area. For geologic units with no sensitivity, a paleontological monitor is not required.

3.5.4.2 Approach to Analysis

Cultural Resources

The following is summarized from the technical report prepared by Rincon Consultants, Inc. (Rincon) for the proposed project (Haas and Vargas 2017).

Cultural Resources Records Search

Rincon archaeologist Breana Campbell conducted a search of cultural resource records housed at the California Historical Resources Information System (CHRIS), Eastern Information Center (EIC) located at the University of California, Riverside on May 3, 2017. The search was conducted to identify all previous cultural resources work and previously recorded cultural resources within a one-half mile radius of the project site. The CHRIS search included a review of the NRHP, the CRHR, the California Points of Historical Interest list, the California Historical Landmarks list, the Archaeological Determinations of Eligibility list, and the California State Historic Resources Inventory list. The records search also included a review of all available historic United States Geological Survey 7.5-, 15-, and 30-minute quadrangle maps.

The EIC records search identified a total of 64 cultural resources studies that have been conducted within a half-mile radius of the project site, 13 of which included the project site. A total of 116 cultural resources have been recorded within a half-mile radius of the project site. Of the resources within the one-half mile radius of the project site, 93 are prehistoric, 17 are historic, and the remaining six contain both a historic and prehistoric component. One of these resources (P-33-000064/CA-RIV-64/H) is within the alignment of the Mid-Valley Pipeline.

CA-RIV-64/H

Resource CA-RIV-64/H consists of a large prehistoric village site originally recorded in 1954 by C. E. Smith and covering approximately 200 acres. Updates to the site in 1963 and in 1994 resulted in the identification of additional loci, including two cremations. Research indicated that the site is located in the vicinity of the historic Cahuilla village of Kavinish (Love 2000). The site includes twelve prehistoric loci and three historic loci, including the remnants of a house and water reservoir. A testing program was implemented at the site in 2000, involving systematic excavations of both the prehistoric and historic components of the site and ethnohistoric research on the area. During testing, three human cremations and dense concentrations of artifacts were identified. Construction monitoring in 2000 resulted in the discovery of at least five additional cremations. The northernmost portion of CA-RIV-64H crosses the Mid-Valley Pipeline. The original site record states that the site was “partly destroyed in dredging the storm channel,” and thus likely no longer exists within the current APE (Smith 1954). The site was registered as a California Point of Historical Interest in 1968.

Cultural Resources Survey

Rincon archaeologist Hannah Haas conducted a pedestrian survey of the project site on May 17, 2017. The archaeologist surveyed the Whitewater River Stormwater Channel using transects spaced 15 to 20 meters oriented east-west, parallel to the channel. The WRP10 area was visited and photographed but has been heavily disturbed by the construction of existing storage ponds so intensive pedestrian survey was not warranted. The length of the pipeline was surveyed with particular attention to areas that appeared relatively undisturbed and areas that were unpaved or unvegetated. The locations of previously recorded resources were fully inspected to assess the state of the resources.

The WRP10 area has been heavily disturbed by the construction of ponds and other infrastructure within the plant. Although portions of the plant site remain unpaved, the entirety of the plant has been graded. No cultural resources were identified within the WRP10 area as a result of the survey or records search.

The Whitewater River Stormwater Channel is a man-made stormwater channel. Ground visibility was excellent (95 to 100 percent) on the margins of the channel, but poor (15 percent) in the center of the channel where the presence of water has led to dense vegetation. The sloping walls on either side of the channel are held by concrete retaining walls covered over with soil to allow for the growth of vegetation and to control erosion. Tire tracks of large vehicles were noted across the entire area, likely from activities related to erosion control and maintenance. No cultural resources were identified within the Whitewater River Stormwater Channel as a result of the survey or records search.

The Mid-Valley Pipeline also falls within the artificial Whitewater River Stormwater Channel and as such has been heavily disturbed. Ground visibility along the majority of the pipeline alignment was fair (75 to 100 percent), though the density of vegetation varied. The location where CA-RIV-64/H is

crossed by the pipeline alignment was thoroughly inspected. This area has been heavily disturbed by the construction of the channel and by the installation of a culvert carrying water runoff from the surrounding residential areas into the channel. No surface evidence of the site was identified with the exception of a single buffware ceramic sherd on the northern levee near the pipeline alignment.

The Mid-Valley Pipeline Pump Station had excellent ground visibility but had been previously graded for the construction of the pump station. No cultural resources were identified within the pump station area as a result of the survey or records search. The following figures provide views of the project site.

Paleontological Resources

The following is drawn from the technical report prepared by Rincon Consultants, Inc. (Rincon) for the proposed project (Rincon 2017), which is included as Appendix C to this EIR.

Early Holocene and Pleistocene units contain widely scattered scientifically significant paleontological resources throughout California. Pleistocene alluvium has an especially abundant record of diverse vertebrate fauna (Agenbroad 2003; Bell et al. 2004; Jefferson 1985, 1991; Maguire and Holroyd 2016; Merriam 1911; Reynolds et al. 1991; Savage et al. 1954; Scott and Cox 2008; Springer et al. 2009; Tomiya et al. 2011; Wilkerson et al. 2011; Winters 1954) and is generally considered to have high paleontological sensitivity wherever it occurs. The specific geologic units mapped at the surface of the project area are discussed in detail below.

Quaternary Sand and Gravel of the Whitewater River (Qg)

Quaternary (Holocene) sand and gravel of the Whitewater River occurs along a majority of the project alignment, as the existing MVP is buried within the channel sediments. Whitewater River channel sediments occur within an intermittently active channel and so these would not be expected to contain significant fossils, at least near the surface. Any excavations at depth within the channel however, may uncover older, undisturbed Pleistocene alluvium, as the Whitewater River will have meandered during the Quaternary, creating and abandoning many channels over that period. The channel therefore has a high potential to yield fossils in the subsurface, at unknown depths, where sediments become early Holocene to Pleistocene in age.

Quaternary Alluvium (Qa)

Quaternary (Holocene) alluvium occurs at the surface within a sliver of the westernmost portion of the project area (Figure 1: Attachment A). These sediments consist of sand and clay and are prevalent throughout much of the Coachella Valley (Dibblee and Minch 2008). These Holocene-aged units are likely too young at the surface to contain scientifically significant paleontological resources (<5,000 years old, per SVP 2010), though they may become substantially older at unknown depth within the subsurface. Holocene alluvium has low to no potential to yield significant fossils at the surface, but a high potential to yield fossils in the subsurface where they become early Holocene to Pleistocene in age.

Quaternary Aeolian Sand (Qs)

Quaternary (Holocene) aeolian sand occurs within the far northwestern extent of the project area and may occur at unknown depths beneath the Whitewater River channel in the middle of the project area (Figure 1). These sediments consist of wind-blown sand and silt and are consistent with deposition within an arid depression (Dibblee and Minch 2008). These sand deposits are likely too

young at the surface to contain scientifically significant paleontological resources (<5,000 years old, per SVP 2010), though they may become substantially older at unknown depth within the subsurface. Any excavations at depth within these dune deposits may reveal unknown fossils. Wind-blown sand deposits thus have a high potential to yield fossils in the subsurface, at unknown depths, where sediments become early Holocene to Pleistocene in age.

3.5.4.3 Construction Impacts and Mitigation Measures

IMPACT CR-1 CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE SURFACE EXCAVATION, WHICH HAS THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT HISTORICAL OR ARCHAEOLOGICAL RESOURCES. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

Project construction activities within the project site, including ground clearing, grading and excavation, could have significant impacts on known and previously unidentified historical and archaeological resources. Pre-construction reconnaissance can only confidently assess the potential for encountering surficial archaeological materials. Therefore, the possibility remains for encountering subsurface archaeological resources during construction activities. If the resource(s) were found to be significant, impacts would be potentially significant unless mitigation is incorporated. Potentially significant impacts would occur if the implementation of the proposed project would result in construction activities that would damage previously unidentified significant archaeological resources. Resource CA-RIV-64/H is heavily disturbed within the Mid-Valley Pipeline alignment though it is possible that portions of the site remain. It is not anticipated that construction activities would occur along the existing pipeline alignment; however, if it becomes necessary for construction activities occur within the pipeline alignment, there may be potential to damage any remaining portions of CA-RIV-64/H.

Mitigation Measures

Mitigation Measures CR-1 through CR-5 would apply to the proposed project.

Mitigation Measure CR-1: Retain a Qualified Archaeologist

CVWD shall retain a qualified archaeologist, defined as an archaeologist who meets the Secretary of the Interior's Professional Qualifications Standards for archaeology, to carry out all mitigation measures related to archaeological and historic resources. This archaeologist shall work with CVWD and local Native American representatives to develop formal protocols for archaeological monitoring.

Timing	Before Construction
Party Responsible for Implementation	Coachella Valley Water District
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The qualified archaeologist will be responsible for carrying out all mitigation related to archaeological and historic resources

Mitigation Measure CR-2: Archaeological Sensitivity Training

A qualified archaeologist shall be retained to conduct a Worker's Environmental Awareness Program (WEAP) training for archaeological sensitivity for all construction personnel prior to the commencement of any ground disturbing activities. Archaeological sensitivity training should

include a description of the types of cultural material that may be encountered, cultural sensitivity issues, regulatory issues, and the proper protocol for treatment of the materials in the event of a find.

Timing	Before Construction
Party Responsible for Implementation	Qualified Archaeologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	All construction personnel will sign a sign-in sheet acknowledging that they received the WEAP training

Mitigation Measure CR-3: Archaeological Spot-Checking

A qualified archaeologist shall conduct daily spot-checks of all-project related ground disturbing activities within the WRP10 and the Whitewater River Stormwater Channel areas. Such monitoring activities should be coordinated with local Native American representatives who have requested consultation. Should conditions indicate the need for additional monitoring, the qualified archaeologist may increase the monitoring efforts and/or recommend the inclusion of a Native American monitor. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and a plan must be created for evaluating the find for significance under CEQA.

Timing	During Construction
Party Responsible for Implementation	Qualified Archaeologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The archaeologist shall conduct daily spot-checks and keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.

Mitigation Measure CR-4: Archaeological and Native American Monitoring within CA-RIV-64/H

If ground-disturbing activities are required within or immediately adjacent to the boundaries of CA-RIV-64/H, a qualified archaeologist and local Native American representative shall monitor project-related ground-disturbing activities. Monitoring shall be conducted within 100 feet surrounding CA-RIV-64/H. If remnants of CA-RIV-64/H are encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for significance under CEQA.

Timing	During Construction
Party Responsible for Implementation	Qualified Archaeologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The archaeological and Native American monitors shall keep daily monitoring logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.

Mitigation Measure CR-5: Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and the qualified archaeologist must be contacted immediately to evaluate the find and develop a plan for treatment of the find/archaeological site. If the discovery proves to be significant under CEQA, additional work such as data recovery excavation may be warranted.

Timing	During Construction
Party Responsible for Implementation	Qualified Archaeologist, Construction Contractor, Coachella Valley Water District
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	All cultural resource finds will be reported to the Coachella Valley Water District. All evaluation plans and subsequent reports will be submitted to the Coachella Valley Water District for review and approval.

Significance After Mitigation

Implementation of Mitigation Measures CR-1 through CR-5 would reduce impacts to a less than significant level by ensuring identification and protection of historical and archaeological resources.

IMPACT CR-2 CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE SURFACE EXCAVATION, WHICH HAS THE POTENTIAL TO IMPACT PREVIOUSLY UNIDENTIFIED TRIBAL CULTURAL RESOURCES. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

No tribal cultural resources were identified within the project site as a result of the cultural resources study or AB 52 consultation. However, there is always potential to uncover buried archaeological resources during ground disturbing activities, which could potentially be considered tribal cultural resources. If the resource(s) were found to be significant, impacts would be potentially significant unless mitigation is incorporated.

Mitigation Measures

Mitigation Measure CR-6 would apply to the proposed project.

Mitigation Measure CR-6: Unanticipated Discovery of Tribal Cultural Resources

In the event that archaeological resources, including tribal cultural resources of Native American origin, are identified during project construction, the qualified archaeologist would consult with CVWD to halt construction in the immediate area and begin or continue Native American consultation procedures. As part of this process, it may be determined that archaeological monitoring may be required; a Native American monitor may also be required in addition to the archaeologist.

Timing	During Construction
Party Responsible for Implementation	Qualified Archaeologist, Construction Contractor, Coachella Valley Water District
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	All potential tribal cultural resource finds will be reported to the Coachella Valley Water District, who will consult with local Native Americans regarding the find

Significance After Mitigation

Implementation of Mitigation Measure CR-6 would reduce potential impacts to tribal cultural resources to a less than significant level by ensuring they are treated in consultation with local Native Americans.

IMPACT CR-3 CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE SURFACE EXCAVATION, WHICH HAS THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PALEONTOLOGICAL RESOURCES. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

A thorough search of the LACM paleontological collection records for the project site and vicinity revealed no fossils within the project site, but at least one locality from similar sediments (Pleistocene alluvium), approximately 12 miles northwest of the project area. Such sediments may underlie the project area along its entire length. The single LACM locality (LACM 1269) contained a fossil horse (*Equus*).

Holocene sediments mapped in the project area have low paleontological sensitivity at the surface, where they are too young to preserve fossils, but high sensitivity at unknown depths, where they may become early Holocene to Pleistocene aged.

Proposed project ground disturbance associated with berm creation and new pipeline, pump station, and valve installation is expected to occur at depths at or exceeding 20 feet below ground surface. Thus, the project could result in significant impacts to paleontological resources, at least within previously undisturbed sediments. If the resource(s) were found to be significant, impacts would be potentially significant unless mitigation is incorporated.

Mitigation Measures

Mitigation Measures CR-7 through CR-10 would apply to the proposed project:

Mitigation Measure CR-7: Retain a Qualified Paleontologist

Prior to initial ground disturbance, CVWD shall retain a project paleontologist, defined as a paleontologist who meets the SVP standards for Qualified Professional Paleontologist, to direct all mitigation measures related to paleontological resources. A qualified paleontologist (Principal Paleontologist) is defined by the SVP standards as an individual with an M.S. or Ph.D. in paleontology or geology who is experienced with paleontological procedures and techniques, who is knowledgeable in the geology of California, and who has worked as a paleontological mitigation project supervisor for a least one year (SVP 2010).

Timing	Before Construction
Party Responsible for Implementation	Qualified Paleontologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The qualified paleontologist will be responsible for carrying out all mitigation related to paleontological resources

Mitigation Measure CR-8: Paleontological Mitigation and Monitoring Program

Prior to construction activity a qualified paleontologist shall prepare a Paleontological Mitigation and Monitoring Program (PMMP) to be implemented during ground disturbance activity for the proposed project. This program will outline the procedures for construction staff WEAP training,

paleontological monitoring extent and duration, salvage and preparation of fossils, the final mitigation and monitoring report, and paleontological staff qualifications.

Timing	Before Construction
Party Responsible for Implementation	Qualified Paleontologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The qualified paleontologist will be responsible for producing the PMMP and providing it to the Coachella Valley Water District for review and approval

Mitigation Measure CR-9: Paleontological Worker Environmental Awareness Program (WEAP)

Prior to the start of construction, the project paleontologist or his or her designee, shall conduct training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction staff. The WEAP shall be fulfilled at the time of a preconstruction meeting at which a qualified paleontologist shall attend. The paleontological WEAP may occur in concurrence with the archaeological WEAP. In the event of a fossil discovery by construction personnel, all work in the immediate vicinity of the find shall cease and a qualified paleontologist shall be contacted to evaluate the find, and to appropriately handle the find before restarting work in the area, as determined by the qualified paleontologist.

Timing	Before Construction
Party Responsible for Implementation	Qualified Paleontologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	All construction personnel will sign a sign-in sheet acknowledging that they received the WEAP training

Mitigation Measure CR-10: Paleontological Monitoring

Ground disturbing construction activities (including grading, trenching, berm creation and new pipeline, pump station, and valve installation) exceeding 5 feet in depth in areas mapped as high paleontological sensitivity shall be monitored on a full-time basis by a qualified paleontological monitor during initial ground disturbance. The Paleontological Mitigation and Monitoring Program shall be supervised by the project paleontologist. Monitoring should be conducted by a qualified paleontological monitor, who is defined as an individual who has experience with collection and salvage of paleontological resources. The duration and timing of the monitoring will be determined by the project paleontologist. If the project paleontologist determines that full-time monitoring is no longer warranted, he or she may recommend that monitoring be reduced to periodic spot-checking or cease entirely. Monitoring would be reinstated if any new or unforeseen deeper ground disturbances are required and reduction or suspension would need to be reconsidered by the Supervising Paleontologist. Ground disturbing activity that does not exceed 5 feet in depth would not require paleontological monitoring.

Timing	During Construction
Party Responsible for Implementation	Qualified Paleontologist
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	The paleontologist shall conduct daily monitoring and keep daily logs. All monitoring logs and a weekly summary shall be submitted to the Coachella Valley Water District.

Significance After Mitigation

Implementation of Mitigation Measures CR-7 through CR-10 would reduce impacts to a less than significant level by ensuring identification and protection of paleontological resources.

IMPACT CR-4 CONSTRUCTION OF THE PROPOSED PROJECT WOULD INVOLVE EXCAVATION, WHICH HAS THE POTENTIAL TO UNEARTH OR ADVERSELY IMPACT PREVIOUSLY UNIDENTIFIED HUMAN REMAINS. (LESS THAN SIGNIFICANT)

Though unanticipated, project construction activities within the project site, including ground clearing, grading and excavation, have the potential to impact previously unidentified human remains.

If human remains are discovered, State Health and Safety Code section 7050.5 requires that no further disturbance shall occur until the County has made the necessary findings as to origin and disposition pursuant to Public Resources Code section 5097.98. If the remains are determined to be of Native American descent, the coroner would notify the Native American Heritage Commission (NAHC). The NAHC would determine and notify a most likely descendant (MLD). The MLD would complete the inspection of the site within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Because of existing regulations, if human remains are identified in the project site, impacts would be less than significant without mitigation.

3.5.4.4 Operation Impacts and Mitigation Measures

Operation and maintenance of the proposed project would not involve ground disturbance such as grading or excavation. Therefore, operation and maintenance of the project would not result in new impacts associated with cultural, tribal cultural, or paleontological resources.

3.5.4.5 Cumulative Impacts

The proposed project, in conjunction with other development in the City of Palm Desert and surrounding areas, would cumulatively increase the potential to encounter sensitive cultural, paleontological, and tribal cultural resources. However, as discussed above, potential cumulative impacts are site-specific and potential impacts of the proposed project would be reduced to a less-than-significant level due to implementation of mitigation measures that would protect cultural, paleontological, and tribal cultural resource. Compliance with CEQA requirements, including the implementation of recommendations in site-specific cultural resource studies, on all new development would ensure that the proposed project would not be cumulatively significant. Such recommendations may include site avoidance, in-situ preservation, site salvage and documentation

and/or other measures determined to be necessary based on the resources identified. Cumulative impacts would be less than significant.

3.6 Geology and Soils

3.6.1 Introduction

This section describes geology, soils, and seismicity conditions in the vicinity of the project and assesses the potential for the proposed project to be affected by or to increase risks associated with identified geologic and seismic hazards. This section is based on information gathered from sources such as the United States Geological Survey (USGS), California Geological Survey, Riverside County hazards mapping, the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), *Web Soil Survey*, and other CEQA documents prepared for relevant projects in the Coachella Valley.

3.6.2 Environmental Setting

3.6.2.1 *Regional Geologic Setting*

The project study area for geology and soils is focused at the central portion of the Coachella Valley in the city of Palm Desert. It also includes nearby fault zones that have the potential to generate seismic events that could affect project facilities.

The Coachella Valley, which is flanked on three sides by the Little San Bernardino, Santa Rosa, and San Jacinto Mountains, is located within the Salton Trough, which is within the northern portion of the Colorado Desert Geomorphic Province of Southern California. The Salton Trough is a geologic structural depression resulting from large-scale regional faulting and represents the northward extension of the Gulf of California. The Colorado Desert Geomorphic Province is bounded on the north by the Transverse Ranges (Little San Bernardino and Orocopia Mountains), on the west by the Peninsular Ranges (Santa Rosa and San Jacinto Mountains), and on the east by the Mojave Desert. The Valley floor ranges in elevation from 1,600 feet above mean sea level (MSL) in the northwest to about 230 feet below MSL at the Salton Sea. The province is a seismically active region characterized by alluviated basins, elevated erosion surfaces, and northwest-trending mountain ranges bounded by northwest-trending strike-slip faults. The most prominent of the nearby fault zones include the San Andreas and San Jacinto fault zones, both of which have been known to be active during Quaternary time (the most recent 2.6 million years of Earth's history) (CVWD 2016).

Several thousand feet of sediments, including alluvial deposits from the Whitewater River and aeolian deposits from the strong prevailing winds typical of the region, underlie the Coachella Valley. The geologic units anticipated within the Phase I area include wind-laid dune sand, alluvial sand and gravel of the Whitewater River, and alluvial sand and clay of valley areas. The Phase II area and Mid-Valley Pipeline extension area include alluvial sand and gravel of the Whitewater River Stormwater Channel.

3.6.2.2 *Project Geologic Setting*

The project site is located in central Coachella Valley, within and north of the Whitewater River Stormwater Channel. It is situated within a pocket of marine and nonmarine quaternary sand deposits surrounded by nonmarine quaternary alluvium and marine deposits, including alluvium, lake, playa, and terrace deposits (USGS 2017a). The project site is located within the USGS La Quinta 7.5-minute topographic quadrangle at approximate latitude 33.7435N and longitude 116.3488W

(USGS 2017b). This section covers the geology of the project site, its topographic relief, seismic hazards, landslide hazards, and soil characteristics.

Faults

The USGS defines active faults as those that have had surface displacement within Holocene time, or approximately within the last 11,000 years. Evidence of surface displacement can be recognized by the existence of cliffs in alluvium, terraces, offset stream courses, fault troughs and saddles, the alignment of depressions, sag ponds, and the existence of steep mountain fronts. Potentially active faults are those that have had surface displacement during Quaternary time, or within the last 1.6 million years. Inactive faults have not had surface displacement within the last 1.6 million years.

The major sources of seismic activity in central and western Riverside County are the San Andreas, San Jacinto, and Elsinore fault zones (CVWD 2016). Earthquake risk is very high in the Coachella Valley due to the presence of two of California's most active faults, the San Andreas and San Jacinto (Riverside County 2012). According to the State mapping of fault zones, pursuant to the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (Public Resources Code Sections 2621-2630), the city and its sphere of influence are not located in an active fault zone. However, the area is bordered by three active faults, including the San Andreas Fault near San Geronio Pass, the San Jacinto Fault, and the Elsinore Fault (Palm Desert 2016a). Each of these has the potential of generating a significant earthquake which would impact Palm Desert (City of Palm Desert 2012). The Phase I and Phase II project sites are located within a distance of approximately three miles west of the San Andreas Fault zone, and the Mid-Valley Pipeline extension is located approximately five miles west of the San Andreas Fault Zone. As shown on Figure 7, Regional Fault Zone Map, and Figure 8, Faults in the Project Area, there are no faults mapped on or adjacent to the project site, and the project site is not located in an Alquist-Priolo Earthquake Fault Zone (California DOC 2017a).

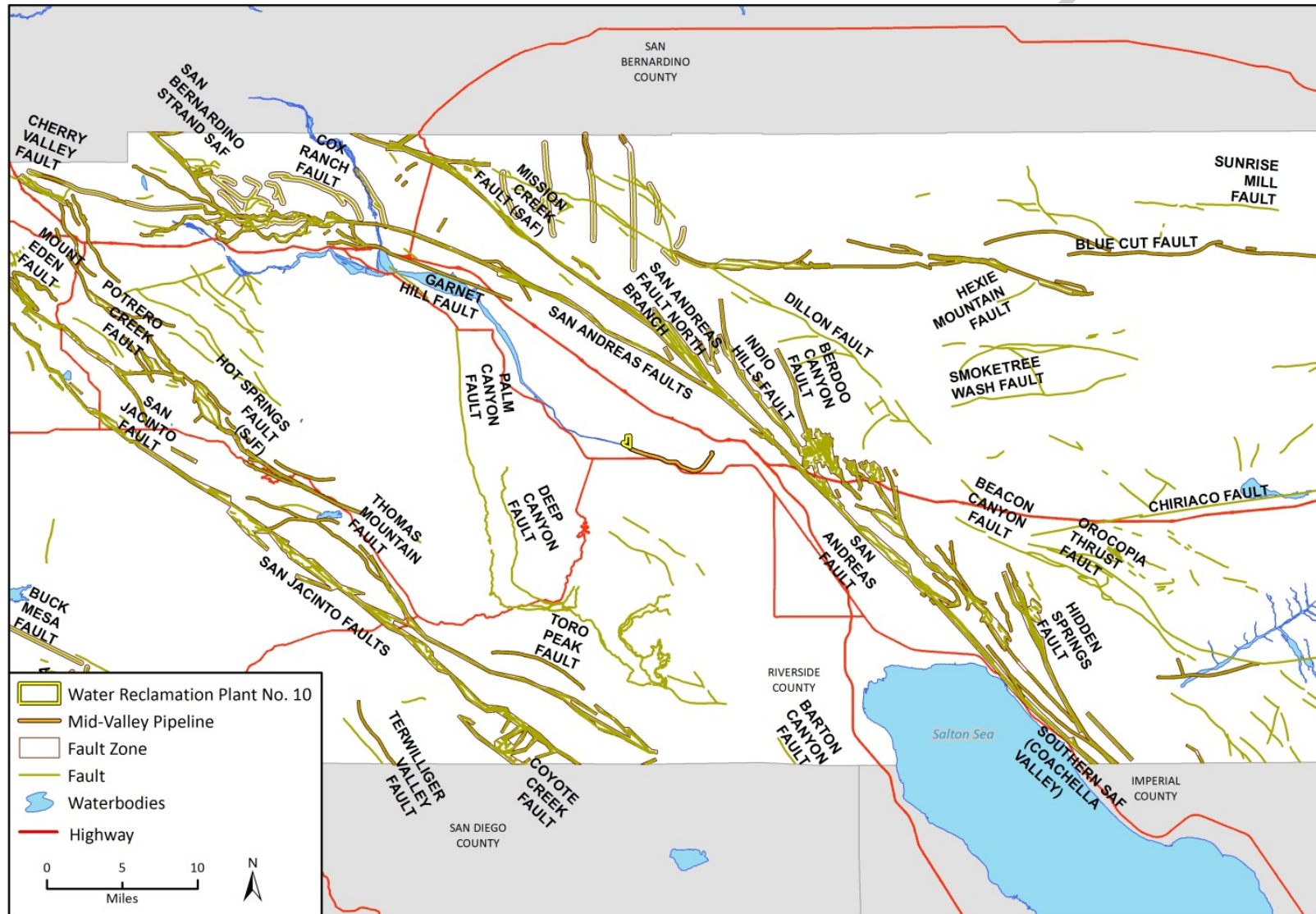
San Andreas Fault Near San Geronio Pass

The entire San Andreas Fault system is more than 800 miles long and extends to depths of at least 10 miles within the earth. The San Andreas Fault in California forms a continuous, narrow break in the earth's crust that extends from northern California southward to Cajon Pass near San Bernardino. Recent studies of the eastern section of the San Andreas near San Geronio Pass reveal that this area is more advanced in the cycle of strain accumulation than the western area at the Cajon Pass. Recent earthquake activity around the Southern San Andreas, including the June, 1992 Landers-Big Bear earthquakes, has prompted scientists to increase their studies of this Area. (Riverside County 2012)

San Jacinto Fault

The San Jacinto Fault, has had a higher level of moderate-to-large earthquakes during the past 50 to 100 years, although the rate of slip is not as high. Geodetic data indicates there is an "appreciable" strain accumulation across faults in the area, implying that one or more may be primed for release. One of the larger and more active fault segments of the San Jacinto Fault, the Casa Loma Fault, runs from near Perris Reservoir to just north of Anza. Also, another large and active named segment is the Clark Fault, which runs from near Hemet to just nine miles southwest of the shore of the Salton Sea. Historically, the San Jacinto Fault moves on average every 14 years, with the longest known interval being 19 years. The last slip occurred on the Borrego Springs segment in 1968. (Riverside County 2012)

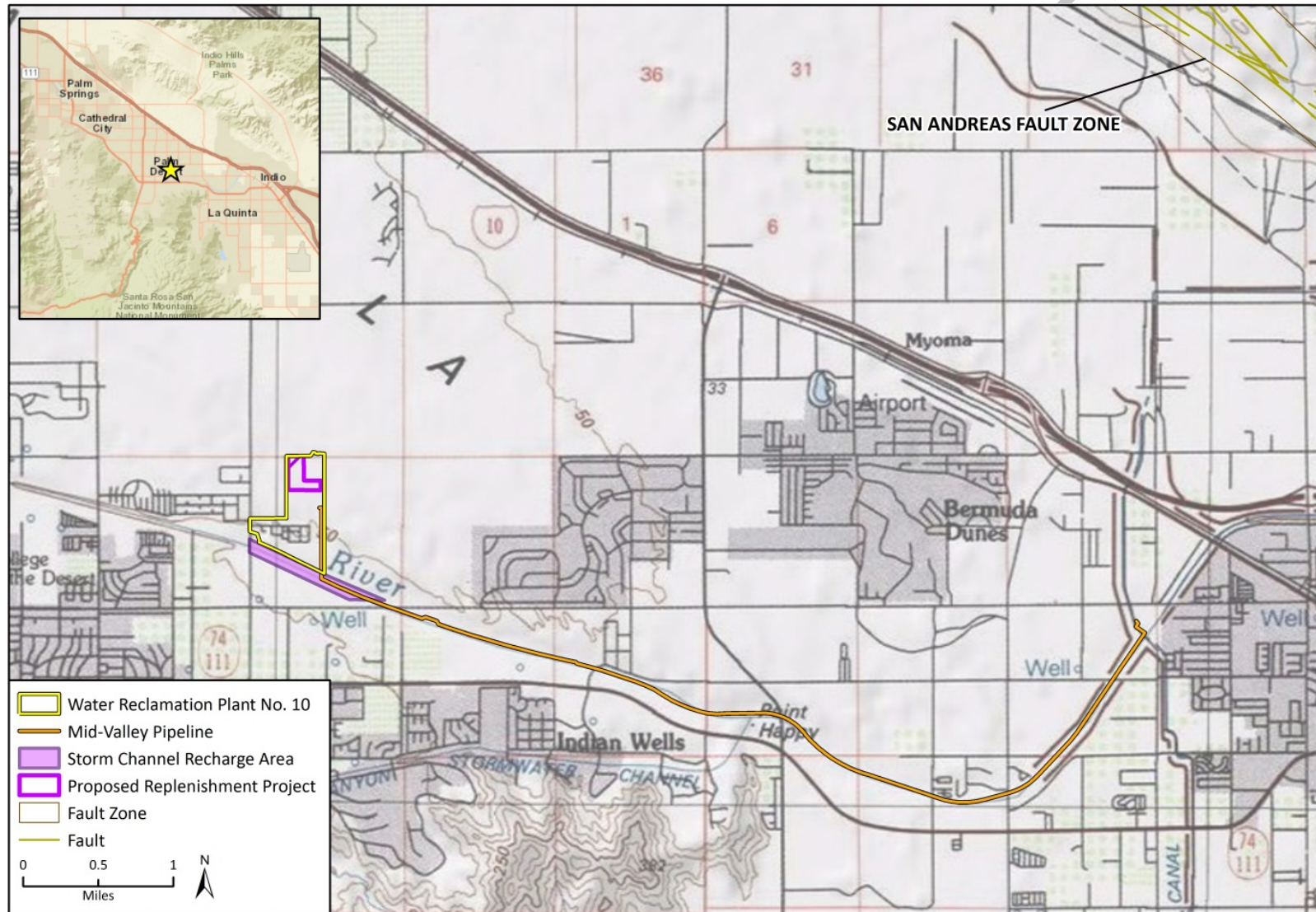
Figure 7 Regional Fault Zone Map



Data provided by Coachella Valley Water District, 2017; Riverside County, 2016.

Fig 1 Regional Fault Zone Map

Figure 8 Project Area Fault Zone Map



Imagery provided by ESRI and its licensors © 2017. Additional data provided by Coachella Valley Water District, 2017; Riverside County, 2016.

Fig 2 Fault Zone Project Area Map

In 1988, the Working Group on California Earthquake Probabilities estimated 30-year probabilities of 20 percent for a magnitude 7.0 event on the San Bernardino Valley segment of the San Jacinto Fault Zone. In late 1993, Special Publication 102, "Planning Scenario for a Major Earthquake on the San Jacinto Fault in the San Bernardino Area" was published by the California DOC, Division of Mines and Geology. This planning scenario states that an earthquake of magnitude 7.0 on the San Bernardino Valley Segment of the San Jacinto Fault Zone is a significant hazard to lives and property in western Riverside County. (Riverside County 2012)

Elsinore Fault

The Elsinore Fault zone parallels the San Jacinto and is part of the same right-lateral plate strain system as the San Andreas and San Jacinto faults. The relevant segments of the Elsinore Fault zone in western Riverside County are the Whittier, Glen Ivy, Temecula, and Julian segments. Maximum credible earthquakes of magnitude 6.7 to 6.8 have been assigned for these segments. (Riverside County 2012)

Seismic Hazards

Following is a description of the seismic hazards that could affect project facilities within the study area.

Surface Rupture

Surface rupture occurs when movement on a fault deep within the earth breaks through to the surface. The evaluation of fault rupture hazard is generally based on the historical activity and recurrence of earthquakes along existing faults. Not all earthquakes result in surface rupture. Rupture may occur suddenly during an earthquake or slowly in the form of fault creep. Sudden displacements are more damaging to structures because they can suddenly displace structures and are usually accompanied by strong shaking. Fault creep is the slow rupture of the earth's crust. In developed areas, fault creep can offset and deform curbs, streets, buildings, and other structures that lie on the fault trace. As shown on the figures above, the proposed Phase I, II, and the Mid-Valley Pipeline extension, are not located within an earthquake fault zone, and the potential for fault rupture at these sites is considered low.

Ground Shaking

Fault displacement can generate seismic ground shaking, which is the greatest cause of widespread damage in an earthquake. Whereas surface rupture affects a narrow area above an active fault, ground shaking covers a wide area and is greatly influenced by the distance of the site to the seismic source, soil conditions, and depth to groundwater. The site is in a region of generally high seismicity and has the potential to experience strong ground shaking from earthquakes on regional and/or local causative faults.

Liquefaction

Liquefaction is a phenomenon in which saturated granular sediments temporarily lose their shear strength during periods of earthquake-induced strong groundshaking. The susceptibility of a site to liquefaction is a function of the depth, density, and water content of the granular sediments and the magnitude of the earthquakes likely to affect the site. Saturated, unconsolidated silts, sands, silty sands, and gravels within 50 feet of the ground surface are most susceptible to liquefaction. Liquefaction related phenomena include vertical settlement from densification, lateral spreading,

ground oscillation, flow failures, loss of bearing strength, subsidence, and buoyancy effects. Phase I and II of the project site are located in an area with deep groundwater susceptible sediments deemed to have a moderate susceptibility for liquefaction, and the Mid-Valley Pipeline extension, located along the Whitewater River Channel with shallow groundwater susceptible sediments, is deemed to have a low to moderate susceptibility for liquefaction. (Riverside County 2015)

Lateral Spreading

Lateral spreading refers to landslides that commonly form on gentle slopes and that cause rapid fluidlike flow movement, like water. During lateral spreading, a mass moves toward an unconfined area, such as a descending slope or stream-cut bluff, and can occur on slope gradients as gentle as one degree. Lateral spreading is characterized by near-vertical cracks with predominantly horizontal movement of the soil mass over liquefied soils (CVWD 2016). The project site is relatively flat and does not include significant slopes; therefore, the risk of lateral spreading is considered to be low.

Earthquake-induced Slope Failure and Landslides

Earthquake motion can induce substantial stresses in slopes, causing earthquake-induced landslides or ground cracking when the slope fails. Earthquake-induced landslides can occur in areas with steep slopes that are susceptible to strong ground motion during an earthquake. Exposed rock slopes undergo rockfalls, rockslides, or rock avalanches, while soil slopes experience soil slumps, rapid debris flows, and deep-seated slides. Slope stability can depend on a number of complex variables, including the geology, soil structure, and amount of groundwater, as well as external processes such as climate, topography, slope geometry, and human activity. Landslides can occur on slopes of 15 percent or less, but the probability is greater on steeper slopes (CVWD 2016). The Phase I and II project sites, and the location of the Mid-Valley Pipeline extension along the Whitewater River Channel, are relatively flat and are considered to have a low potential for seismically-induced slope failure and landsliding.

Tsunami and Seiches

Tsunamis are open sea tidal waves generated by earthquakes. Tsunami damage is typically confined to low-lying coastal areas. Due to the distance of the Coachella Valley from the ocean, tsunamis are not a threat to the study area. A seiche is a periodic oscillation or “sloshing” of water in an enclosed basin (e.g., lake or reservoir) caused by an earthquake. The nearest enclosed water basin, the Salton Sea, is approximately 23 miles southeast of the project site; based on this distance, the threat of seiches is unlikely. (CVWD 2016)

The basins that would be implemented under the proposed project would not be large enough to facilitate a seiche in the case of a strong seismic event.

3.6.2.3 Soil Conditions

Problematic soils, such as those that are expansive or corrosive, can damage structures and buried utilities and increase maintenance requirements. Expansive soils are characterized by their ability to undergo significant volume change (i.e., to shrink and to swell) due to variations in moisture content. Changes in soil moisture can result from rainfall, landscape irrigation, utility leakage, roof drainage, and/or perched groundwater. Expansive soils are typically very fine grained and have a high to very high percentage of clay. Expansion and contraction of expansive soils in response to changes in moisture content can lead to differential and cyclical movements that can cause damage

and/or distress to structures and equipment. As mapped by the U.S. Department of Agriculture (USDA), NRCS, the predominant soil type of the Phase I site is Myoma fine sand (MaD), but also consists of Fluvents (Fe), Gilman fine sandy loam (GbA), and Coachella fine sand (CpA). Phase II and the Mid-Valley Pipeline sites consist of a mix of CpA, Fe, and GbA. The expansion potential for these fine sandy and sandy soil types found on alluvial fans and floodplains is considered to be very low to low. (USDA 2017)

The corrosivity of soils is commonly related to several key parameters, including soil resistivity, the presence of chlorides and sulfates, oxygen content, and pH. Typically, the most corrosive soils are those with the lowest pH and highest concentration of chlorides and sulfates. Wet/dry conditions can result in a concentration of chlorides and sulfates, as well as movement in the soil, both of which tend to break down the protective corrosion films and coatings on the surfaces of building materials. High-sulfate soils are also corrosive to concrete and may prevent complete curing, thereby reducing the strength of the concrete considerably. Low pH and/or low-resistivity soils can corrode buried or partially buried metal structures. Depending on the degree of corrosivity of the subsurface soils, building materials such as concrete, reinforcing steel in concrete structures, and bare-metal structures exposed to these soils can deteriorate, eventually leading to structural failures. All of the project sites have been identified as having low to moderate risk for corrosion of concrete, and moderate to high risk for corrosion of steel. (USDA 2017)

Table 15 provides a summary of existing geologic and soils conditions for the project sites.

Table 15 Summary of Geologic and Soil Conditions

CVWD Site	Geologic Unit	Landslide/Slope Failure Potential	Liquefaction Susceptibility	Approximate Distance to San Andreas Fault Zone
North of the WRP10 site Proposed replenishment area and relocated operations parking (Phase I)	Wind-laid sand dune	Low	Moderate*	2 miles northeast
Southern WRP10 site Proposed lower storage ponds and secondary effluent pump station (Phase II)	Alluvial sand and clay of valley areas; and alluvial sand and gravel of Whitewater River	Low	Moderate*	2 miles northeast
Whitewater River Stormwater Channel Proposed detention basins (Phase II)	Alluvial sand and gravel of Whitewater River	Low	Moderate*	2 miles northeast
Mid-Valley Pipeline Extension and Pump Station (Phase I and Phase II)	Alluvial sand and gravel of Whitewater River	Low	Low to Moderate**	1-3 miles northeast
* Deep groundwater susceptible sediments				
** Shallow groundwater susceptible sediments				
Source: Coachella Valley Water District 2017, Riverside County 2015 and 2016				

3.6.3 Regulatory Framework

3.6.3.1 *State*

Alquist-Priolo Earthquake Fault Zoning Act

The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. In accordance with this act, the State Geologist established regulatory zones, called “earthquake fault zones,” around the surface traces of active faults and published maps showing these zones. Within these zones, buildings for human occupancy cannot be constructed across the surface trace of active faults. Because many active faults are complex and consist of more than one branch, each earthquake fault zone extends approximately 200 to 500 feet on either side of the mapped fault trace.

Seismic Hazards Mapping Act

Like the Alquist-Priolo Act, the Seismic Hazards Mapping Act of 1990 (Public Resources Code Sections 690 to 2699.6) is intended to reduce damage resulting from earthquakes. While the Alquist-Priolo Act addresses surface fault rupture, the Seismic Hazards Mapping Act addresses other earthquake-related hazards, including strong groundshaking, liquefaction, and seismically-induced landslides. Its provisions are similar in concept to those of the Alquist-Priolo Act; the State is charged with identifying and mapping areas at risk of strong groundshaking, liquefaction, landslides, and other corollary hazards. Cities and counties are required to regulate development within mapped Seismic Hazard Zones.

Under the Seismic Hazards Mapping Act, permit review is the primary mechanism for local regulation of development. Specifically, cities and counties are prohibited from issuing development permits for sites within Seismic Hazard Zones until appropriate site-specific geologic and/or geotechnical investigations have been conducted and measures to reduce potential damage have been incorporated into the development plans. According Seismic Hazard Zone Maps, the project is not within areas designated as Seismic Hazard Zones (California DOC 2017).

California Building Code

The California Building Code (CBC), which is codified in CCR Title 24, Part 2, was promulgated to safeguard the public health, safety, and general welfare by establishing minimum standards related to structural strength, egress facilities, and general building stability. The purpose of the CBC is to regulate and control the design, construction, quality of materials, use/occupancy, location, and maintenance of all building and structures within its jurisdiction. Title 24 is administered by the California Building Standards Commission which, by law, is responsible for coordinating all building standards. The 2013 CBC is based on the 2006 International Building Code (IBC) published by the International Code Conference. In addition, the CBC contains necessary California amendments that are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads, as well as other loads (e.g., flood, snow, wind) for inclusion in building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, all of which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at a given site, and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

3.6.3.2 *Regional and Local*

CVWD Development Design Manual

CVWD has adopted the Development Design Manual (DDM) to provide comprehensive procedural and technical requirements for the planning, design and construction of CVWD service infrastructure required for new development (CVWD 2013). The DDM includes requirements for meeting seismic design standards.

3.6.4 Impacts and Mitigation Measures

3.6.4.1 *Significance Criteria*

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:*
 - i. *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;*
 - ii. *Strong seismic shaking*
 - iii. *Seismic-related ground failure, including liquefaction,*
 - iv. *Landslides;*
- b. *Result in substantial soil erosion or the loss of topsoil;*
- c. *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;*
- d. *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/or*
- e. *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.*

3.6.4.2 *Approach to Analysis*

The potential for impacts related to geology, soils, and seismicity are evaluated according to the significance criteria listed above. Regional and local geologic maps were reviewed to identify

geologic conditions and geologic hazards in the study area that, because of their proximity, could be directly or indirectly affected by the proposed project or could affect the project.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to the following significance criterion.

- e. 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.*

The proposed project would not implement any septic tanks or alternative waste water disposal system(s). There would be no impact associated with the availability of sewers or disposal of waste water.

3.6.4.3 Construction Impacts and Mitigation Measures

IMPACT GS-1 CONSTRUCTION OF THE PROJECT WOULD NOT RESULT IN SUBSTANTIAL SOIL EROSION OR THE LOSS OF TOP SOIL. (LESS THAN SIGNIFICANT)

Grading and excavation at these sites would result in disturbance to native soils. However, the Phase I, Phase II, and Mid-Valley Pipeline extension sites are developed with existing CVWD water infrastructure and have been highly altered from their original, natural state. In addition, these sites are near areas of moderate to intense urban uses, such as surface streets, residences, and recreational and commercial facilities. Consequently, no substantial loss of topsoil due to erosion or grading would occur during construction of the project at these sites.

The sites for both Phase I and Phase II of the project are currently disturbed, and are utilized respectively for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during stormwater events (Phase II). Construction of Phase I would involve grading and excavation to re-purpose existing ponds within the northern area of CVWD's WRP10 site and remove them from existing WRP10 site operations, as well as to construct new lower storage ponds within southern area of CVWD's WRP10 site. Construction of Phase II would include grading to construct temporary berms using native sediments within the Whitewater River Stormwater Channel located south/southeast of the WRP10 site for the purpose of creating detention basins to receive and infiltrate Colorado River water for replenishing the underlying groundwater basin. Implementation of Phase II may also require an extension of the Mid-Valley Pipeline, which would either occur within the Whitewater River Stormwater Channel. Extension of the pipeline within the channel would include backfilling of the pipeline trench with a low-strength concrete slurry material to the midpoint of the pipeline and the remainder of the trench backfill would be native material from excavation. Potential erosion may result from grading, excavation, and pipeline trenching, and other soil disturbance during construction would be controlled during construction with implementation of erosion control measures included in the project-specific Stormwater Pollution Prevention Plan (SWPPP), required per the State Water Resources Control Board General Permit for Stormwater Discharges Associated with Construction Activity (Water Quality Order 99-08-DWQ). BMPs included in the SWPPP would be implemented to control erosion and discharge of polluted runoff and could include, but would not be limited to, preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities as necessary. .

Additionally, standard construction practices to prevent and minimize construction-related erosion would be included in construction documents and SWPPP that are required pursuant to federal and state National Pollutant Discharge Elimination System regulations (see Section 3.9 Hydrology and Water Quality, for further explanation of SWPPP requirements). The SWPPP would include BMPs to prevent erosion, such as use of silt fences or other barriers to prevent erosion and sedimentation into water bodies, use of desilting basins, limitations on work during high-wind events, and post-construction revegetation and drainage requirements. Implementation of SWPPP and BMPs would ensure that this impact would be less than significant. No mitigation measures are required.

IMPACT GS-2 CONSTRUCTION OF SOME PROJECT PIPELINE COMPONENTS WOULD BE LOCATED ON GEOLOGIC UNITS OR SOILS THAT ARE UNSTABLE OR THAT MAY BECOME UNSTABLE DURING PROJECT CONSTRUCTION, AND POTENTIALLY RESULT IN SOIL INSTABILITY OR COLLAPSE; HOWEVER, THIS EXPOSURE WOULD NOT RESULT IN SUBSTANTIAL RISK TO PEOPLE OR STRUCTURES. (LESS THAN SIGNIFICANT)

This impact applies to the installation of underground pipelines at a depth of approximately 20 feet during the implementation of Phase II of the proposed project. Phase II would include an extension of the Mid-Valley Pipeline, which would occur within the Whitewater River Stormwater Channel consistent with existing pipeline design and configuration. Installation of this pipeline extension may result in the potential for soil instability or collapse during pipeline trenching. To address this potential, standard construction BMPs would be implemented during trenching activities, such as shoring during open trenching. As discussed above, a project-specific SWPPP would be implemented for the project, including BMPs to control erosion and discharge of polluted runoff. The BMPs could include, but would not be limited to, preventing runoff from unprotected slopes, keeping disturbed areas to a minimum, and installing check berms and desilting basins during construction activities as necessary. Additionally, compliance with CVWD's professional engineering standards would ensure that this impact would be less than significant. No mitigation measures are required.

3.6.4.4 Operation Impacts and Mitigation Measures

IMPACT GS-3 THE PROPOSED PROJECT WOULD NOT BE INSTALLED IN A FAULT ZONE. HOWEVER, SEISMICALLY-INDUCED GROUND SHAKING COULD DESTROY OR DAMAGE STRUCTURES AND INFRASTRUCTURE, RESULTING IN LOSS OF PROPERTY OR RISK TO HUMAN SAFETY. THE PROJECT'S COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE, AND LOCAL CONSTRUCTION AND DESIGN STANDARDS WOULD RENDER IMPACTS LESS THAN SIGNIFICANT. (LESS THAN SIGNIFICANT)

The project would be located within a seismically active region, but is not located in an Alquist-Priolo Earthquake Fault Zone. The major active faults capable of producing large magnitude events and high seismic activity rate recognized in the region are the San Andreas and San Jacinto Faults. While not seismically active in recent years, the Elsinore Fault has not yet revealed major faulting in historic times (Riverside County 2012). As shown on Figure 4.6-2, there are no faults mapped on or adjacent to the site. However, the project would potentially experience strong ground shaking from earthquakes on any active or potentially active faults in the area, as would other properties in the Coachella Valley.

The City of Palm Desert also has policies and standards in place that minimizes risks from seismic and geologic hazards, such as fault rupture and ground shaking. For example, the City of Palm Desert General Plan Safety Policy 2.1 requires the exceedance of minimum seismic safety standards for critical facilities that ensure building function and support continuity of critical services and emergency response after a seismic event. In addition, in accordance with Safety Policy 2.2, the City requires the maintenance of development code standards to prohibit siting of new seepage pits,

drainage facilities, and heavily irrigated areas away from structure foundations to reduce potential soil collapse. Compliance with all applicable provisions of federal, state, and local construction and design standards would ensure that potential impacts would be less than significant, because the project would be engineered, designed, and operated consistent with the City of Palm Desert General Plan provisions mentioned above. No mitigation measures are required.

IMPACT GS-4 THE PROJECT SITE IS NOT LOCATED ON A GEOLOGIC UNIT 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, AND WOULD NOT EXPOSE PEOPLE OR STRUCTURES TO SEISMIC-RELATED GROUND FAILURE INCLUDING LIQUEFACTION OR LANDSLIDES. (LESS THAN SIGNIFICANT)

Topography at the project site is relatively flat and the proposed project would not affect the topography such that an increased likelihood of landslides would result. The potential for lateral spreading at the site is low due to the flat topography. No documented areas of subsidence have been identified on or near the project site. The on-site soils have a low expansion potential (USDA 2017). Operation and maintenance of the proposed project would not involve ground-disturbing activities, except as needed to repair berms in the Phase II basins within the Whitewater River Stormwater Channel. Additionally, structures would not be exposed to seismic ground failure because the proposed project would not introduce new structures, and would not alter the potential for seismic ground failure to occur. Therefore, potential impacts associated with the characteristics of geologic units and potential for landslides, lateral spreading, and expansion would be less than significant.

IMPACT GS-5 SOME OF THE PROJECT INFRASTRUCTURE WOULD BE LOCATED ON SITES WITH CORROSIVE SOILS; HOWEVER, THIS EXPOSURE WOULD NOT RESULT IN A SUBSTANTIAL RISK TO PEOPLE OR STRUCTURES. THE PROJECT WOULD NOT BE LOCATED ON EXPANSIVE SOILS. (LESS THAN SIGNIFICANT)

The project is not located on expansive soils, and would not introduce risk to life or property as a result of expansive soils. All of the project sites have been identified as having some level of potential exposure from risk of soil corrosion. The soil types on the project sites range from low to high susceptibility for soil corrosion. The soils types associated with the project sites, CpA, Fe, GbA, and MaD have been identified as having low to moderate risk for corrosion of concrete, and a moderate to high risk for corrosion of steel (USDA 2017). Corrosive soils could, over time, deteriorate the newly-installed project facilities. However, a combination of protective coatings, pipe wrapping, and possibly cathodic protection would be included in facilities' design and construction to minimize exposure to the corrosion process. With incorporation of these design features, corrosive soil impacts to life and property would be less than significant. No mitigation measures are required.

3.6.4.5 Cumulative Impacts

The geographic scope for cumulative impacts on geology and soils consists of Phase I, Phase II, the MVP extension within the Whitewater River Stormwater Channel, and the immediate vicinity adjacent to each of these sites. The area affected varies for each site. Although residential and non-residential projects are anticipated to occur within the vicinity of the project (City of Palm Desert, 2015, 2016b), geologic and seismic impacts are generally site-specific, because they depend on local geology and soil conditions. Therefore, no cumulative projects have been identified for the project sites, which would contribute to a cumulative and soils impact.

3.7 Greenhouse Gas Emissions

This section discusses potential impacts relating to greenhouse gases and climate change.

3.7.1 Environmental Setting

3.7.1.1 *The Greenhouse Effect and Greenhouse Gases*

Climate change is the observed increase in the average temperature of the earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. The term "climate change" is often used interchangeably with the term "global warming," but "climate change" is preferred to "global warming" because it helps convey that there are other changes in addition to rising temperatures. The baseline against which these changes are measured originates in historical records identifying temperature changes that have occurred in the past, such as during previous ice ages. The global climate is continuously changing, as evidenced by repeated episodes of substantial warming and cooling documented in the geologic record. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming during the past 150 years. Per the United Nations Intergovernmental Panel on Climate Change (SCAQMD 2014), the understanding of anthropogenic warming and cooling influences on climate has led to a high confidence (95 percent or greater chance) that the global average net effect of human activities has been the dominant cause of warming since the mid-twentieth century.

Gases that absorb and re-emit infrared radiation in the atmosphere are called greenhouse gases (GHGs). The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), fluorinated gases such as hydrofluorocarbons (HFC) and perfluorocarbons (PFC), and sulfur hexafluoride (SF₆). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Observations of CO₂ concentrations, globally-averaged temperature, and sea level rise are generally well within the range of the extent of the earlier IPCC projections. The recently observed increases in CH₄ and N₂O concentrations are smaller than those assumed in the scenarios in the previous assessments. Each IPCC assessment has used new projections of future climate change that have become more detailed as the models have become more advanced. (SCAQMD 2007)

Man-made GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and sulfur hexafluoride (SF₆) (CalEPA 2006). Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO₂) is used to relate the amount of heat absorbed to the amount of the gas emissions, referred to as "carbon dioxide equivalent" (CO₂e), and is the

amount of a GHG emitted multiplied by its GWP. CO₂ has a 100-year GWP of one. By contrast, CH₄ has a GWP of 25, meaning its global warming effect is 25 times greater than CO₂ on a molecule per molecule basis (SCAQMD 2007).

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, Earth's surface would be about 34 degrees Celsius cooler (CalEPA 2014). However, it is believed that emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations. The primary GHGs of concern include CO₂, CH₄, N₂O, and fluorinated gases (HFCs, PFCs, and SF₆). These all contribute to climate change on a global scale and climate change affects numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns.

3.7.1.2 Greenhouse Gas Emissions Inventory

Based upon CARB (2016) California Greenhouse Gas Inventory for 2000-2014, California produced 441.5 million metric tons (MMT) of CO₂e in 2014. The major source of GHG in California is transportation, contributing 37 percent of the state's total GHG emissions. Industrial sources are the second largest source of the state's GHG emissions, contributing 24 percent of the state's GHG emissions (CARB 2016). California emissions are due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions, as compared to other states, is its relatively mild climate. CARB has projected statewide unregulated GHG emissions for the year 2020 will be 509.4 MMT of CO₂e (CARB 2016). These projections represent the emissions that would be expected to occur in the absence of any GHG reduction actions.

3.7.2 Regulatory Framework

3.7.2.1 California Regulations

The following California regulations address both climate change and GHG emissions. For international accords and federal regulations, see Appendix C.

The State of California considers GHG emissions and the impacts of climate change to be a serious threat to the public health, environment, economic well-being, and natural resources of California, and has taken an aggressive stance to mitigate the state's impact on climate change through the adoption of policies and legislation. CARB is responsible for the coordination and oversight of State and local air pollution control programs in California. California has a numerous regulations aimed at reducing the state's GHG emissions. Some of the major initiatives are summarized below.

3.7.2.2 Executive Order S-3-05

In 2005, the Governor issued Executive Order (EO) S-3-05, which identifies statewide GHG emission reduction targets to achieve long-term climate stabilization as follows:

- Reduce GHG emissions to 1990 levels by 2020
- Reduce GHG emissions to 80 percent below 1990 levels by 2050

In response to EO S-3-05, CalEPA created the Climate Action Team (CAT), which in March 2006 published the Climate Action Team Report (the “2006 CAT Report”) (CalEPA 2006). The 2006 CAT Report identified a recommended list of strategies that the State could pursue to reduce GHG emissions. These are strategies that could be implemented by various State agencies to ensure that the emission reduction targets in EO S-3-05 are met and can be met with existing authority of the State agencies. The strategies include the reduction of passenger and light duty truck emissions, the reduction of idling times for diesel trucks, an overhaul of shipping technology/infrastructure, increased use of alternative fuels, increased recycling, landfill methane capture, etc.

3.7.2.3 Assembly Bill 32

California’s major initiative for reducing GHG emissions is outlined in Assembly Bill 32 (AB 32), the “California Global Warming Solutions Act of 2006,” signed into law in 2006. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 (essentially a 15 percent reduction below 2005 emission levels; the same requirement as under S-3-05), and requires CARB to prepare a Scoping Plan that outlines the main strategies for reducing GHGs to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of the state’s largest industrial emitters.

CARB approved the initial AB 32 Scoping Plan on December 11, 2008 and a 2020 statewide GHG emission limit of 427 MMT of CO₂e was established. The Scoping Plan also included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

3.7.2.4 Senate Bill 97

Senate Bill (SB) 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Resources Agency (Resources Agency) adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts. Specifically, Section 15183.5(b)(1)A-G of Title 14 of the California Code of Regulations was amended to state that a GHG Reduction Plan, or Climate Action Plan, may be used for tiering and streamlining the analysis of GHG emissions in subsequent CEQA project evaluation provided that the CAP does the following:

- Quantifies GHG emissions both existing and projected over a specific period of time, resulting from activities within a defined geographical area.
- Establishes a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable.
- Identifies and analyzes the GHGs emissions resulting from specific actions or categories of actions anticipated within the geographic area.
- Specifies measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level.

- Establishes a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels.
- Is adopted in a public process following environmental review.

3.7.2.5 Senate Bill 375

SB 375, signed in August 2008, enhances the State's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles for 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPO) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On September 23, 2010, CARB adopted final regional targets for reducing GHG emissions from automobiles and light trucks for the SCAG region at eight percent below 2005 levels by 2020 and 13 percent below 2005 per capita emissions levels by 2035. The Final 2016 RTP/SCS complies with the emission reduction targets established by CARB by achieving per capita GHG emission reductions relative to 2005 of eight percent by 2020 and 18 percent by 2035 (SCAG 2016).

3.7.2.6 Senate Bill 2X

In April 2011, the Governor signed SB 2X requiring California to generate 33 percent of its electricity from renewable energy by 2020. SB 350, the Clean Energy and Pollution Reduction Act of 2015, was approved in October 2015. SB 350 has two objectives: to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030 and to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

3.7.2.7 AB 32 Scoping Plan Update

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The first Scoping Plan update defines CARB's climate change priorities for the next five years and sets the groundwork to reach post-2020 targets set forth in EO S-3-05. The update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction targets defined in the original Scoping Plan. It also evaluates how to align the State's longer-term GHG reduction strategies with other State policy priorities, such as for water, waste, natural resources, clean energy and transportation, and land use (CARB 2017).

3.7.2.8 Executive Order B-30-15

EO B-30-15 established a statewide mid-term GHG reduction target of 40 percent below 1990 levels by 2030. Targets set beyond 2020 provide market certainty to foster investment and growth in industries like clean energy.

3.7.2.9 Senate Bill 32

Senate Bill 32 (SB 32) became effective on January 1, 2017 and requires CARB to develop technologically feasible and cost effective regulations to achieve the targeted 40 percent GHG emission reduction by 2030. CARB is currently working to update the Scoping Plan to provide a framework for achieving the 2030 target. The updated Scoping Plan is expected to be completed by

the end of 2017 (CARB 2017). The Proposed Scoping Plan calls for emissions reductions at the state level that meet or exceed the statewide GHG target, and notes that additional effort will be needed to maintain and continue GHG reductions to meet the mid- (2030) and long-term (2050) targets. Additionally, the Proposed Scoping Plan recognizes the need to reach beyond statewide policy and engage local jurisdictions to develop plans to address local conditions and provide a “fair share” contribution towards the achievement of the State’s GHG reduction targets. To assist local planning efforts with developing strategies to meet these targets, the Proposed Scoping Plan includes annual community-wide thresholds of no more than six metric tons of CO₂e per capita by 2030 and no more than two metric tons of CO₂e per capita by 2050 (CARB 2017).

For more information on the Senate and Assembly Bills, Executive Orders, and reports discussed above, and to view reports and research referenced above, please refer to the following websites: www.climatechange.ca.gov and www.CARB.ca.gov/cc/cc.htm.

3.7.2.10 California Environmental Quality Act

Pursuant to the requirements of SB 97, the Resources Agency adopted amendments to the State CEQA Guidelines for the feasible mitigation of GHG emissions and analysis of the effects of GHG emissions. The adopted State CEQA Guidelines provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHGs and climate change impacts.

3.7.3 Local Regulations

The City of Palm Desert completed its *Environmental Sustainability Plan* in 2010 and GHG inventory in 2008, which quantified electricity associated with wastewater provided by CVWD in a “water” sector not associated with buildings or residential. On December 13, 2007 the Palm Desert City Council adopted Resolution 07-78. It was a major first step by the City towards a systematic approach to reducing greenhouse gas emissions. Palm Desert opted to set its own reduction targets in line with the Kyoto Protocol, and to make a major commitment to meeting it. Over a five year period beginning in 2007, the Resolution called for cutting greenhouse gas emissions to a level seven percent below 1990 levels. Thus by 2012, the City would exceed the AB 32 2020 goal of reducing emissions to 1990 levels.

Emissions have continued to climb since 1990, making the seven percent reduction goal less attainable. However, the greenhouse gas inventory presents steps to reduce GHGs and achieve State goals over time and Resolution 07-78 began a deliberate process of measuring the city’s emissions and developing strategies to reduce them.

This Palm Desert *Environmental Sustainability Plan* presents a broad menu of conservation and efficiency steps and system considerations. The City supports the CVWD efforts to expand its treatment plant to reclaim additional water for landscaping and golf courses. Specifically, Recommended Action WM 20 calls to “Support CVWD efforts to expand water treatment plants.” The City’s General Plan, adopted in 2004, does not have policies regarding the reduction of GHGs.

It is also important to note that the lead agency for this project is CVWD; therefore, the project is not subject to City’s sustainability policies.

3.7.4 Methodology and Significance Thresholds

Based on Appendix G of the State CEQA Guidelines, impacts related to GHG emissions from the proposed project would be significant if the project would:

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

The vast majority of individual projects do not generate sufficient GHG emissions to create significant project-specific environment effects. However, the environmental effects of a project's GHG emissions can contribute incrementally to cumulative environmental effects that are significant, contributing to climate change, even if an individual project's environmental effects are limited (State CEQA Guidelines, §15064[h][1]). The issue of a project's environmental effects and contribution towards climate change typically involves an analysis of whether or not a project's contribution towards climate change is cumulatively considerable. Cumulatively considerable means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (State CEQA Guidelines, §15064[h][1]).

The significance of GHG emissions may be evaluated based on locally adopted quantitative thresholds, or consistency with respect to a regional GHG emissions reduction plan (such as a Climate Action Plan). Although not yet adopted, the SCAQMD has a recommended quantitative GHG emissions threshold for all land use types of 3,000 MT CO₂e/year (SCAQMD 2010). Because no GHG emissions thresholds have been adopted by CVWD, project GHG emissions are compared to SCAQMD's recommended GHG emissions threshold.

The SCAQMD threshold was designed to achieve regional GHG reductions consistent with the AB 32 statewide target of 1990 emission levels by 2020. It is important to note that the threshold has not yet been updated to reflect the more stringent SB 32 statewide emission reduction target of 40 percent below 1990-level emissions by 2030. CARB Proposed Climate Change Scoping Plan Update, which provides guidelines to meet the SB 32 emission reduction target, has yet to be approved. In the interim, prior to approval of the Proposed Scoping Plan, this analysis continues to use the comparison to the SCAQMD threshold.

Calculations of CO₂, CH₄, and N₂O emissions are provided to identify the magnitude and nature of the proposed project's potential GHG emissions and environmental effects. The analysis focuses on CO₂, CH₄, and N₂O because these make up 98.9 percent of all GHG emissions by volume (SCAQMD 2007) and are the GHG emissions that the project would emit in the largest quantities. Fluorinated gases, such as HFCs, PFCs, and SF₆, were also considered for the analysis. However, because fluorinated gases are primarily associated with industrial processes, and the proposed project involves water storage (for infiltration), the quantity of fluorinated gases would not be significant. Emissions of all GHGs are converted into their equivalent GWP in MT CO₂e. Calculations are based on the methodologies discussed in the CAPCOA (2008) CEQA and Climate Change white paper and included the use of the California Climate Action Registry (2009) General Reporting Protocol.

3.7.4.1 Construction Emissions

Although construction activity is addressed in this analysis, CAPCOA does not discuss whether any of the suggested threshold approaches adequately address impacts from temporary construction activity. As stated in the CEQA and Climate Change white paper, “more study is needed to make this assessment or to develop separate thresholds for construction activity” (CAPCOA 2008). In accordance with SCAQMD’s recommendation, GHG emissions from construction of the proposed project were amortized over a 30-year period and added to annual operational emissions to determine the project’s total annual GHG emissions.

GHG emissions associated with construction of the proposed project were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1 (see Appendix A for CalEEMod worksheets). Construction of the proposed project would generate temporary GHG emissions primarily due to the operation of construction equipment and truck trips. Site preparation and grading typically generate the greatest amount of emissions due to the use of grading equipment and soil hauling. CalEEMod was used to estimate emissions associated with the construction period, based on the CalEEMod defaults. Complete results from CalEEMod and assumptions can be viewed in Appendix A.

3.7.4.2 Operational Emissions

The project involves the operation and maintenance of water storage/infiltration facilities, where regular operation and maintenance would be comparable to existing operation and maintenance activities at the WRP10 site and within the Whitewater River Stormwater Channel where Phase II of the project is proposed. Operation of Phase II of the project would include the occasional (approximately every five years) repair or replacement of the temporary berms; these activities would include earth movement, but over the project lifetime area anticipated to require comparable equipment usage as currently used within the channel to maintain its capacity through regular mowing, vegetation removal, and sediment clearing.

Operational emissions for energy use were calculated using estimated electricity consumption and energy intensity factors for GHG emissions from Southern California Edison. The energy intensity factors obtained from CalEEMod were 702 lb per CO₂ per MWh, 0.029 lb per CH₄ per MWh, and 0.006 lb per N₂O per MWh (CalEEMod 2016). According to CVWD, operation of the proposed project (including Phase I and Phase II) would include the operation of a total of six pumps operating for 24 hours per day, 365 days per year, which would lead to 18,396,000 kWh per year. GHG emissions were calculated by multiplying the energy intensity by the energy intensity factors.

3.7.5 Project Impacts

IMPACT GHG-1 THE PROPOSED PROJECT WOULD NOT CONFLICT WITH GHG REDUCTION POLICIES IN THE 2016-2040 SCAG RTP/SCS AND PALM DESERT ENVIRONMENTAL SUSTAINABILITY PLAN. (LESS THAN SIGNIFICANT)

As discussed under *Regional Regulations* and *Local Regulations* sections above, a number of plans and policies have been adopted to reduce GHG emissions in Southern California, Riverside County, and City of Palm Desert. The SCAG’s 2016-2040 RTP/SCS provides transportation and growth strategies that include reduced water usage to reduce regional emissions. Many of the regional policies in particular pertain to residential and commercial development and do not apply to the

project, which is a groundwater replenishment project. The City supports CVWD's efforts to expand its water supply reliability, and the project is consistent with local GHG reduction policies including those in the 2016-2040 SCAG RTP/SCS and Palm Desert Environmental Sustainability Plan. Consequently, the project would not conflict with regional growth or local GHG reduction policies and would not result in increased trips to the site.

Therefore, the proposed project would be consistent with the goals and policies of the SCAG RTP/SCS, and the City's Environmental Sustainability Plan. The project would not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Potential impacts would be less than significant with no mitigation required.

IMPACT GHG-2 THE PROPOSED PROJECT WOULD GENERATE GREENHOUSE GAS EMISSIONS THROUGH CONSTRUCTION AND ENERGY USE. GHG EMISSIONS WOULD EXCEED THE SCAQMD THRESHOLD FOR ANNUAL GREENHOUSE GAS EMISSIONS. THE PROJECT WOULD CONFLICT WITH AB 32 AND SB 32. (SIGNIFICANT AND UNAVOIDABLE)

Construction Emissions

As shown in Table 16, construction of the proposed project would generate an estimated 1,316 MT of CO₂e. Following the SCAQMD's recommended methodology for amortizing construction emissions over a 30-year period (the assumed life of the project), construction of the proposed project would generate an estimated 44 MT CO₂e per year.

Table 16 Estimated Construction Emissions of Greenhouse Gases

Year	Annual Emissions (MT CO ₂ e/year)
Phase I	841
Phase II	475
Total Construction Emissions	1,316
Amortized over 30 years	44

See Appendix A for CalEEMod results.

Operational Emissions

Operation of the proposed project would generate greenhouse gases through an increase in energy use associated with the secondary effluent pump, and repair/replacement of the temporary berms on an as-needed basis. Emissions for energy use due to pumping were calculated using estimated electricity consumption and energy intensity factors from Southern California Edison. Assuming all six pumps are powered by electricity and operating at full pumping capacity of 92+ CFS, the total energy usage would be 18,396,000 kWh per year. Based on the energy intensity factors, operational emissions would result in approximately 5,882 MT CO₂e per year. Table 17 summarizes the long-term GHG emissions generated by energy use associated with the secondary effluent pump.

Table 17 Project Operational GHG Emissions from the Secondary Effluent Pump

Emission Source	Annual Emissions (MT of CO ₂ e/year)
Operational Emissions	5,882
Construction Emissions (amortized)	44
Temporary Berms (once every five years)	12
Combined Project Emissions	5,938
<i>SCAQMD Threshold</i>	<i>3,000</i>
Threshold Exceeded?	Yes
See Appendix A for CalEEMod results	

The project would generate a total of 5,938 MT CO₂e per year, which would exceed SCAQMD's threshold, which is based on AB 32. Since the project would conflict with AB 32, subsequently, the project would conflict with SB 32. Therefore, this impact would be significant and unavoidable.

Cumulative Impacts

As discussed above, evaluating the significance of a project's GHG emissions is inherently an analysis of whether the project's contribution to climate change would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]). As indicated in the discussions for Impact GHG-1 and Impact GHG-2, although the project would not conflict with GHG reduction policies in the 2016-2040 SCAG RTP/SCS and Palm Desert Environmental Sustainability Plan, operation of the project would produce GHG emissions that would exceed the SCAQMD thresholds for annual emissions, and would conflict with AB 32 and SB 32, and impacts would therefore be significant and unavoidable. Therefore, the proposed project's impacts would be cumulatively considerable.

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3.8 Hazards and Hazardous Materials

3.8.1 Environmental Setting

This section addresses potential impacts associated with hazardous materials, airports, wildfires, emergency access, and hazards to schools. The study area for hazardous materials includes possible contaminating activities (e.g., leaking underground storage tanks) within 0.5 mile of the project site. The study area for the evaluation of airport and airstrip impacts is within two miles of the project site. The study area for the evaluation of wildfires and emergency access includes the project site and surrounding roadway network. The study area for the evaluation of impacts to schools includes a 0.25-mile area around the project site.

3.8.1.1 *Potential Presence of Hazardous Materials in Soil and Groundwater*

The evaluation of the potential to encounter hazardous materials in soil and groundwater is based on federal, State, and local regulatory database reviews which identified permitted hazardous materials uses, environmental cases, and spill sites within 0.5 mile of project site.

The California Department of Toxic Substances Control (DTSC) EnviroStor database contains information on properties in California where hazardous substances have been released or where the potential for a release exists. A search of this database was conducted on May 2, 2017, and identified no “Active” cleanup sites within 0.5 mile of the project site (defined as all disturbance areas associated with the proposed project). One “No Further Action” DTSC listed cleanup site was identified within 0.5 mile of the project area:

- **Palm Desert High School located at 43570 Phyllis Jackson Lane** (southwest and across Cook Street from the Phase II project site) – The school site and adjacent properties were historically used for agriculture. A soil matrix assessment conducted in February 2008 for the potential presence of organochlorine pesticides (OCPs), arsenic, lead, and metals found that no Chemicals of Potential Concern were present and no further action was necessary. (DTSC 2017)

The SWRCB GeoTracker database contains information on properties in California for sites that require cleanup, such as leaking underground storage tank (LUST) sites, which may impact, or have potential impacts, to water quality, with emphasis on groundwater. A search of this database was conducted on May 2, 2017, and identified no “Active” cleanup sites within 0.5 mile of the project area. One “Completed – Case Closed” GeoTracker listed cleanup site was identified within 0.5 mile of the project site:

- **Coachella Valley Water District located at 43000 Cook Street** (approximately 875 feet north of the proposed Phase II project site within the stormwater channel) – In 1990, a diesel fuel leak was discovered during the removal of an underground storage tank (UST) from the site. Soil samples taken at the time of removal detected elevated total petroleum hydrocarbon (TPH) concentrations. A site investigation commenced in August 1991. Six soil samples were collected from each of the three boreholes for a total of 18 soil samples. No tested samples showed contamination above the laboratory reporting limit. Based on the results of the site investigation, the County of Riverside Department of Health determined no further action was necessary. (SWRCB 2017)

3.8.1.2 Airports

The nearest airport to the project site is the privately-operated Bermuda Dunes Airport, located more than four miles east of the project site.

3.8.1.3 Wildfire Hazards

The California Department of Forestry and Fire Protection (CAL FIRE) identifies fire hazard areas and fire-threatened communities at the wildland urban interface. CAL FIRE maps identify fire hazard severity zones in the State and Local Responsibility Areas. Wildland fire protection in California is the responsibility of either the state, local government, or the federal government. A designated State Responsibility Area (SRA) is the area "in which the financial responsibility of preventing and suppressing fires is primarily the responsibility of the state" (Public Resources Code Section 4125). Local responsibility areas (LRA) in the project study area include incorporated cities, cultivated agricultural lands, and portions of the desert. LRA fire protection is typically provided by city fire departments, fire protection districts, counties, and by CAL FIRE under contract to local government.

Classification of a zone as moderate, high or very high fire hazard is based on a combination of how a fire will behave and the probability of flames and embers threatening buildings. CAL FIRE has identified the project area as located within the "*Non-Very High Fire Hazard Severity Zone*" in the Local Responsibility Area for incorporated cities, which indicates the project site is not subject to wildfire hazards.

3.8.2 Regulatory Framework

3.8.2.1 Federal

United States Department of Transportation Hazardous Materials Transport Act

The United States Department of Transportation (USDOT), in conjunction with the United States Environmental Protection Agency (USEPA), is responsible for enforcement and implementation of federal laws and regulations pertaining to transportation of hazardous materials. The Hazardous Materials Transportation Act of 1974 (49 U.S. Code [USC] 5101) directs the USDOT to establish criteria and regulations regarding the safe storage and transportation of hazardous materials. CFR 49, 171–180, regulates the transportation of hazardous materials, types of material defined as hazardous, and the marking of vehicles transporting hazardous materials.

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) of 1976 gives the USEPA the authority to control hazardous waste from "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also sets forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Title 40 Code of Federal Regulations

Title 40 Code of Federal Regulations (CFR) Part 264 "Standards for Owners of Hazardous Waste Treatment, Storage and Disposal Facilities," establishes minimum national standards which define

the acceptable management of hazardous waste. This standard applies to owners and operators of all facilities which treat, store, or dispose of hazardous waste.

3.8.2.2 State

California Occupational Safety and Health Act – California Labor Code, Section 6300 et seq.

The California Occupational Safety and Health Act of 1973 addresses California employee working conditions, enables the enforcement of workplace standards, and provides for advancements in the field of occupational health and safety. The Act also created the California Occupational Safety and Health Administration (Cal OSHA), the primary agency responsible for worker safety in the handling and use of chemicals in the workplace. Cal OSHA's standards are generally more stringent than federal regulations. Under the former, the employer is required to monitor worker exposure to listed hazardous substances and notify workers of exposure. The regulations specify requirements for employee training, availability of safety equipment, accident-prevention programs, and hazardous substance exposure warnings. At sites known or suspected to be contaminated by hazardous materials, workers must have training in hazardous materials operations and a Site Health and Safety Plan must be prepared. The Health and Safety Plan establishes policies and procedures to protect workers and the public from exposure to potential hazards at the contaminated site.

California Health and Safety Code, Title 22, Chapter 20 Hazardous Waste Permit Program

Title 22, Chapter 20 Hazardous Waste Permit Program, establishes provisions for the issuance and administration of hazardous waste permits pursuant to the Health and Safety Code. Regulations cover basic permitting requirements, such as application requirements, standard permit conditions, and monitoring and reporting requirements. Hazardous Waste Permits are required for the transfer, treatment, storage, and disposal of any waste which is hazardous waste pursuant to section 66261.3. Owners and operators of certain facilities require hazardous waste facility permits as well as permits under other programs for certain aspects of the facility operation.

California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control Law

The California Health and Safety Code, Division 20, Chapter 6.5, Hazardous Waste Control Law regulates the safe disposal of hazardous wastes generated within the State of California. The law identifies proper guidance for the handling, storage, use, and disposal of hazardous wastes. Additionally, the Hazardous Waste Control Law identifies the need for proper landfill disposal in order to reduce long-term threats to public health and to air and water quality.

Hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; dictate the management of hazardous waste; establish permit requirements for hazardous waste treatment, storage, disposal and transportation; and identify hazardous wastes that cannot be disposed of in landfills.

California Code of Regulations, Division 4.5, Title 22

California Health and Safety Code and Title 22 regulates processes that produce hazardous waste. The Regulation requires an ID number, regulates accumulation of on-site hazardous materials, shipping and transport, emergency procedures, and worker training.

California Code of Regulations Title 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b)

California Code of Regulations Title 23, Chapter 15 Discharges of Hazardous Waste to Land Section 2511(b) pertains to water quality aspects of waste discharge to land. The regulation establishes waste and site classifications and waste management requirements for waste treatment, storage, or disposal in landfills, surface impoundments, waste piles, and land treatment facilities. Requirements are minimum standards for proper management of each waste category, which allow regional water boards to impose more stringent requirements to accommodate regional and site-specific conditions. In addition, the requirements of California Code of Regulations Title 23, Chapter 15 applies to cleanup and abatement actions for unregulated discharges to land of hazardous waste (e.g. spills).

License to Transport Hazardous Materials – California Vehicle Code, Section 32000.5 et seq.

The California Department of Transportation (Caltrans) regulates hazardous materials transportation on all interstate roads. Within California, the State agencies with primary responsibility for enforcing federal and State regulations and for responding to transportation emergencies are the California Highway Patrol and Caltrans. Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications for vehicles transporting hazardous materials.

California Fire Code, Title 24, Part 9, Chapters 33, 50 and 57

The 2013 California Fire Code, written by the California Building Standards Commission, is based on the 2012 International Fire Code. The International Fire Code (IFC) is a model code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The IFC addresses fire prevention, fire protection, life safety, and safe storage and use of hazardous materials in new and existing buildings, facilities, and processes.

Uniform Fire Code

The Uniform Fire Code, Article 80 (Section 80.103 of the Uniform Fire Code as adopted by the State Fire Marshal pursuant to Health and Safety Code Section 13143.9), includes specific requirements for the safe storage and handling of hazardous materials. These requirements are intended to reduce the potential for a release of hazardous materials and for mixing of incompatible chemicals, and specify the following specific design features to reduce the potential for a release of hazardous materials that could affect public health or the environment:

- Separation of incompatible materials with a noncombustible partition;
- Spill control in all storage, handling, and dispensing areas; and

- Separate secondary containment for each chemical storage system. The secondary containment must hold the entire contents of the tank, plus the volume of water needed to supply the fire suppression system for a period of 20 minutes in the event of catastrophic spill.

Emergency Response

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local government and private entities. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services, which coordinates the responses of other agencies. The Riverside County Environmental Health Department's Emergency Response Team provides the capabilities for hazardous materials emergencies within the project area. Emergency Response Team members respond and work with local fire and police agencies, California Highway Patrol, California Department of Fish and Wildlife, California Department of Transportation, U.S. Coast Guard and National Marine Sanctuary personnel.

3.8.2.3 Regional and Local

Regional Water Quality Control Board (RWQCB)

The Colorado River Basin RWQCB regulates discharges and releases to surface and groundwater in the project area. The RWQCB generally oversees cases involving groundwater contamination. Within the Colorado River Basin RWQCB, the County of Riverside-Health Services Agency (CRHSA) handles most leaking underground storage tank (LUST) cases, so the RWQCB may oversee cases involving other groundwater contaminants; i.e. Spills, Leaks, Incidents, and Cleanup (SLIC) cases. In the case of spills at a project site, the responsible party would notify the CRHSA, and then a lead regulator (either the CRHSA, RWQCB, or DTSC) would be determined.

County of Riverside Department of Public Health (CRDPH)

The CRDPH, which includes the Riverside County Department of Environmental Health (RCDEH), serves as the County Local Oversight Program within the County for hazardous materials and soil and groundwater contamination. This agency oversees several programs related to hazardous materials and releases. In general, LUST cases affecting groundwater within the project area are handled by the CRDPH. Other groundwater contamination cases may also be handled by the CRDPH, but can also be deferred to the RWQCB or DTSC, depending on the responsible party. The Hazardous Materials Division of the CRDPH oversees hazardous materials permitting, hazardous materials oversight, and hazardous materials facility closures.

Riverside County Fire Department Office of Emergency Services (OES)

The Riverside County OES is the lead agency in fulfilling the County's responsibility under the California Emergency Services Act (Chapter 7 of Division 1 of Title 2 of the CA Government Code) and also serves as the Operational Area Coordinator for Riverside County under the Standardized Emergency Management System (CA Government Code 8605). The Riverside County OES has established an Emergency Operating Plan (EOP) to address a spectrum of issues ranging from the minor incidents to disasters. As part of the Riverside County OES, all departments and agencies of the County must be prepared to promptly and effectively respond to any foreseeable emergency. Similarly, Riverside County has developed the 2012 County of Riverside Multi Jurisdiction Hazard Mitigation Plan to identify the County's hazards, review and assess past disaster occurrences,

estimate the probability of future occurrences, and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and property from natural and man-made hazards.

CVWD Emergency Preparedness/Response Plan

CVWD has emergency preparedness steps to ensure safe drinking water in the event of a water emergency. As discussed in the Coachella Valley Water Management Plan, the Emergency Response Plan has been performed in compliance with the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 and in accordance with the USEPA Office of Water Planning Guidelines. The plan is routinely updated to assure compliance. The Emergency Response Plan addresses events like natural disasters, such as an earthquake.

3.8.3 Impacts and Mitigation Measures

3.8.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.*
- b. 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.*
- c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.*
- d. 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.*
- e. 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.*
- f. 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.*
- g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.*
- h. 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.*

3.8.3.2 Approach to Analysis

This impact analysis addresses the potential to encounter hazardous substances in soil and groundwater during project construction and/or operation, as well as potential use and disposal of hazardous materials or waste during operation and maintenance of the proposed project. The evaluation was performed based on current conditions at the project sites, information in

environmental databases, applicable regulations and guidelines, and proposed construction and operational activities. Relationships and proximities of project sites to schools, airports, and fire hazard zones were also identified. The above significance criteria are used in this section as the basis for determining the significance of impacts related to hazards and hazardous materials for both construction and operation. If necessary, mitigation measures are proposed to reduce impacts to a less than significant level.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to any of the five above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- d. 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.*

According to the environmental database review, the project site is not included on any lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur and this criterion is not further addressed.

- e. 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.*

The project site is not located within an airport land use plan or within two miles of a public airport or airstrip. Therefore, no impact would occur and this criterion is not further addressed.

- f. 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.*

The nearest airport (including private airstrips) to the proposed project site is the Bermuda Dunes Airport, located approximately 4.7 miles east of the project site, at 42nd Avenue and Indio Boulevard in Bermuda Dunes. The project would not be located within two miles of a public airport or public use airport, including private airstrips. Therefore, no impact would occur and this criterion is not further addressed.

- h. 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.*

Construction and operation of the project would not introduce potentially flammable activities in fire-prone areas. CAL FIRE has identified the project area as located within the “Non-Very High Fire Hazard Severity Zone” in the Local Responsibility Area for incorporated cities which indicates the site is not subject to wildfire hazards. Therefore, no impact would occur and this criterion is not further addressed.

3.8.3.3 Construction Impacts and Mitigation Measures

IMPACT HAZ-1 THE PROJECT WOULD NOT CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT RELATED TO TRANSPORT, USE, OR DISPOSAL OF HAZARDOUS MATERIALS DURING

CONSTRUCTION, OR DUE TO REASONABLY FORESEEABLE UPSET AND ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS INTO THE ENVIRONMENT. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the area through the operation of construction vehicles and equipment. In addition, there is potential for an accidental upset or accident condition to occur as a result of ground-disturbing activities; should such a condition occur, there would be potential for potential impacts to occur as a result of a release of hazardous materials to the environment. However, limited quantities of miscellaneous hazardous substances, such as diesel fuel, oil, solvents, and other similar materials, would be brought onto the construction site, used, and stored during the construction period. These materials would be disposed of off-site in accordance with all applicable laws pertaining to the handling and disposal of hazardous waste. Construction of the project would comply with all relevant regulations, including the enforcement of hazardous materials transportation regulations discussed above. There is a possibility that upset or accident conditions could result in the unanticipated spill or release of hazardous materials such as vehicle and equipment fuels, potentially introducing a hazard to the public or the environment. Therefore, to ensure an additional level of safety and reduce potential impacts to a less than significant level, Mitigation Measures HAZ-1(a) and HAZ-1(b) would be implemented.

Potential impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure HAZ-1(a) would apply to the proposed project.

Mitigation Measure HAZ-1(a): Hazardous Materials Management and Spill Control Plan

Before construction begins, the construction contractor shall develop and implement a Hazardous Materials Management and Spill Control Plan (HMMSCP) that includes a project-specific contingency plan for hazardous materials and waste operations. The HMMSCP shall establish policies and procedures consistent with applicable codes and regulations, including but not limited to the California Building and Fire Codes, as well federal OSHA and Cal/OSHA regulations. The HMMSCP shall articulate hazardous materials handling practices to prevent the accidental spill or release of hazardous materials.

Timing	Before and During Construction
Party Responsible for Implementation	Construction contractor
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Construction monitors perform daily checks and weekly written reports to ensure compliance with hazardous materials management and spill controls.

Mitigation Measure HAZ-1(b) would apply to the proposed project.

Mitigation Measure HAZ-1(b): Hazardous Materials Business Plan

Prior to construction of the proposed project, a Hazardous Materials Business Plan (HMBP) shall be prepared and implemented. The HMBP shall include a hazardous materials inventory, site plan, an

emergency response plan, and requirements for employee training. An existing HMBP may be updated for use under this project.

Timing	Before and During Construction
Party Responsible for Implementation	Construction contractor
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Construction monitors perform daily checks and weekly written reports to assure compliance of hazardous materials inventory, site plan, emergency response plan, and requirements for employee training.

Significance After Mitigation

With implementation of mitigation measures HAZ-1(a) and HAZ-1(b), impacts related to release of hazardous materials during construction would be reduced to a *less than significant level*.

IMPACT HAZ-2 THE PROJECT SITE WOULD NOT EMIT HAZARDOUS EMISSIONS OR HANDLE HAZARDOUS MATERIALS OR WASTES WITHIN 0.25 MILE OF AN EXISTING OR PROPOSED SCHOOL. (LESS THAN SIGNIFICANT)

As described above, the Phase II site of the proposed project is located within the Whitewater River Stormwater Channel, across Cook Street from Palm Desert High School, which is located at 43570 Phyllis Jackson Lane. As described above for Impact HAZ-1, there is potential that an accidental spill or release of hazardous or potentially hazardous materials such as vehicle and equipment fuels could occur during project construction. However, project activities would not occur on the school site, and mitigation measures that would be implemented under Impact HAZ-1 include BMPs to ensure that should an accidental spill or release occur during project construction, it would be contained, site-specific, and cleaned up in a timely manner such that significant impacts would be avoided. Therefore, potential impacts associated with a potential emission or release of hazardous materials or wastes in proximity to a school would be less than significant.

IMPACT HAZ-3 THE PROJECT SITE WOULD NOT IMPAIR IMPLEMENTATION OF OR PHYSICALLY INTERFERE WITH AN ADOPTED EMERGENCY RESPONSE PLAN OR EMERGENCY EVACUATION PLAN. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

Riverside County has developed EOPs, and the City of Palm Desert, where the project is located, has developed Community Emergency Response Team (CERT) Program (City of Palm Desert 2017). The emergency response plans do not designate specific evacuation routes or sites within the cities. However, the proposed project would not increase traffic or introduce impediments to access such that emergency access or evacuation routes would be substantially affected. To ensure that emergency access and evacuation routes are maintained through project implementation, Mitigation Measure HAZ-4 would be implemented.

Mitigation Measures

Mitigation Measure HAZ-2 would apply to the proposed project.

Mitigation Measure HAZ-2: Traffic Management Plan

Prior to the start of construction, a Traffic Management Plan shall be developed, in coordination with County Transit, Public Works, and Coachella Valley Water District. The Traffic Management Plan shall include measures that address how to accommodate emergency evacuation and

response, if needed. Measures to manage construction traffic could include warning signs, flag personnel, and scheduling deliveries outside the morning and evening peak traffic hours.

Timing	Before and During Construction
Party Responsible for Implementation	Construction contractor
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Construction monitors perform daily checks and weekly written reports to assure compliance of traffic management plan.

Significance After Mitigation

With implementation of mitigation measure HAZ-2, impacts related to interference with an adopted emergency and response plan would be reduced to a less than significant level.

3.8.3.4 Operation Impacts and Mitigation Measures

Operation and maintenance of the proposed project would not involve the routine transport or use of hazardous materials or wastes, and would not introduce new operational traffic that could impede emergency access. Potential increases in off-site traffic would be minimal, associated with maintenance and repairs to Phase II facilities within the Whitewater River Stormwater Channel; these activities would be minimal, and would not introduce new hazardous materials or wastes to the site. Therefore, operation and maintenance of the project would not result in new impacts associated with hazardous wastes and materials.

3.8.3.5 Cumulative Impacts

The geographic scope for the analysis of cumulative impacts relating to hazards and hazardous materials consists of all project facility sites and an area of 0.25 mile surrounding the sites where an adverse effect could occur. As discussed in the impact analysis provided above, the proposed project would occur in compliance with laws and regulations applicable to the use and handling of hazardous or potentially hazardous materials. Potential impacts associated with hazardous materials and wastes that could occur under the proposed project would be site-specific and mitigated to less-than-significant levels where necessary. Therefore, the proposed project would not contribute to the cumulative scenario for impacts to hazardous materials and wastes, and would not combine with similar impacts of other projects to result in a significant cumulative impact as these would also be required to comply with the laws and regulations applicable to the use and handling of hazardous or potentially hazardous materials.

3.9 Hydrology and Water Quality

This section describes existing conditions and regulatory setting for hydrology and water quality in the project site, and assesses potential impacts on hydrology and water quality that could result from implementation of the proposed project.

3.9.1 Environmental Setting

The overall study area for hydrology and water quality is the Coachella Valley and the groundwater basins underlying the project site. For surface water effects, the study area is restricted to the project site, including the MVP Pump Station in Indio, CVWD's existing WRP10 site in Palm Desert (pipeline extension and pump station for Phase I), ponds located adjacent to the north of the WRP10 site (Phase I of the project), and the portion of the Whitewater River Stormwater Channel located adjacent to the south of the WRP10 site, between Cook Street and Fred Waring Drive (Phase II of the project).

3.9.1.1 *Regional Surface Water Hydrology*

The Coachella Valley drainage area is approximately 65 percent mountainous and 35 percent typical desert valley, with alluvial fan topography buffering the valley floor from the steep mountain slopes. The mean annual precipitation ranges from 44 inches in the San Bernardino Mountains to less than three inches at the Salton Sea. Based on a nearby weather monitoring station located in the City of Indio, typical precipitation in the Palm Desert area is approximately 3.3 inches per calendar year. (Western Regional Climate Center 2017)

Precipitation in the drainage area comes from winter storms, summer storms, and localized thunderstorms. Long duration, lower intensity rainfall events tend to have higher recharge rates, but runoff and flash flooding can result from all three types of storms. Otherwise, there is little or no flow in most of the streams in the drainage area during most of the year (CVWD 2016a).

The 50-mile-long Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel is the largest surface water feature within the study area. The Whitewater River is a natural water course that originates from the southerly and easterly slopes of the San Bernardino Mountains, at the western portion of the Coachella Valley. Several of its tributaries originate from the easterly slopes of the San Jacinto and Santa Rosa Mountains. The Whitewater River eventually discharges to the Salton Sea through the man-made extension of the stormwater channel system known as the Coachella Valley Stormwater Channel. The Coachella Valley Stormwater Channel is the main drainage channel for the East Valley. It is a largely unlined earthen channel that extends 17 miles southeast from the City of La Quinta, through the cities of Indio and Coachella, and the agricultural communities of Thermal and Mecca down to the north end of the Salton Sea. The drainage area of the Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel is approximately 1,500 square miles at the Salton Sea (CVWD 2011).

Other surface waters in the study area are several local rivers and streams that are tributaries to the Whitewater River, notably San Gorgonio River, Mission Creek, Snow Creek, Falls Creek, Tahquitz Creek, Palm Canyon Wash and Deep Canyon. The majority of local surface water is derived from runoff from the San Bernardino and San Jacinto Mountains, with lesser amounts from the Santa Rosa Mountains. This runoff either percolates in the streambeds or is captured in mountain-front debris basins where it recharges the groundwater basin (CVWD 2011).

Large portions of the Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel and its tributaries have been channelized and improved to safely convey flood flows. Improvements typically consist of debris basins and concrete channels to capture debris and convey flash flood flows to the main channel. Debris basins also have the added benefit of capturing and infiltrating small storm flows, thus enhancing recharge of stormwater. Significant amounts of local runoff are currently captured at the Whitewater River Groundwater Replenishment Facility near Windy Point, and in the debris basins and unlined channels of the West Valley; an average of approximately 44,000 acre feet per year (AFY) of surface water recharges the Whitewater River Subbasin.

CVWD provides regional flood control within its jurisdiction. CVWD operates and maintains approximately 207 miles of stormwater protection facilities within the District to protect approximately 590 square miles from flooding (CVWD 2011). The regional flood control system consists of the Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel and various regional tributary stormwater facilities. The system collects, detains, and conveys storm flows from the hills and mountains surrounding the Coachella Valley to the Salton Sea. The system also accepts storm flows from local jurisdictions, i.e., Riverside County and cities within the Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel watershed. The Whitewater River Stormwater Channel/Coachella Valley Stormwater Channel was built to withstand a flow of 80,000 cubic feet per second, which is greater than flows generated by a 100-year flood event (CVWD 2017b). The County and cities are responsible for local flood control within their respective jurisdictions. CVWD conducts ongoing stormwater management planning and construction activities, in coordination with other agencies and jurisdictions, to provide flood protection within its service area.

3.9.1.2 Regional Groundwater Hydrology

The Coachella Valley Groundwater Basin, as described by the California Department of Water Resources' (DWR) Bulletin 118 Interim Update (2016), encompasses the entire floor of the Coachella Valley, and consists of four subbasins. These subbasins are the San Geronio Pass, Whitewater River (also known as Indio), Mission Creek, and Desert Hot Springs subbasins. CVWD obtains groundwater from both the Whitewater River and Mission Creek subbasins, and all drinking water delivered by CVWD comes from wells in these subbasins (CVWD 2016a; 2017a). CVWD operates approximately 96 active wells in these subbasins to provide a distributed supply throughout the Coachella Valley (CVWD 2016a).

The Whitewater River subbasin, which is also known as the Indio subbasin, underlies the major portion of the Valley floor and encompasses approximately 525 square miles (DWR 2003). The subbasin is bordered on the southwest by the Santa Rosa and San Jacinto Mountains, and is separated from the Mission Creek and Desert Hot Spring subbasins to the north and east by the Garnet Hill and San Andreas Faults. These faults are relatively effective barriers to groundwater movement in the area (CVWD 2016a).

The Whitewater River / Indio subbasin underlies the cities of Palm Springs, Cathedral City, Rancho Mirage, Palm Desert, Indian Wells, La Quinta, Indio, and Coachella, and the unincorporated communities of Thousand Palms, Thermal, Bermuda Dunes, Oasis and Mecca. From about Indio southeasterly to the Salton Sea, the subbasin contains increasingly thick layers of silt and clay, especially in the shallower portions of the subbasin. These silt and clay layers, which are remnants of ancient lake beds, impede the percolation of water applied for irrigation and restrict groundwater recharge opportunities to the westerly and easterly fringes of the subbasin (CVWD 2012b). The

Whitewater River / Indio subbasin is not adjudicated; it is jointly managed by CVWD and DWA under the terms of a 1976 Water Management Agreement (CVWD 2016a).

The Whitewater River / Indio subbasin is further divided into four subareas: Palm Springs, Thermal, Thousand Palms and Oasis. The Palm Springs subarea is the forebay or main area of recharge to the subbasin, and the Thermal subarea comprises the pressure or confined area within the basin. The other two subareas are peripheral areas having unconfined groundwater conditions (CVWD 2012b). Precipitation in the bordering San Jacinto and Santa Rosa Mountains produces surface runoff and subsurface inflow that are the primary natural sources of recharge to the Coachella Valley groundwater basin. Additional recharge is derived from precipitation in the Little San Bernardino Mountains in extremely wet years. The volume of natural recharge varies dramatically annually due to wide variations in precipitation and, as noted above, perennial flow is very limited. Artificial recharge of the basin occurs through recharge facilities in the West and East valleys, described below (CVWD 2011).

The Whitewater River / Indio subbasin has been identified by DWR as being in a condition of overdraft since the 1940s. Overdraft is defined as the condition of a groundwater basin in which the outflows (demands) exceed the inflows (supplies) to the groundwater basin over the long term. The overdraft condition has caused groundwater levels to decline in some areas, and has raised concerns about water quality degradation and land subsidence. To address the overdraft conditions, CVWD and DWA jointly operate groundwater replenishment programs in the subbasin and implement elements described in the Coachella Valley Water Management Plan Update (CVWD 2012a). Recharge activities using imported water commenced in the West Valley in 1973 at the Whitewater River Groundwater Replenishment Facility, and groundwater levels within the West Whitewater River Subbasin Area of Benefit have benefited from this recharge. East Valley recharge was commenced in 1997 at the Dike No. 4 pilot recharge facility and expanded in 2009; this facility is now called the Thomas E. Levy Groundwater Replenishment Facility (CVWD 2016a). CVWD and DWA also began replenishment of the Mission Creek subbasin in 2003. Continued use of these recharge facilities is a critical component to maintaining groundwater levels and CVWD's overall water supply program (CVWD 2016a).

The Mission Creek subbasin is bounded on the south by the Banning fault and on the north and east by the Mission Creek fault. These faults are effective barriers to groundwater movement, and the geographic limit of effective storage within the subbasin is relatively confined to the area defined by these faults. CVWD, DWA and the Mission Springs Water District jointly manage this subbasin under terms of the 2004 Mission Creek Settlement Agreement (CVWD 2012b). Groundwater recharge in the Mission Creek subbasin has taken place since 2003 (CVWD 2016a). These replenishment activities and implementation of the *Mission Creek and Garnet Hill Subbasins Water Management Plan* (CVWD, DWA, & Mission Springs Water District 2013) have essentially eliminated overdraft conditions in the Mission Creek subbasin (CVWD 2017c).

Groundwater quality in the Coachella Valley varies with depth, proximity to faults and recharge basins, presence of surface contaminants, and other hydrogeologic or human factors. CVWD conducts water quality monitoring in accordance with federal and state drinking water requirements, and analyzes water samples for more than 100 regulated and unregulated substances. Based on the most current water quality report (CVWD 2016b), CVWD's drinking water supplied from groundwater wells complies with all state and federal drinking water quality standards. Groundwater in some parts of the Coachella Valley does contain naturally occurring substances, such as arsenic, fluoride, uranium and chromium-6, identified by California water quality regulatory agencies as having the potential to cause adverse health effects if ingested at

levels above Maximum Contaminant Levels (MCLs) over a long period of time. However, these substances are not present at levels above MCLs in the drinking water supply (CVWD 2016b).

3.9.1.3 Existing Hydrologic Conditions at Project Site

The existing WRP10 site is developed with impervious surfaces. Phase I of the project would occur adjacent to the north of the WRP10 site, which is also developed and covered with impervious surfaces. The MVP Pump Station, which is where Phase I of the proposed project would install two new pumps within an existing enclosed structure, is also developed with impervious surfaces. In addition, the Whitewater River Stormwater Channel is also disturbed, but is not impervious; implementation of Phase II of the project would introduce groundwater replenishment basins to the channel, and would not alter the permeability of existing conditions within the channel.

On-site stormwater runoff from the impervious areas of the project site areas is not directly connected to a stormwater conveyance system, but instead occurs as sheet flow that is directed to the surrounding pervious ground to encourage infiltration. In the case of larger or extreme storm events, sheet runoff from the existing WRP10 site may also flow into the adjacent section of the Whitewater River Stormwater Channel within the project site. As described above, the Whitewater River Stormwater Channel is the pillar of the CVWD stormwater management and flood protection system. Within the project site, the channel is normally dry, but may convey surface flows from stormwater runoff during and following storm events.

The Federal Emergency Management Agency (FEMA) delineates regional flooding hazards as part of the National Flood Insurance Program. FEMA identifies flood hazard areas through its Flood Insurance Rate Map (FIRM) program. Higher flood risk zones are called Special Flood Hazard Areas; these areas have a one percent chance or greater of flooding in any given year (also called the 100-year flood). The project site is mapped on Riverside County FIRM Panels 2226 (FEMA 2017) and 2232 (FEMA 2008). As shown on FIRM Panel 2226, the existing WRP10 site is in Zone X (“Other Areas”) and outside of the 0.2 percent floodplain (“500-year flood”). The Whitewater River Stormwater Channel is in Zone A, which is designated a “Special Flood Hazard Area”, which is subject to inundation by the flood of a magnitude that could occur once every one hundred years, or the magnitude flood that has a one percent chance of occurring during any given year.

The MVP Pump Station is located in Zone X (“Other Flood Areas”) (FEMA 2008). This zone includes areas subject to the 0.2 percent annual flood (i.e., 500-year flood), areas of one percent annual chance flood with average depths of less than one foot or with drainage areas less than one square mile, and areas protected by levees from one percent annual chance flood. The MVP Pump Station is protected by an accredited levee from the one percent annual chance flood.

3.9.2 Regulatory Framework

Numerous federal, state, and local laws, regulations, and policies define the framework for regulating water quality in the project area. Water quality in California is regulated through the Federal Clean Water Act (CWA), which is managed by the U.S. Environmental Protection Agency (USEPA), with implementation largely delegated to the State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs). Water quality at the project site is regulated primarily by the Colorado River Basin RWQCB. The following provides a description of the water quality requirements applicable to the project. Flood protection guidance is provided primarily by the FEMA and is implemented at the state and local levels through legislation and local flood protection ordinances.

3.9.2.1 Federal

Clean Water Act

The federal Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. The Act established the basic structure for regulating discharges of pollutants into the waters of the United States. The Clean Water Act gave the U.S. Environmental Protection Agency USEPA the authority to implement federal pollution control programs, such as setting water quality standards for contaminants in surface water, establishing wastewater and effluent discharge limits for various industry contaminants in surface water, establishing wastewater and effluent discharge limits for various industry categories, and imposing requirements for controlling nonpoint-source pollution. At the federal level, the Clean Water Act is administered by the USEPA and U.S. Army Corps of Engineers (USACE). At the state and regional levels in California, the act is administered and enforced by the SWRCB and the nine RWQCBs.

Clean Water Act Section 303(d): List of Impaired Water Bodies

Section 303(d) of the CWA requires states to identify water bodies that do not meet water quality objectives and are not supporting their beneficial uses. Each state must submit an updated list, called the 303(d) list, to USEPA periodically. In addition to identifying the water bodies that are not supporting beneficial uses, the list also identifies the pollutant or stressor causing impairment, and establishes a priority for developing a control plan to address the impairment. On June 28, 2007, USEPA gave final approval to California's 2006 Section 303(d) List of Water Quality Limited Segments.

Clean Water Act Section 404

Under Section 404 of the Clean Water Act, proposed discharges of dredged or fill material into waters of the United States require USACE authorization. Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands (with the exception of isolated wetlands). The USACE identifies wetlands using a multi-parameter approach, which requires positive wetland indicators in three distinct environmental categories: hydrology, soils, and vegetation. According to the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987), except in certain situations, all three parameters must be satisfied for an area to be considered a jurisdictional wetland. The *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008) is also used when conducting jurisdictional wetland determinations in areas identified within the boundaries of the arid west, such as the Coachella Valley.

When an application for a Section 404 permit is made, the Applicant must show it has:

- Taken steps to avoid impacts to wetlands or waters of the U.S. where practicable;
- Minimized unavoidable impacts on waters of the U.S. and wetlands; and
- Provided mitigation for unavoidable impacts.

Drinking Water Regulations

The federal Safe Drinking Water Act was enacted in 1974, and allows the USEPA to promulgate national primary drinking water standards specifying MCLs for each contaminant present in a public water system with an adverse effect on human health. Primary MCLs have been established for

approximately 90 contaminants in drinking water. The USEPA also adopts secondary MCLs as non-enforceable guidelines for contaminants that may cause cosmetic or aesthetic effects. States have the discretion to adopt them as enforceable standards. USEPA has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In 1976, two years after the federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (see below).

3.9.2.2 State

Clean Water Act Section 401

Under Section 401 of the Clean Water Act, the RWQCB has regulatory authority over actions in waters of the United States and/or the State of California through the issuance of water quality certifications, which are issued in conjunction with any federal permit (e.g., permits issued by the USACE under Section 404 of the Clean Water Act, described below). Section 401 of the Clean Water Act provides the SWRCB and the RWQCBs with the regulatory authority to waive, certify, or deny any proposed activity that could result in a discharge to surface waters of the State. To waive or certify an activity, these agencies must find that the proposed discharge would comply with State water quality standards, including those protecting beneficial uses and water quality. If these agencies deny the proposed activity, the federal permit cannot be issued. This water quality certification is generally required for projects involving the discharge of dredge or fill material to wetlands or other bodies. Jurisdictional streambeds and associated riparian habitat are also regulated by the California Department of Fish and Wildlife (CDFW) under Section 1602 of the State Fish and Game Code.

Clean Water Act Section 402: National Pollutant Discharge Elimination System

In 1987, amendments to the Clean Water Act added Section 402, which established a framework to protect water quality by regulating industrial, municipal, and construction-related sources of pollutant discharges to waters. In California, the National Pollutant Discharge Elimination System (NPDES) program is administered by the SWRCB through the RWQCBs and requires municipalities to obtain permits that outline programs and activities to control wastewater and stormwater pollution. The NPDES program provides two levels of control for the protection of water quality: technology-based limits and water quality-based limits. Technology-based limits are based on the ability of dischargers to treat the water, while water quality-based limits are required if technology-based limits are not sufficient to protect the water body. The water quality-based effluent limitations required to meet water quality criteria in the receiving water are based on the National Toxics Rule, the California Toxics Rule, and the Basin Plan (see below under Porter-Cologne Water Quality Control Act).

The federal Clean Water Act prohibits discharges of stormwater from construction projects unless the discharge is in compliance with an NPDES permit. The SWRCB is the permitting authority in California, and adopted an NPDES General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) (Order 2009-0009, as amended by Orders 2010-0014-DWQ and 2012-006-DWQ). The Order applies to construction sites that include one or more acre of soil disturbance. Construction activities include clearing, grading, grubbing, excavation, stockpiling, and reconstruction of existing facilities involving removal or replacement. The Construction General Permit requires that the landowner and/or contractor file permit registration documents prior to commencing construction and then pay a fee annually

through the duration of construction. These documents include a notice of intent, risk assessment, site map, SWPPP, and signed certification statement. The SWPPP must include measures to ensure that: all pollutants and their sources are controlled; non-stormwater discharges are identified and eliminated, controlled, or treated, site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges; and BMPs installed to reduce or eliminate pollutants after construction are completed and maintained. The Construction General Permit specifies minimum BMP requirements for stormwater control based on the risk level of the site. The Permit also specifies minimum qualifications for a qualified SWPPP developer and qualified SWPPP practitioner.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) is the primary statute covering the quality of waters in California. Under the act, the SWRCB has the ultimate authority over the State's water quality policy. The SWRCB administers water rights, water pollution control, and water quality functions throughout the state, while the nine RWQCBs conduct planning, permitting, and enforcement activities. The RWQCBs also regulate water quality under this act through the regulatory standards and objectives set forth in Water Quality Control Plans (also referred to as Basin Plans) prepared for each region.

The project site is located in the jurisdiction of the Colorado River Basin RWQCB. The most current version of the Colorado River Region Basin Plan was adopted in 2014 (Colorado River Basin RWQCB 2014), and is currently undergoing its 2017 Triennial Review (). The Basin Plan has five major components: 1) identifies the waters of the region; 2) designates beneficial uses of those waters; 3) establishes water quality objectives for the protection of those uses; 4) prescribes an implementation plan; and 5) establishes a monitoring and surveillance program to assess implementation efforts.

California Safe Drinking Water Act

USEPA has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In 1976, two years after the federal Safe Drinking Water Act was passed, California adopted its own safe drinking water act (contained in the Health and Safety Code) and adopted implementing regulations (contained in Title 22 California Code of Regulations). California's program sets drinking water standards that are at least as stringent as the USEPA standards. Each community water system also must monitor for a specified list of contaminants, and the monitoring results must be reported to the state. Responsibility for the state's Drinking Water Program was transferred from the Department of Public Health to the Division of Drinking Water, which is a new division of the SWRCB created in July 2014.

California Drainage Law, Government Code 65302

Government Code Section 65302(a) requires cities and counties located within the state to review the Land Use, Conservation, and Safety elements of the general plan "for the consideration of flood hazards, flooding, and floodplains" to address flood risks. The code also requires cities and counties in the state to annually review the land use element within "those areas covered by the plan that are subject to flooding identified by floodplain mapping prepared by FEMA or the Department of Water Resources."

3.9.2.3 *Local*

CVWD Ordinance No. 1234 (as amended)

As noted above, CVWD is the designated flood control agency within its service area. CVWD Ordinance No. 1234 provides conditions of approval for development in flood hazard areas within the CVWD stormwater service area. Ordinance No. 1234 provides design standards to minimize flood damage, and indicates that any flood protection facilities not designed and constructed to these standards will not normally be owned, operated or maintained by CVWD. CVWD has adopted the Development Design Manual (2013) that sets forth the standards that CVWD has set for stormwater facilities.

City of Palm Desert General Plan

The Public Utilities and Services Element of the City of Palm Desert General Plan (City of Palm Desert 2016) provide the following policies and action applicable to the proposed project:

Policy 1.2 On-site stormwater retention and infiltration. Whenever possible, stormwater shall be infiltrated, evapotranspired, reused or treated on-site in other ways that improve stormwater quality and reduce flows into the storm drain system.

Policy 1.13 Soil erosion. Require the prevention of water-born soil erosion from sites, especially those undergoing grading and mining activities.

Policy 3.2 Water Supply. Provide a clean, reliable citywide water supply sufficient to serve existing and planned development.

Policy 3.7 Priority infrastructure improvements. Prioritize water infrastructure improvements in areas with failing, insufficient or end of useful life infrastructure.

The Work Plan of the City of Palm Desert General Plan lists the following action that the City is to undertake:

“Continue to maintain and enforce regulations and guidelines for the development and maintenance of project-specific on-site retention/detention basins to control stormwater and implement the NPDES program, including measures to enhance groundwater recharge, complement regional flood control facilities, and address applicable community design policies.”

3.9.3 *Impacts and Mitigation Measures*

3.9.3.1 *Significance Criteria*

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Violate any water quality standards or waste discharge requirements.*
- b. *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).*

- c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site.*
- d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.*
- e. 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?*
- f. Otherwise substantially degrade water quality.*
- g. 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.*
- h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?*
- i. 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.*
- j. Inundation by seiche, tsunami, or mudflow.*

3.9.3.2 Approach to Analysis

The hydrology and water quality impact analysis is based on an assessment of baseline conditions for the proposed project area, including climate, watersheds and surface waters, groundwater, and floodplains, as described in the Environmental Setting provided for this issue area. This analysis identifies potential impacts based on the predicted interaction between the affected environment and construction and operation of the proposed project. These impacts are analyzed in accordance with the significance criteria presented above.

Areas of No Project Impact

The following significance criteria are not discussed further in this section for the following reasons:

- g. 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.*

The project does not include the construction of new housing. Therefore, this significance criterion is not applicable and is not discussed further.

- j. Inundation by seiche, tsunami, or mudflow.*

The project site is not located in an area subject to inundation by seiche, tsunami or mudflows. Therefore, this significance criterion is not applicable to the project and is not discussed further.

3.9.3.3 Construction Impacts and Mitigation Measures

IMPACT HWQ-1 CONSTRUCTION OF THE PROPOSED PROJECT WOULD REQUIRE GRADING AND EXCAVATION OF SOIL, WHICH WOULD INHERENTLY INCREASE THE POTENTIAL FOR EROSION AND SEDIMENTATION OF SURFACE WATERS. CONSTRUCTION EQUIPMENT OPERATING IN THE WHITEWATER RIVER STORMWATER CHANNEL WOULD HAVE THE POTENTIAL TO LEAK OIL, DIESEL, GREASE AND OTHER CHEMICALS, RESULTING IN POTENTIAL DISCHARGES TO SURFACE WATERS OR GROUNDWATER AQUIFERS. IMPLEMENTATION OF THE REQUIRED CONSTRUCTION SWPPP WOULD MINIMIZE THE POTENTIAL FOR EROSION AND DISCHARGE OF EQUIPMENT LEAKS. VIOLATIONS OF WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS WOULD BE PREVENTED. (LESS THAN SIGNIFICANT)

Construction of the proposed project, including both Phase I and Phase II, would be required to comply with all applicable federal, state, and local water quality standards and waste discharge requirements. Because construction of the proposed project would disturb more than one acre, the project would be required to obtain a Construction General Permit pursuant to NPDES. The Construction General Permit requires development of a construction SWPPP and implementation of BMPs to prevent polluted runoff from leaving the construction site. The construction SWPPP and best management practices are designed to prevent sedimentation of both on-site and off-site surface waters from construction activities.

Construction of the project would require grading and excavation of soils, inherently increasing the potential for erosion. However, implementation of the SWPPP and BMPs would be expected to prevent sedimentation of surface waters. The construction SWPPP and BMPs would also be anticipated to prevent leaking of pollutants such as oil, grease, and chemicals from construction equipment from discharging to surface waters or groundwater. Thus, implementation of the SWPPP and BMPs would be expected to prevent violations of water quality standards during project construction. Runoff from the project site during construction would not provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality.

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. This would provide a dry work area to protect waters and preserve the work area. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agriculture lands or stormwater facilities in conformance with the Construction General Permit and applicable local discharge requirements. Impacts would be less than significant and no mitigation would be required.

IMPACT HWQ-2 CONSTRUCTION OF THE PROPOSED PROJECT WOULD REQUIRE WATER AND TEMPORARILY INCREASE POTABLE WATER DEMAND, WHICH IS FROM GROUNDWATER SOURCES. EXTENSION OF THE MID-VALLEY PIPELINE MAY REQUIRE DEWATERING DURING CONSTRUCTION, WHICH WOULD TEMPORARILY REMOVE LOCAL GROUNDWATER. HOWEVER, CONSTRUCTION WOULD BE SHORT TERM AND TEMPORARY, AND NOT DEMAND MUCH WATER USE. GROUNDWATER REMOVED FROM DEWATERING WOULD BE DISCHARGED TO BENEFICIAL REUSE PONDS OR EXISTING DRAINAGE SYSTEMS FOR AGRICULTURAL LANDS OR STORMWATER FACILITIES WHERE INFILTRATION COULD OCCUR, THEREBY MINIMIZING POTENTIAL IMPACTS. CONSTRUCTION OF THE PROJECT, INCLUDING DEWATERING, WOULD NOT SUBSTANTIALLY DEplete GROUNDWATER SUPPLIES OR INTERFERE WITH GROUNDWATER RECHARGE. (LESS THAN SIGNIFICANT)

Water required for construction of the project and testing of equipment would be potable water obtained on-site from the existing WRP10 site. The WRP10 site has sufficient water supplies to meet existing demand in combination with the temporary, short-term demands of project construction.

The minimal demand required for construction would not substantially deplete groundwater supplies.

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agriculture lands or stormwater facilities in conformance with the Construction General Permit and applicable local discharge requirements. Because groundwater removed from dewatering would be disposed of in areas where infiltration or beneficial uses could occur, construction dewatering would not substantially deplete groundwater supplies. Construction of the proposed project would have a less than significant impact and no mitigation would be required.

IMPACT HWQ-3 CONSTRUCTION OF THE PROPOSED PROJECT WOULD REQUIRE THE CONSTRUCTION WORKFORCE TO WORK WITHIN THE WHITEWATER RIVER STORMWATER CHANNEL, WHICH IS A SPECIAL FLOOD HAZARD AREA. DUE TO THE NATURE OF THE CONSTRUCTION ACTIVITIES REQUIRED IN THE WHITEWATER RIVER STORMWATER CHANNEL, CONSTRUCTION CREWS WOULD BE UNABLE TO WORK IN THE CHANNEL DURING FLOODS. THUS, CONSTRUCTION OF THE PROPOSED PROJECT WOULD NOT EXPOSE PEOPLE TO A SIGNIFICANT RISK OF INJURY OR DEATH AS A RESULT OF FLOODING. (LESS THAN SIGNIFICANT)

Construction of Phase II of the project would require construction crews to work within the Whitewater River Stormwater Channel, which as described above, is a Special Flood Hazard Area with a one percent annual chance of flooding. However, the construction activities required in the Whitewater River Stormwater Channel would involve excavation and grading, which could not be performed during periods of flood inundation. Therefore, construction crews would typically not be present within flood hazard areas during flood conditions. Construction of the proposed project would have a less than significant impact and no mitigation would be required.

3.9.3.4 Operation Impacts and Mitigation Measures

IMPACT HWQ-4 RUNOFF FROM THE EXPANDED PALM DESERT OPERATIONS UNIT MAY INCREASE THE VOLUME OF POLLUTED STORMWATER RUNOFF. HOWEVER, ON-SITE INFILTRATION BMPs WILL BE USED TO PREVENT RUN-OFF TO SURFACE WATERS. THE INCREASED CAPACITY FOR SECONDARY EFFLUENT WOULD BE OPERATED COMPLIANT WITH FEDERAL, STATE, AND LOCAL REGULATIONS. THUS, OPERATION OF THE PROPOSED PROJECT WOULD NOT VIOLATE SURFACE WATER QUALITY STANDARDS OR WASTE DISCHARGE REQUIREMENTS, PROVIDE SUBSTANTIAL ADDITIONAL SOURCES OF POLLUTED RUNOFF OR SUBSTANTIALLY DEGRADE SURFACE WATER QUALITY. RUNOFF FROM PROJECT OPERATIONS WOULD NOT EXCEED THE CAPACITY OF EXISTING OR PLANNED STORMWATER DRAINAGE SYSTEMS. (LESS THAN SIGNIFICANT)

The proposed expansion of the parking area for CVWD operations and maintenance vehicles would increase the area of impervious surface in the project area for the operational life of the project; as described, this expansion would occur outside of the WRP10 site, adjacent to the north as shown on Figure 2. The increase in impervious surface area would generate increased volumes of stormwater runoff during storm events. Stormwater runoff from urban parking lots may hold particulate matter, residual hydrocarbons, persistent organic pollutants, and trace quantities of heavy metals, such as copper and zinc (USEPA 1983). The expansion of the parking area would increase the area on which pollutants may accumulate and become concentrated; as noted, this expansion would occur adjacent to the north of the WRP10 site. During precipitation events, the accumulated pollutants on impervious parking surfaces could contaminate stormwater runoff. The proposed project has been designed such that stormwater runoff would not enter stormwater drains, but would instead flow

to pervious ground surface where pollutants could be filtered out through natural infiltration processes. Infiltration would also prevent erosion and sedimentation. Thus, stormwater runoff from project operations would not provide substantial additional sources of polluted runoff or substantially degrade water quality.

The increased capacity for secondary effluent storage at the existing WRP10 site would be operated consistent with existing procedures including federal, state, and local regulations. Treated secondary effluent would be required to meet the discharge requirements and standards of the Colorado River Basin RWQCB. In addition, during construction of the proposed facilities, stormwater would be managed in accordance with BMPs identified in a SWPPP. These BMPs would include measures to minimize erosion and sedimentation and general good housekeeping practices to limit potential discharge of pollutants associated with construction vehicle and equipment use. With implementation of BMPs per the SWPPP, construction of the proposed project would not violate surface water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or substantially degrade surface water quality. Groundwater quality is further addressed under Impact HWQ-6. Impacts would be less than significant and no mitigation would be required.

IMPACT HWQ-5 OPERATION OF THE PROJECT WOULD ALTER THE DRAINAGE PATTERNS WITHIN THE STORMWATER CHANNEL. HOWEVER, THE BASINS WOULD BE OPERATED TO ALLOW SURFACE FLOWS TO PASS THROUGH DURING STORM EVENTS. THE STORMWATER MANAGEMENT FUNCTIONS OF THE CHANNEL WOULD NOT BE ALTERED. THE BASINS WOULD INCLUDE FEATURES THAT ACCOMMODATE FLOOD EVENTS AND DO NOT RESTRICT OR IMPEDE FLOOD FLOWS. THESE FEATURES WOULD NOT REQUIRE MANUAL OPERATION AND CVWD STAFF WOULD NOT BE REQUIRED TO WORK IN THE CHANNEL OR BASINS DURING FLOOD EVENTS. THUS, OPERATION OF THE REPLENISHMENT BASINS WOULD NOT RESTRICT OR IMPEDE FLOOD FLOWS, CHANGE THE FLOOD STORAGE CAPACITY OF THE CHANNEL, RESULT IN FLOODING ON- OR OFF-SITE, OR EXPOSE PEOPLE TO SIGNIFICANT RISKS OF FLOODS. (LESS THAN SIGNIFICANT)

The proposed expansion of the parking area for CVWD operations and maintenance vehicles would increase the area of impervious surface in the project area over the operational life of the proposed project; pending ongoing re-permitting of the WRP10 site with the RWQCB, the parking area for operational vehicles will no longer be included within the boundaries of the WRP10 site. However, as noted, the increase in impervious surface area would have potential to generate increased volumes of stormwater runoff during storm events. The existing WRP10 site is not directly connected to a stormwater conveyance system for stormwater runoff management; currently, stormwater runoff from the existing WRP10 site occurs as sheet flow that is directed to pervious ground surfaces to encourage infiltration. Additional runoff from the expanded impervious parking area would be managed using this same approach, and the parking area would be designed to maintain existing runoff patterns. Thus, operation of the project would not contribute runoff water which would result in flooding. Infiltration of stormwater runoff would also prevent the potential for increased erosion from runoff.

Operation of the project would include groundwater infiltration basins located within the Whitewater River Stormwater Channel. During periods of flooding or increased stormwater runoff, stormwater will flow through the groundwater replenishment basins. Project design features include breakaway fencing / temporary berms that would be implemented at the upstream and downstream ends of the basins. These features would maintain the function of the channel for stormwater conveyance, operate without manual intervention, and not require CVWD personnel to work in the channel during flood events. These features would also be repaired as necessary following storm events. Therefore, operation of the replenishment basins would not restrict or

impede flood flows, change the flood storage capacity of the channel, result in flooding on- or off-site, or expose people to significant risks of floods. Impacts would be less than significant and no mitigation would be required.

IMPACT HWQ-6 OPERATION OF THE PROJECT WOULD INTRODUCE COLORADO RIVER WATER TO MANMADE REPLENISHMENT BASINS ON THE PROJECT SITE IN ORDER TO FACILITATE REPLENISHMENT OF THE UNDERLYING GROUNDWATER BASIN, WHICH WOULD INCREASE THE TOTAL DISSOLVED SOLIDS (TDS) IN SOME GROUNDWATER AND COULD CAUSE WATER PRODUCED BY SOME COACHELLA VALLEY WELLS TO EXCEED THE RECOMMENDED CONSUMER ACCEPTANCE CONTAMINANT LEVELS AND HEALTH-BASED STANDARDS FOR DRINKING WATER. (SIGNIFICANT AND UNAVOIDABLE)

Project impacts to groundwater quality are discussed below and are summarized based on the analyses in the Coachella Valley Water Management Plan and EIR (2002 and 2012), and the Palm Desert Groundwater Replenishment Feasibility Study prepared by Todd Groundwater (2017) incorporated by reference.

The Proposed Project would result in increased TDS concentrations near the recharge areas. Wells nearest the recharge areas could exhibit increased TDS concentrations that exceed the recommended consumer acceptance contaminant level of 500 mg/L for drinking water. However, no beneficial uses of groundwater would be compromised. This is a potentially significant impact (CVWD 2002).

Groundwater TDS concentrations are generally higher in the shallow aquifer than in the deeper production wells. TDS is a non-health based limit regulated by a consumer acceptance contaminant level range of 500 to 1,500 mg/L to avoid aesthetic concerns.

The principal source of imported water used for both direct and indirect groundwater recharge in the Coachella Valley is Colorado River water via the Coachella Canal and SWP Exchange. SWP water originates in Northern California, therefore the lack of facilities to convey this water to the Coachella Valley requires an exchange with Metropolitan; as such, CVWD and DWA exchange their SWP water with Metropolitan for Colorado River water (referred to as SWP Exchange Water or imported water), which is delivered to the project area via the Coachella Canal. This exchange results in higher salinity water being delivered to the Coachella Valley because the Colorado River water has a higher TDS content than the existing groundwater, and therefore the use of this water results in additional salt being imported to the basin. The use of Colorado River water for groundwater recharge may initially and over time have an adverse impact on the salt balance, or TDS (total dissolved solids) concentrations of the basin. Other constituents of concern in groundwater include nitrate (discussed further below), perchlorate, arsenic, and chromium-6. CVWD operates agricultural drains in the eastern portion of Coachella Valley, to aid in drainage associated with shallow groundwater and maintain a relatively constant water level in the East Valley Semi-perched aquifer, where the Thomas E. Levy Groundwater Recharge Facility (also referred to as the Dike 4 Groundwater Recharge Facility) is used to recharge groundwater (CVWD 2011). These drains, in addition to maintaining water levels, also aid in regulating TDS concentrations because as groundwater levels rise, it is exported from the basin, reducing the adverse salt balance (CVWD 2011). While this reduction is a beneficial effect, the basin will continue to experience a net adverse salt balance, which is more pronounced in the western portion of the Coachella Valley (CVWD 2011). As described, the proposed project is located in the central portion of the basin.

As discussed, operation of the proposed project includes groundwater replenishment using imported Colorado River water, via transport of Colorado River water to the Phase I and Phase II project sites. Maintenance activities for the proposed project include the occasional clearing of sediment from replenishment basins on both the Phase I and Phase II project sites, and the ongoing clearing of vegetation and debris from the stormwater channel (Phase II site) are also included.

During operation of the proposed project, current activities on the WRP10 site would continue, including the ongoing treatment and storage of effluent, or secondary treated wastewater on the WRP10 site would continue with operation of the proposed project; these actions are entirely separate from the proposed project's groundwater replenishment activities and would occur regardless of the proposed project.

As with CVWD's Whitewater River Groundwater Replenishment Facility and the Thomas E. Levy Groundwater Replenishment Facility, the proposed project would recharge imported Colorado River water to the local groundwater basin. CVWD has been conducting groundwater recharge activities in the Coachella Valley for over 50 years. Overall impacts on groundwater levels associated with these groundwater recharge efforts were found to be beneficial in the Program EIR for the Coachella Valley WMP.

As discussed above, Colorado River water has higher TDS concentrations than some native groundwater and could cause local groundwater near recharge basins to locally exceed the recommended consumer acceptance contaminant level of 500 mg/L for drinking water; however, TDS concentrations do not exceed health-based drinking water standards. Concentrations of other constituents including nitrate (discussed further below), perchlorate, arsenic, and chromium-6 are less than the drinking water standards and imported Colorado River water is not adversely affected by these constituents. CVWD monitors the quality of drinking water produced at wells near recharge areas, and will provide alternate supplies or wellhead treatment if health-based drinking water standards are exceeded. (CVWD 2006; CVWD 2011)

One of the water quality constituents noted above is nitrate; imported Colorado River water is not affected by nitrate, but existing shallow groundwater does have elevated nitrate levels. When imported Colorado River water is recharged to the local groundwater basin, it may temporarily result in elevated nitrate levels at some production wells near the recharge ponds when shallow groundwater with elevated nitrate levels migrates downward due to localized pumping. Introducing almost nitrate-free water (Colorado River water) to the local groundwater will eventually dilute existing nitrate concentrations, resulting in improved water quality over the lifetime of the project. Elevated nitrate levels in drinking water is a health concern and there are primary water quality standards in place to address nitrate. In order to ensure that the proposed project does not result in significant adverse effects associated with short-term increases of nitrate in groundwater, CVWD will implement mitigation which includes monitoring of domestic groundwater quality. If monitoring indicates that groundwater used for drinking water purposes exceeds a health-based drinking water standard due to the proposed recharge activities, CVWD will remove impacted wells from service and work with individual well owners to bring the drinking water supply into compliance by either providing domestic water service from CVWD's domestic water system, or by providing appropriate well-head treatment until primary water quality standards are achieved. This mitigation is presented below as HYD-1.

The Coachella Valley WMP Program EIR found that overall impacts to water quality associated with groundwater recharge efforts (such as would occur under the proposed project) would be potentially significant. A Statement of Overriding Considerations for the Coachella Valley WMP Program EIR was adopted for significant irreversible environmental change where drinking water standards may be exceeded in some groundwater.

As discussed above, salt loading (TDS concentration) is an existing groundwater quality consideration in the proposed project area. It is possible that the infiltration of Colorado River water associated with the project could increase salt concentrations. The proposed replenishment activities would result in increased TDS concentrations and could cause short-term increased nitrate

concentrations at some local production wells, but long-term effects of the project on water quality would be beneficial.

Mitigation Measure

Mitigation Measure HYD-1 would apply to the proposed project:

Mitigation Measure HYD-1: Monitor Groundwater Drinking Wells and Ensure Health-based Water Standards are Met.

Coachella Valley Water District shall continue to monitor the quality of groundwater produced drinking water wells located near the groundwater recharge areas to ensure that all recognized health-based drinking water standards are met. If monitoring shows that the groundwater pumped from these wells exceeds any health-based drinking water standards due to recharge activities, CVWD will remove impacted wells from service and work with well owners to bring the drinking water supply into compliance by either providing domestic water from the domestic water system or providing appropriate well-head treatment within their respective service areas.

Timing	During Project Operation
Party Responsible for Implementation	Coachella Valley Water District
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Coachella Valley Water District reports monitoring results to the Division of Drinking Water to ensure sufficiency of mitigation requirements and to meet drinking water standards.

Significance After Mitigation

Since there is no feasible mitigation measure that would not be environmentally or economically prohibitive, mitigation of groundwater quality impacts to below a level of significance is not feasible, the project would result in a significant and unavoidable impact.

3.9.3.5 Cumulative Impacts

The Coachella Valley WMP Program EIR determined that groundwater recharge efforts in the Coachella Valley address groundwater overdraft conditions throughout the valley, and the overall cumulative effect on groundwater levels is beneficial. Additionally, reducing (or eliminating) overdraft conditions helps to prevent saline water under the Salton Sea from intruding into groundwater in the Coachella Valley, which is also a beneficial cumulative effect. Groundwater recharge activities would continue to increase saline (TDS) concentrations compared to current conditions near existing and proposed recharge basins; these effects and other significant changes to groundwater quality were evaluated in the 2002 WMP and the 2010 WMP, which determined that no new feasible mitigation measures for cumulative groundwater quality effects are available. The proposed project would result in cumulatively significant impacts to groundwater quality.

3.10 Land Use and Planning

The project site consists of the existing WRP10 site, adjacent ponds to the north of the existing WRP10 site, and adjacent section of the Whitewater River Stormwater Channel in Palm Desert. The project site also includes the existing MVP Pump Station located in Indio. Both of these cities are located in central Riverside County, approximately 70 miles east of Riverside and 122 miles east of Los Angeles. Neighboring cities within 15 miles of the project site area include the cities of Palm Springs, Indian Wells, La Quinta, and Cathedral City. The regional location is shown in Figure 2.

3.10.1 Project Site Setting

The existing WRP10 site occurs across several parcels that are zoned either Public Facility (P) or Service Industrial (SI). The proposed project would occur on areas of the existing WRP10 site and adjacent to the north of the existing WRP10 site that are zoned Public Facility (P). The City of Palm Desert General Plan (City of Palm Desert 2016) designates this area of the existing WRP10 site as Public Facilities/Institutional. The portion of the Whitewater River Stormwater Channel adjacent to the south of the WRP10 site is zoned Open Space (OS) and is designated as Open Space in the City of Palm Desert General Plan.

The MVP Pump Station in Indio is located partially within the maintained right-of-way of the Coachella Canal. The Coachella Canal right-of-way is zoned All American Canal (AAC) (City of Indio 2009). The City of Indio General Plan Land Use Diagram (City of Indio 2007) designates the canal right-of-way as Public.

The existing WRP10 site is bordered to the north by Hovley Lane East and residential development. To the east, the site is bordered by residential development and a golf course. CVWD's permit for operation of the WRP10 site is under revision by the Colorado River Basin RWQCB and, as revised, the border of the WRP10 site is approximately at Merle Drive, as shown on Figure 2, such that the Phase I activities included under the proposed project would not occur within the WRP10 site. To the west, the existing WRP10 site is bordered by Cook Street and commercial and light-industrial uses. The Whitewater River Stormwater Channel is located adjacent to the southern boundary of the existing WRP10 site. To the south of the Whitewater River Stormwater Channel is existing residential development. The MVP Pump Station in Indio is bordered to the south and east by the Whitewater River Stormwater Channel, and to the north by a transmission tower. The MVP Pump Station site is bordered to the west by the Coachella Canal. West of the canal is an electrical substation, residential development, and a golf course.

3.10.1.1 Plan Consistency

The State CEQA *Guidelines*, Section 15125(d), states that the environmental setting of an EIR must discuss "any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans."

As described above, the City of Palm Desert General Plan designates the project area as Public Facilities/Institutional and Open Space (City of Palm Desert 2016). According to the City of Palm Desert General Plan, the purpose of the Public Facility/Institutional District is to provide for government buildings and schools facilities including: civic center, libraries, community centers, senior centers, fire stations, corporate yards, both public and private schools/universities and similar uses. The City of Palm Desert General Plan does not directly describe an intended purpose or

allowable use(s) for areas designated as Open Space. However, the proposed project would effectively be a continuation of existing operations at the WRP10 site and maintenance of the Whitewater River Stormwater Channel, with existing ponds repurposed for infiltration and new basins in the stormwater channel. The proposed project would be consistent with the City of Palm Desert General Plan.

The City of Indio General Plan Land Use Diagram (City of Indio 2007) designates the MVP Pump Station portion of the project site as Public. According to the City of Indio General Plan, the purpose of the Public land use designation is to provide for a variety of public and quasi-public facilities which support the community and are operated by governmental agencies, utility providers, or non-profit organizations (City of Indio 1994). The proposed project would be consistent with the City of Indio General Plan.

3.10.2 Regulatory Framework

3.10.2.1 *Federal*

There are no federal regulations pertaining to land use and planning that are applicable to the proposed project.

3.10.2.2 *State*

There are no State regulations pertaining to land use and planning that are applicable to the proposed project.

3.10.2.3 *Regional*

Coachella Valley Multiple Species Habitat Conservation Plan

The overall goal of the Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP) is to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth (Coachella Valley Conservation Commission 2008). The Coachella Valley MSHCP serves two primary purposes: 1) balancing environmental protection and economic development objectives in the Coachella Valley MSHCP area; and, 2) simplifying compliance with endangered species related laws. The Coachella Valley MSHCP is a comprehensive regional plan that addresses the conservation needs of 26 species of native flora and fauna (5 plants, 2 insects, 3 reptiles, 11 birds, and 5 mammals) and 24 natural vegetation communities occurring throughout the Coachella Valley region of Riverside County. The Coachella Valley MSHCP area includes approximately 1.2 million acres in the Coachella Valley and surrounding mountains. The project site is not located within any of the conservation areas of the Coachella Valley MSHCP.

3.10.2.4 *Local*

City of Palm Desert General Plan

The City of Palm Desert General Plan (City of Palm Desert 2016) was adopted on November 10, 2016. The City of Palm Desert General Plan is the principal tool for guiding the physical form and development of the city. It is a visionary document that lays out the community's long-term goals and objectives for the future. It contains the City's official policies on land use and community design, mobility, housing, infrastructure, economics, health, and public facilities and services. The

Environmental Resources Element and the Public Utilities and Services Element of the City of Palm Desert General Plan provide the following policies applicable to the proposed project:

- Environmental Resources Element of the City of Palm Desert General Plan
 - **Policy 1.5 Waterways as amenities.** When considering development applications and infrastructure improvements, treat waterways as amenities, not hazards, and encourage designs that embrace the waterways.
 - **Policy 3.2 Grading and vegetation removal.** Limit grading and vegetation removal of new development activities to the minimum extent necessary to reduce erosion and sedimentation.
 - **Policy 3.3 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.
- Public Utilities and Services Element of the City of Palm Desert General Plan
 - **Policy 3.1 Agency coordination.** Coordinate on an ongoing basis with the Coachella Valley Water District, and other agencies responsible for supplying water to the region.
 - **Policy 3.2 Water Supply.** Provide a clean, reliable citywide water supply sufficient to serve existing and planned development.
 - **Policy 3.3 Water infrastructure.** Maintain existing water infrastructure to protect the supply, quality, and delivery of potable water.
 - **Policy 3.7 Priority infrastructure improvements.** Prioritize water infrastructure improvements in areas with failing, insufficient or end of useful life infrastructure.
- The Work Plan of the City of Palm Desert General Plan lists the following action that the City is to undertake:
 - Continue to maintain and enforce regulations and guidelines for the development and maintenance of project-specific on-site retention/detention basins to control stormwater and implement the NPDES program, including measures to enhance groundwater recharge, complement regional flood control facilities, and address applicable community design policies.

City of Indio General Plan

The City of Indio General Plan (City of Indio 1994) was originally adopted in 1993, amended in 1994, and is currently undergoing an update process. The following goal in the current City of Indio General Plan is applicable to the proposed project:

- **Goal DW-1.** Provide for the planning and funding mechanism to construct, expand, and maintain water facilities (transmission, storage, distribution, and treatment) needed to meet current and future demand.

3.10.3 Impacts and Mitigation Measures

3.10.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would meet any of the following criteria:

- a. *Physically divide an established community.*
- b. *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.*
- c. *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

3.10.3.2 Approach to Analysis

This analysis evaluates the potential for land use impacts, including short-term impacts on existing land uses that could result from temporary construction activities, and long-term impacts that could result from the siting, operation, and maintenance of proposed project facilities. The analysis compares the existing land use setting and planning goals for consistency and compatibility of the proposed project during construction and operations. Local planning documents and maps, as described above, were reviewed and site surveys were conducted to characterize existing land uses on and adjacent to the project sites. Applicable plans and policies were reviewed to determine their applicability to the project and whether a proposed project facility would be inconsistent with the relevant policy, plan or regulation.

Area of No Project Impacts

As explained below, the proposed project would not result in impacts related to two of the above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- a. *Physically divide an established community.*

Phase I of the proposed project would primarily occur adjacent to the north of the existing WRP10 site, where groundwater replenishment ponds would be implemented; Phase I would also occur within the WRP10 site, where the MVP would be extended to transmit imported Colorado River water to the new replenishment ponds, as well as the new pump station that would be implemented within WRP10 as part of Phase I. The boundaries of the WRP10 site would not be expanded or encroach into an established community. Phase II of the proposed project would be located within the Whitewater River Stormwater Channel immediately adjacent to the WRP10 site. There are no communities, other properties, or other land uses located between the WRP10 site and Whitewater River Stormwater Channel where project components would be constructed and operated. Upgrading the capacity of the MVP Pump Station would occur at the existing pump station site located within the right-of-way for the Coachella Canal. Therefore, the proposed project would not divide an established community and would have no impact.

c. *Conflict with any applicable habitat conservation plan or natural community conservation plan.*

The project site is not located within a conservation area of the Coachella Valley MSHCP or within any other habitat or natural community conservation plans. The proposed project would not conflict with any such plans and would have no impact.

3.10.3.3 Construction Impacts and Mitigation Measures

IMPACT LUP-1 POTENTIAL ENVIRONMENTAL IMPACTS RESULTING FROM CONSTRUCTION OF THE PROJECT WOULD NOT CONFLICT WITH AN APPLICABLE LAND USE PLAN, POLICY, OR REGULATION THAT HAS BEEN ADOPTED WITH THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL IMPACT. (LESS THAN SIGNIFICANT)

The State CEQA Guidelines require that an EIR consider whether a proposed project may conflict with any applicable land use plan, policy, or regulation that was adopted for the purpose of avoiding or mitigating an environmental impact. This environmental determination differs from the larger policy determinations of whether a proposed project is consistent with a jurisdiction's general plan and land use designation. Conflicts of a project with land use policies do not alone constitute significant environmental impacts; policy conflicts are considered environmental impacts only when they would result in direct environmental effects. To the extent that physical environmental impacts may result from such conflicts, the EIR discloses and analyzes these physical impacts under the specific environmental issue area sections. When applicable, mitigation measures to reduce to avoid impacts are identified to reduce potential impacts to a less-than-significant level. Operation of the proposed project would be consistent with existing land uses on the project site and would not conflict with an applicable land use plan, policy, or regulation. Construction of the proposed project would introduce temporary adverse effects such as traffic, noise, air quality emissions, and ground disturbance that could result in erosion or sedimentation; however, compliance with BMPs and mitigation measures identified in this EIR would ensure that impacts associated with land use plans, policies, and regulations would remain less than significant, and would be limited to the temporary construction period. As such, potential impacts associated with conflicts with applicable land use plans, policies, or regulations would therefore be less than significant without mitigation.

3.10.3.4 Operation Impacts and Mitigation Measures

IMPACT LUP-2 POTENTIAL ENVIRONMENTAL IMPACTS RESULTING FROM OPERATION OF THE PROJECT WOULD NOT CONFLICT WITH AN APPLICABLE LAND USE PLAN, POLICY, OR REGULATION THAT HAS BEEN ADOPTED WITH THE PURPOSE OF AVOIDING OR MITIGATING AN ENVIRONMENTAL IMPACT. (LESS THAN SIGNIFICANT)

Specific environmental issue area discussions presented throughout this chapter disclose and analyze the potential environmental physical impacts resulting from operation and maintenance activities; when applicable, mitigation measures to reduce or avoid impacts are identified. After mitigation, the potential environmental impacts of project operations would have a less than significant impact with regards to conflicts with land use plan, policy, or regulations that were adopted for the purpose of avoiding or mitigating an environmental impact.

As discussed above for the City of Palm Desert General Plan, a number of General Plan policies are applicable to the proposed project; as a water supply reliability project, the proposed project is consistent with applicable policies, including those listed below.

- Policy 3.1 Agency coordination
- Policy 3.2 Water Supply

- Policy 3.3 Water infrastructure
- Policy 3.7 Priority infrastructure improvements

In addition, the City of Indio General Plan includes Goal DW-1, which is to provide for the planning and funding mechanism to construct, expand, and maintain water facilities needed to meet current and future demand. The MVP Pump Station, which would receive two new pumps under the proposed project, is located within Indio; this feature of the proposed project would be consistent with the General Plan by facilitating water supply reliability in the project area.

There are no significant and unavoidable impacts associated with land use and planning. Operational impacts would be less than significant without mitigation.

3.10.3.5 Cumulative Impacts

As discussed in the impact analysis provided above, the project would be consistent with applicable land use plans, policies, and regulations for the area; as such, potential impacts associated with land use and planning would be less than significant. Therefore, the proposed project would not contribute to the cumulative scenario for impacts to land use and planning, and would not combine with similar impacts of other projects to result in a considerable contribution to any cumulative impacts.

3.11 Mineral Resources

This section describes the availability of mineral resources in the project site, and analyzes the project's potential to adversely affect these resources.

3.11.1 Environmental Setting

The California Geological Survey (CGS), classifies land solely on the basis of geologic factors and without regard to existing land use. CGS has mapped nonfuel mineral resources of the State to show where economically significant mineral deposits are either present or likely to occur based on the best available scientific data. These resources have been mapped using the California Mineral Land Classification System, which includes the following four Mineral Resource Zones (MRZs):

- **MRZ-1.** Areas where available geologic information indicates that little likelihood exists for the presence of significant mineral deposits.
- **MRZ-2.** Areas where adequate information indicates that significant mineral deposits are present, where it is judged that a high likelihood for their presence exists, or contains known economic mineral deposits.
- **MRZ-3.** Areas containing known or inferred mineral occurrences of undetermined mineral resource significance.
- **MRZ-4.** Areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources.

The project site has been mapped by the CGS (2007) as MRZ-1. Nearly the entire area within the city limits of Palm Desert and Indio have been mapped by the CGS as MRZ-1. There are no mines or quarries within the project site or in nearby areas.

It should be noted that although the CGS (2007) mapping identifies the city of Palm Desert as MRZ-1, the City of Palm Desert General Plan specifies that the entire city is in an MRZ-3 classification (City of Palm Desert 2016).

3.11.2 Regulatory Framework

3.11.2.1 *Federal*

There are no federal regulations governing mineral resources that apply to the project site.

3.11.2.2 *State*

State Mining and Reclamation Act

The State Mining and Reclamation Act (SMARA) was enacted in 1975 in response to land use conflicts between urban growth and essential mineral production. In accordance with SMARA, the State has established the Mineral Land Classification System to help identify and protect mineral resources in areas that are subject to urban expansion or other irreversible land uses that would preclude mineral extraction. Protected mineral resources include construction materials, industrial and chemical mineral materials, metallic and rare minerals, and non-fluid mineral fuels.

3.11.2.3 Local

There are no local regulations governing mineral resources that apply to the project site.

3.11.3 Impacts and Mitigation Measures

3.11.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would meet any of the following criteria:

- a. *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.*
- b. *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.*

3.11.3.2 Approach to Analysis

Impacts to mineral resources were assessed using the significance criteria listed above. This analysis evaluates whether the project would directly or indirectly preclude access to or development of mineral resources, mines, quarries, or aggregate sites considered locally or regionally significant or important.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to either of the two above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- a. *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.*

As described above, there are no mines, aggregate pits or quarries within the project site, and the CGS (2007) mapping identifies the entire project site and surrounding vicinity as having little likelihood for the presence of significant mineral deposits. Although the City of Palm Desert General Plan indicates the city is an MRZ-3 classification, a large portion of the project site is developed with the existing WRP10 facilities. As known mineral resources of value are not present or likely to be present, or are precluded by existing uses if present, the proposed project would have no impact.

- b. *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.*

There are no important mineral resource recovery sites delineated on a local general plan or other land use plan within the project site. According to the City of Palm Desert General Plan (City of Palm Desert 2016), the city, including the project site, is located in the MRZ-3 classification. The City of Palm Desert General Plan states that areas within the city may contain mineral deposits that may qualify as mineral resources. A large portion of the project site is developed with the existing MVP Pump Station and WRP10 facilities, which precludes development of mineral resources. The remainder of the project site consists of the Whitewater River Stormwater Channel, which has been developed to manage stormwater runoff events. Thus, current uses of the project site have

precluded availability to or exploration of potential mineral resources in the project site. The proposed project would have no impact.

3.11.3.3 Construction Impacts and Mitigation Measures

There are no known mineral resources of local or regional importance or value within the project site. Construction of the proposed project would have no impact on mineral resources.

3.11.3.4 Operation Impacts and Mitigation Measures

There are no known mineral resources of local or regional importance or significance within the project site. Operation of the project would have no impact.

3.11.3.5 Cumulative Impacts

The proposed project would have no direct or indirect impacts to mineral resource. Thus, the proposed project would not have a cumulative contribution to cumulative impacts on mineral resources.

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3.12 Noise and Vibration

This section describes and analyzes the current noise environment in the areas where project facilities will be located, and evaluates the potential impacts associated with the construction of these facilities. The analysis in this section is based on noise measurements taken at the nearest sensitive receptors, and the Roadway Construction Noise Model (RCNM). The RCNM estimates combined noise levels associated with construction equipment based on industry standard noise levels and load factors from individual pieces of equipment (FHWA 2017). Results are provided in Appendix D. In addition, although the Palm Desert Municipal Code Section 9.24.060 exempts essential public services and facilities from the provisions of the City's noise regulations, this analysis includes an evaluation of project consistency with the City of Palm Desert General Plan and Municipal Code for informational purposes, and to develop noise mitigation measures, where feasible.

3.12.1 Environmental Setting

3.12.1.1 Noise Fundamentals

Noise is defined as “unwanted sound”. Unwanted sound includes noise that interferes with normal activities, inflicts physical harm on individuals, or causes adverse effects on health. Excessive noise or prolonged exposure to noise can contribute to temporary and permanent impairments, such as hearing loss, fatigue, stress, sleep deprivation, anxiety and annoyance. Although noise has been accepted as a necessary by-product of urban development, it can become an environmental hazard. A variety of components of the urban environment generate noise; these include construction equipment and activities, motor vehicles, air traffic, mechanical equipment, household appliances, and other sources.

Noise can result from “line sources” or “point sources.” Line sources include linear sources of noise, such as a freeway or busy street. Point sources are generally stationary, such as HVAC units, or air compressors proposed as part of the project.

Noise is measured on a logarithmic scale of sound pressure level known as a decibel (dB). A-weighted decibels (dBA) approximate the subjective response of the human ear to broad frequency noise sources by discriminating against very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies that are audible to the human ear.

The logarithmic nature of the decibel means that a doubling of sound energy of a noise source results in an increase in the decibel rating of only 3 dBA. For example, the doubling of traffic noise on a busy street will generally only increase sound levels by 3 dBA. Changes of 3 dBA are barely perceptible to the human ear. In order for a human ear to perceive a sound as being twice as loud, the sound must increase by nearly 10 dBA.

Noise levels are measured in several ways to account for different human responses to noise under different conditions. In this analysis, two common measurement tools are utilized:

- Equivalent sound levels (Leq) are calculated from sound pressure levels typically measured in dBA. Leq represents a steady state sound level containing the same total energy as a time varying signal over a given sample period, and is commonly used to describe the “average” noise levels.

- The Community Noise Equivalent Level (CNEL) is a weighted average of the intensity of a sound, with adjustments for time of day, and averaged over 24 hours. The adjustments are made to account for the noise sensitive time periods during the evening and night hours, when sound appears louder. CNEL does not represent the actual sound level heard at any particular time, but rather represents the total sound exposure in a 24 hour period. It is most commonly used in city and county General Plans to describe acceptable, conditionally acceptable and unacceptable noise levels for different types of land uses.

Noise transmission is affected by a variety of factors, such as temperature, wind speed and direction, as well as the type of ground surface. Soft ground surfaces tend to reduce sound levels better than hard surfaces. This reduction of sound intensity caused by surfaces, walls, vegetation or other material is called attenuation. Construction noise levels would diminish with distance from the construction site, at a rate of approximately 6 dBA per doubling of distance as equipment is generally stationary or confined to specific areas during construction. It should be noted that construction noise and vibration level estimates do not account for the presence of intervening structures or topography, which would further reduce noise and vibration levels at receptor locations. Effective noise barriers, such as walls or berms, can help reduce noise levels by 10 to 15 decibels by providing relief from traffic noise. Vegetation, on the other hand, is less effective for reducing noise levels. For a noise barrier to work, walls need to be high enough and long enough to block the view of a road.

3.12.1.2 Existing Noise Conditions at Project Site

The proposed project is located in the central portion of the Coachella Valley in Palm Desert. Development in Palm Desert is primarily residential and resort-oriented, with commercial nodes on major arterials. With the exception of lands immediately adjacent to major arterials, highways, freeways and railroad lines, noise levels in Palm Desert are generally low, and controlled by noise attenuating walls surrounding residential communities and neighborhoods.

The proposed project would be implemented in two phases. In addition, the proposed project includes extension of the existing MVP to convey Colorado River water to Phase II of the project. The locations of the two phases are shown on Figure 2, Project Site and Vicinity, in Section 2.0, *Project Description*. Phase I would occur adjacent to the north of CVWD's existing WRP10, located at 43-000 Cook Street, and partially within the WRP10 site (pipeline extension). Phase I is adjacent to CVWD's administration and operations building and parking to the north and residential development north of Hovley Lane East; a golf course and residential development to the east; the Whitewater River Stormwater Channel and residential development to the south; and industrial uses and residential development to the west.

Phase II of the proposed project would occur within the existing Whitewater River Stormwater Channel, located to the south-southwest of WRP10. Phase II is adjacent to the WRP10 site to the north; Fred Waring Drive to the east; Palm Lake and Desert Rose residential developments to the south; Cook Street to the west; and Palm Desert High School southwest of Cook Road and industrial uses northwest of Cook Road. The pipeline extension included under the proposed project would occur within the Whitewater River Stormwater Channel, from the existing WRP10 site west to Cook Street, a distance of approximately 0.5 mile.

As shown on Figure 9, Rincon Consultants collected 15-minute noise level measurements at four locations within the project area, surrounding the Phase I and Phase II sites.

Figure 9 Noise Measurement Locations



Figure 9 shows ambient noise levels at each of the measurement locations. All four sites were selected for their proximity to the Phase I and Phase II project sites and their ability to characterize the typical noise environment for sensitive receptors within the project area. Noise measurements were not taken at the MVP Pump Station because work conducted at that location would occur entirely within the existing pump house, and the number and types vehicles traveling to the site during implementation of the proposed project would be comparable to the number and types of vehicles currently traveling to the site for current operation and maintenance activities.

Table 18 15-Minute Ambient Noise Level Measurements

Location Number	Primary Noise Source	Sample Date/Time	dBA Leq Measured	dBA Lmax Measured ¹
NM1	Vehicle Traffic on Cook Street 319 feet northwest	5/10/2017 10:35 a.m. – 10:50 a.m.	64.0	76.0
NM2	Vehicle traffic on Fred Waring Drive, 856 feet south	5/10/2017 11:15 a.m. – 11:30 a.m.	46.2	66.8
NM3	Construction on WRP10 500 feet to the west	5/10/2017 11:45 a.m. – 12:00 p.m.	46.8	63.0
NM4	Vehicle traffic on Hovley Lane E 15 feet to the south	5/10/2017 12:15 p.m. – 12:30 p.m.	67.9	79.3

¹ Lmax is the highest root mean squared sound pressure level within the measurement period.

As shown, the ambient noise level measurements for the proposed project were conducted between approximately 10:35 a.m. and 12:30 p.m.; these times were selected to be indicative of average daily conditions. Using noise level measurements during off-peak traffic times is a more conservative approach than using peak-traffic noise measurements because off-peak traffic noise levels are lower than peak traffic noise, meaning that the project-related construction noise would create a larger increase above ambient levels during off-peak hours than during peak hours.

3.12.2 Regulatory Framework

3.12.2.1 Federal

No federal regulations pertaining to noise would be applicable to the proposed project.

3.12.2.2 State

Chapter 12 of the California Building Code

Appendix Chapter 12 of the California Building Code applies to all new construction in the State of California. Title 24 requires that interior noise levels attributable to exterior sources must not exceed 45 dB in any habitable room.

3.12.2.3 *Local*

City of Palm Desert General Plan

The City of Palm Desert is not the CEQA Lead Agency for the project and it is not required that the City's thresholds be applied to the analysis of the proposed project. However, the CEQA lead agency (CVWD) may elect to apply these thresholds or be consistent with them, as practicable. The Noise Element of the City of Palm Desert General Plan (City of Palm Desert 2016) relies on the Noise Compatibility Matrix, shown in Figure 10, to define the level of acceptable noise, or CNEL standards, for different land uses in the city. This matrix is used to ensure noise compatibility of proposed land uses and helps predict the future noise environment. Where sensitive land uses will be exposed to noise levels of 60 dBA CNEL or higher, an acoustical study may be required. In residential areas, the standard is 65 dBA CNEL. Noise reduction measures are included where sensitive land uses will be exposed to noise levels greater than 65 dBA CNEL. As shown in Figure 10, the normally acceptable noise level for utility facilities, is 75 dBA CNEL. The predominant noise source in Palm Desert, as in most communities in the Coachella Valley, is vehicular traffic. Major roadways identified in the City of Palm Desert General Plan near the project site include Cook Street to the west and Fred Waring Drive to the south. Cook Street, on the upstream end of the Phase II area, and Fred Waring Drive, on the downstream end of the Phase II area, are both high-volume roadways. Freight rail service along the Union Pacific Railroad lines located immediately south of and parallel to Interstate 10, approximately 2.5 miles north of Phase I and 3.3 miles north of Phase II, are also responsible for generating substantial noise levels in the area. Other common noise sources in Palm Desert include industrial operations, construction activities, special event noise, commercial activities that include live music, lawnmowers and leaf blowers. Noise-sensitive receptors within the Palm Desert planning area include schools, libraries, and senior care facilities. (City of Palm Desert 2016a)

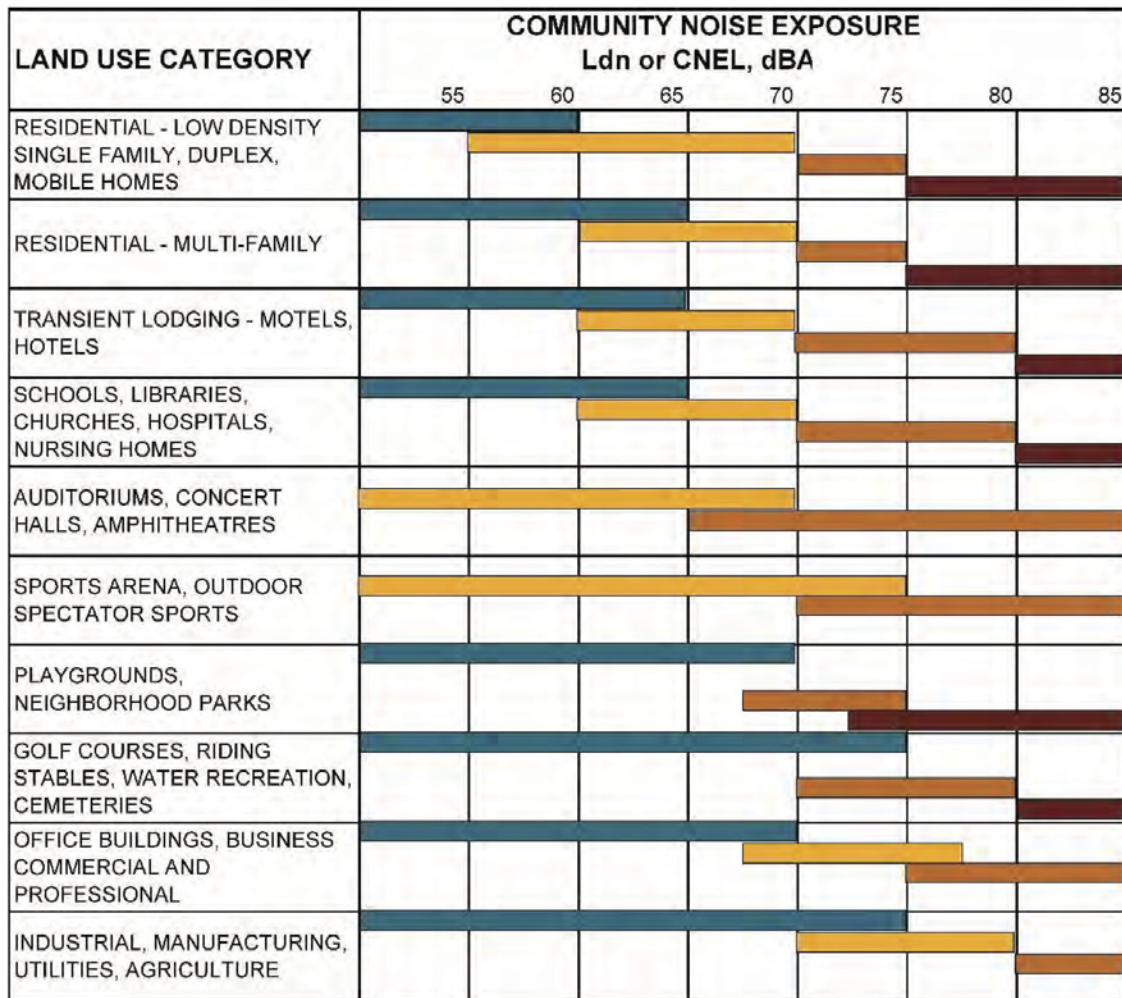
Key goals and policies of the Noise Element (City of Palm Desert 2016a) include:

Goal 2. Stationary Sources of Noise. A city with minimal noise from stationary sources.

Policy 2.1 Noise Ordinance. Minimize noise conflicts between neighboring properties through enforcement of applicable regulations such as the City's Noise Control Ordinance.

Policy 2.2 Noise Control. Ensure that noise impacts from stationery sources on noise-sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities, night clubs and bars, and special events are minimized.

Figure 10 Noise Compatibility Matrix



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

Guidelines for the Preparation and Content of Noise Elements of the General Plan, California Office of Planning and Research, 2003.

Palm Desert Municipal Code Standards

The City of Palm Desert addresses noise levels that are acceptable on an ongoing, daily basis, and noise levels during construction. Daily operational noise standards are shown in Table 19 below. If the measured ambient noise level exceeds the applicable limit as noted in the table, the allowable average sound level shall be the ambient noise level.

Table 19 Operational Sound Level Limits

Land Use ¹	Time Period	Applicable Ten-Minute Average Decibel Limit (A-weighted sound level; dBA)
Commercial	7:00 a.m. to 10:00 p.m.	65
	10:00 p.m. to 7:00 a.m.	55
Residential (All Zones)	7:00 a.m. to 10:00 p.m.	55
	10:00 p.m. to 7:00 a.m.	45
Public Institutional	7:00 a.m. to 10:00 p.m.	65
	10:00 p.m. to 7:00 a.m.	55
Manufacturing Industrial	7 a.m. to 10 p.m.	70
Agricultural	10 p.m. to 7 a.m.	55

¹ The sound level limit between two zoning districts shall be measured at the higher allowable district.

Source: City of Palm Desert Municipal Code, Section 9.24.030 (A), 2017

3.12.2.3.1 Stationary Source Standards

The City of Palm Desert has established standards in its Municipal Code for stationary sources of noise. In general, these standards are associated with generators, pool pumps, and HVAC equipment associated with residential, commercial, and industrial development. Specialized equipment that will be used for the proposed project is not explicitly addressed in local ordinances.

3.12.2.3.2 Construction Standards

Palm Desert Municipal Code Section 9.24.060 exempts noise sources associated with construction activities from the daily operational sound level limits shown in Table 19. Palm Desert Municipal Code Section 9.24.070 limits construction activities to the hours shown Table 20.

Table 20 City of Palm Desert Allowable Construction Hours

Month/Day	Time Period
October 1st through April 30th	
Monday through Friday	7:00 a.m. to 5:30 p.m.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	None
Government code holidays	None
May 1st through September 30th	
Monday through Friday	6:00 a.m. to 7:00 pm.
Saturday	8:00 a.m. to 5:00 p.m.
Sunday	None
Government code holidays	None
Source: City of Palm Desert Municipal Code, Section 9.24.070	

3.12.2.3.3 Construction Vibration Standards

This analysis applies the following vibration thresholds established by the Federal Transit Administration (FTA) for disturbance of people: 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). These thresholds apply to “frequent events,” which the FTA defines as vibration events occurring more than 70 times per day. The thresholds for frequent events are considered appropriate because of the scale and duration of proposed construction activity. In addition, this analysis applies thresholds for intermittent sources in the Caltrans (2013) *Transportation and Construction Vibration Guidance Manual* for potential damage to buildings. Caltrans considers the architectural damage risk level to be between 0.08 and 0.5 inches per second (in/sec) peak particle velocity (PPV) depending on the type of building that is affected (Caltrans 2013). Table 21 shows the thresholds applied by Caltrans, which are expressed in terms of maximum in/sec of PPV.

Table 21 Vibration-Related Building Damage Thresholds

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources ¹	Continuous/Frequent Intermittent Sources ²
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

¹ Transient sources create a single, isolated vibration event, such as blasting or drop balls.
² Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.
in/sec = inches per second
PPV = peak particle velocity
Source: Caltrans 2013

A formula provided in the Caltrans guidance manual is used to calculate the attenuation of vibration from a reference distance of 25 feet to the distances of the nearest sensitive receptors:

$$PPV = PPV_{ref} \times (25/D)^n \text{ (in/sec)}$$

This formula takes into account the reference vibration level (PPV_{ref}), the distance from vibration-generating equipment to the receptor (D), and a constant value related to the attenuation rate through the ground (n). The n-value for this analysis is assumed to be 1.1. This value applies to dense, compacted soil that is appropriate for a developed urban environment. While all soil in the project area may not be characterized as dense, compacted soil, Caltrans recommends an n-value of 1.1 for a conservative analysis.

Sensitive Receptors

Noise-sensitive land uses typically include residences, hospitals, schools, guest lodging, libraries, and parks. The City of Palm Desert General Plan defines noise-sensitive receptors as housing, schools, libraries, parks, and senior care facilities. The closest sensitive receptors to the Phase I and Phase II project sites are the adjacent single-family residences, east of the Phase I site and south of the Phase II site. All construction activities within the Phase I site would be located at least 150 feet from residences to the east and at least 800 feet from residences north of Hovley Lane. All construction activities within the Phase II site would be located at least 80 feet from residential uses to the south, 350 feet to residential uses near Fred Waring Drive to the north, and 500 feet southwest of Palm Desert High School. The pipeline extension would occur within the Whitewater River Storm Channel, from the WRP10 site and continue to Cook Street, approximately 200 feet from residential uses to the south and 300 northeast of the Palm Desert High School.

3.12.2.3.4 Methodology

Construction noise estimates and ground-borne vibration estimates are based upon noise levels reported by the Federal Highway Administration (FHWA; 2006), *Highway Construction Noise*

Handbook, and the distance to nearby sensitive receptors. Reference levels from that document were then used to estimate noise levels at nearby sensitive receptors based on a standard attenuation rate of 6 dBA per doubling of distance (line-of-sight method of sound attenuation for point sources of noise). Construction noise level estimates do not account for the presence of intervening structures or topography, which could reduce noise levels at receptor locations. All construction-related noise levels are assessed at a standard distance of 50 feet from the source to account for heavy equipment use that would be concentrated near the center of the site, away from property boundaries. As discussed in Section 3.12.3.3, above, a formula provided in the Caltrans guidance manual is used to calculate the attenuation of vibration from a reference distance of 25 feet to the distances of the nearest sensitive receptors. Noise from construction equipment is then estimated at project-specific distances between the project site (where construction activity would take place) and nearby receptors. The nearest sensitive receptors are single-family residences that are at least 80 feet from Phase I and Phase II construction activities; therefore, vibration levels are further assessed at a distance of 75 feet and 100 feet to the nearest sensitive receptors. Construction equipment included in this analysis is based on an assumption of the number and type of equipment required to construct Phase I and Phase II of the proposed project. This analysis assumes that construction equipment for Phase I and Phase II would not be operating concurrently.

3.12.3 Impacts and Mitigation Measures

3.12.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Expose persons to or generate noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*
- b. *Expose persons to or generate excessive ground-borne vibration or ground-borne noise levels.*
- c. *Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*
- d. *Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*
- e. *Expose people residing or working in the project area to excessive noise levels, if 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 airports.*
- f. *Expose people residing or working in the project area to excessive noise levels, if located within the vicinity of a private airstrip.*

3.12.3.2 Approach to Analysis

Construction Noise

The sites for both Phase I and Phase II of the project are currently disturbed, and are utilized respectively for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during storm events (Phase II). The Phase I site (ponds adjacent to the north of the WRP10 site and pipeline extension within the WRP10 site) includes a variety of facilities in addition to the existing ponds, including on-site parking for operational vehicles and equipment, and

extension of the MVP within the WRP10 site to provide conveyance of Colorado River water to the ponds north of the WRP10 site.

The FHWA Roadway Construction Noise Model (RCNM) was used to analyze construction noise associated with the proposed project. RCNM uses a compilation of empirical data and the application of acoustical propagation formulas to estimate construction noise (FHWA 2017). Results are provided in Appendix D. The RCNM includes a database of construction equipment noise emission levels, providing a comprehensive list of the noise generating characteristics for a wide range of construction equipment. In addition, the database provides an acoustical usage factor to estimate the time during which each piece of construction equipment is operating at full power, based on typical construction practices.

While construction activity and intensity associated with Phase I, Phase II, and the pipeline extension would vary, this analysis includes typical peak noise levels associated with various types of heavy construction equipment. According to the RCNM, noise levels generated by heavy construction equipment range from approximately 86 dBA to 92 dBA (Lmax) when measured at 50 feet. Noise from point sources, such as construction equipment, attenuates at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 92 dBA measured at 50 feet from the source is reduced to 86 dBA at 100 feet, and further reduced to 80 dBA at 200 feet from the source.

Vibration

Vibration would be generated by vehicle traffic and equipment during the construction of the proposed project. Vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. The vibration resulting from construction equipment, however, has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and equipment used.

Areas of No Project Impact

The proposed project would have no impact on the following three impact criteria for the reasons identified below:

- c. Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.*

Phase I and Phase II sites are expected to operate at noise levels that are similar to current conditions. The sites for both Phase I and Phase II of the project are currently utilized for WRP10 facilities and managing treated wastewater (Phase I), and the transmission of surface flows during storm events (Phase II). The Phase I site includes a variety of facilities in addition to the existing ponds, and on-site parking for operational vehicles and equipment (located adjacent to the north of the WRP10 site, adjacent to the east of the proposed Phase I ponds). Once construction is completed, Phase I operations would include water storage/groundwater replenishment ponds that are either new or expanded, a relocated parking lot, a new Colorado River water pump station surrounded by sound walls, and a new secondary effluent pump within an existing, enclosed structure that will be located within the existing WRP10 site. Phase II operations would include detention basins that will receive and infiltrate Colorado River water and underground pipelines. The detention basins and temporary berms within the Whitewater River Stormwater Channel would require regular maintenance to replace detention basins and temporary berms following storm

events. Regular maintenance and replacement of detention basins and temporary berms may reach unmitigated peak construction noise levels; however, this maintenance and replacement work would only occur during allowable construction hours listed under the Palm Desert City Code Section 9.24.070. Therefore, noise levels from the CVWD Phase I and Phase II sites will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

- e. Expose people residing or working in the project area to excessive noise levels, if 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.*
- f. Expose people residing or working in the project area to excessive noise levels, if located within the vicinity of a private airstrip.*

The proposed project is located approximately 10 miles southeast of the Palm Springs International Airport. The 65 dBA noise contour is located 9.6 miles from the Phase I and Phase II project sites. Therefore, the project site is not located within any airport noise impact contours and would not expose residents or workers to excessive noise levels from airport or private air strip operations; no impact will occur. (City of Palm Springs 2015)

3.12.3.3 Construction Impacts and Mitigation Measures

IMPACT NV-1 PROJECT CONSTRUCTION WOULD NOT RESULT IN NOISE LEVELS IN EXCESS OF LOCAL STANDARDS. (LESS THAN SIGNIFICANT)

The City of Palm Desert has established limits on the hours of operation for construction activities, as shown on Table 20, Allowable Construction Hours. The City has implemented these limitations, which result in construction activities between the prescribed hours being considered exempt from the noise standards of the ordinance.

Using the stationary-source RCNM noise prediction model and the equipment mix that could occur for the project (based upon assumptions made for construction requirements, as described above), the project's construction activity noise level for each phase was estimated. Table 22 provides a summary of estimated construction noise levels for each stage of construction activity. Detailed tables for each phase of construction are provided in Appendix D.

Table 22 Construction Equipment Noise Levels Summary

Construction Phase I	Construction Phase Hourly Noise Level at 50 Feet (dBA Leq)	Construction Phase Hourly Noise Level at 50 Feet (Lmax)¹
Grading		
Excavator	76.7	80.7
Grader	81.0	85.0
Dozer	77.7	81.7
Scraper	79.6	83.6
Tractor	80.0	84.0
Backhoe	73.6	77.6
Slurry Trenching Machine	77.3	80.4
Total Phase I Grading	87.0	85.0
Paving		
Paver	74.2	77.2
Roller	73.0	80.0
Total Phase I Paving	76.7	80.0
Construction Phase II	Construction Phase Hourly Noise Level at 50 Feet (dBA Leq)	Construction Phase Hourly Noise Level at 50 Feet (Lmax)¹
Grading		
Excavator	76.7	80.7
Grader	81.0	85.0
Dozer	77.7	81.7
Scraper	79.6	83.6
Tractor	80.0	84.0
Backhoe	73.6	77.6
Slurry Trenching Machine	77.3	80.4
Total Phase II	87.0	85.0

¹ Lmax is the highest root mean squared sound pressure level within the measurement period.

Source: FHWA 2017. See Appendix D for results.

As shown on Table 22, the highest construction noise level impacts during Phase I would occur during grading activities, when the unmitigated peak construction noise levels may reach up to 87 dBA Leq at a distance of 50 feet from Phase I construction activities. The highest construction noise level during Phase II may reach unmitigated peak construction noise levels up to 87 dBA Leq at a distance of 50 feet from Phase II construction activities for purposes of creating detention basins and temporary berms within the Whitewater River Stormwater Channel, and extending the Mid-Valley Pipeline (refer to Section 2.0, *Project Description*). At 80 feet, the distance of the nearest sensitive noise receptor to construction activity, the unmitigated peak construction noise levels during Phase I may reach up to approximately 83 dBA Leq, and the highest construction noise level during Phase II would reach up to approximately 83 dBA Leq.

The City of Palm Desert is not the CEQA Lead Agency for the project and it is not required that the City's thresholds apply to the proposed project. However, CVWD has elected to apply Palm Desert's thresholds. The City of Palm Desert relies on limited construction hours to mitigate construction impacts. In addition, standard noise-related BMPs would be implemented including, but not limited to, the following: all construction equipment, fixed or mobile, to be equipped with properly

operating and maintained mufflers, consistent with manufacturers' standards; locate all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receptors nearest the project site; limit haul truck deliveries to the same hours specified for construction equipment, and require truck trips be limited to the hours of construction activity.

Construction activities associated with the project would be restricted to the allowable construction hours listed under Palm Desert City Code Section 9.24.070, and the project would not cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project; therefore, potential impacts from construction-related noise levels would be less than significant.

**IMPACT NV-2 PROJECT CONSTRUCTION WOULD NOT RESULT IN EXCESSIVE GROUND-BORNE VIBRATION.
(LESS THAN SIGNIFICANT WITH MITIGATION)**

Construction activity associated with the project would create ground-borne vibration on and adjacent to the project site. Buildings in the vicinity of a construction site respond to vibration to varying degrees ranging from imperceptible effects to the lowest levels, to low rumbling sounds and perceptible vibrations at moderate levels, and up to minor damage at the highest vibration levels. As previously discussed, the nearest sensitive receptors are single-family residences that are at least 80 feet from Phase I and Phase II construction activities. Table 23 lists ground-borne vibration levels from various types of construction equipment at distances of 75 and 100 feet from construction activity. Pile driving is not included in this analysis because the project does not include any components that would require driven piles or caissons.

Table 23 Vibration Levels for Construction Equipment

Equipment	Approximate VdB ¹ 75 feet	Approximate VdB 100 feet
Vibratory Roller	83	81
Hoe Ram	77	74
Small bulldozer	48	45
Large bulldozer	77	74
Loaded trucks	76	73
Jackhammer	69	66

¹ VdB = velocity level in decibels

Vibration levels decrease by 6 VdB with every doubling of distance (FTA 2006).

As shown on Table 23, vibration levels from construction equipment would range from 48 VdB to 83 VdB at 75 feet from the source. Vibration levels that exceed 80 VdB are typically detectable by people living in the vicinity of the activity causing ground-borne vibration. Ground-borne vibration at the nearest sensitive receptor would create detectable vibration at 75 feet from the source when vibratory rollers are in operation. Construction activity would occur during daytime hours consistent with Section 9.24.060 of the Palm Desert Municipal Code, which would avoid sleep disruption. Table 24 shows vibration levels at the nearest buildings, in terms of in/sec PPV.

Table 24 Construction Equipment Vibration Levels at Adjacent Structures

Equipment	Approximate in/sec ¹ PPV ² at Nearest Receptors	
	75 feet	100 feet
Vibratory Roller	0.062	0.045
Hoe Ram	0.026	0.019
Small bulldozer	0.001	0.001
Large bulldozer	0.026	0.019
Loaded trucks	0.022	0.016
Jackhammer	0.010	0.007

¹ in/sec = inches per second

² PPV = peak particle acceleration

Source: FTA 2006, Caltrans 2013

As shown on Table 24, vibration levels at adjacent structures would reach 0.062 in/sec PPV during use of the vibratory roller, which would not exceed the Caltrans threshold of 0.50 in/sec PPV for intermittent sources of vibration at new residential structures, or the Caltrans threshold of 0.50 in/sec PPV for intermittent sources of vibration at modern industrial and commercial buildings. Therefore, vibration impacts at adjacent structures would be less than significant with no mitigation required.

3.12.3.4 Cumulative Impacts

The geographic scope for the analysis of potential cumulative noise impacts includes the land uses immediately adjacent the project disturbance area. Consistent with State CEQA Guidelines Section 15130 (b)(1)(B), the cumulative impacts analysis was performed using growth projects in the affected jurisdictions. The project would contribute to cumulative noise impacts if the proposed project, when added to the noise levels in the vicinity of each project site, would exceed the standards in Table 20 at build out of Palm Desert. Based on review of the cumulative projects obtained from the City of Palm Desert where project facilities are located (City of Palm Desert 2015, 2016b), no cumulative projects have been identified in close proximity to the project site. The nearest approved non-residential project is a telecommunication tower that would be located one mile northwest of the project site at the corner of Country Club Drive and Cook Street (Palm Desert 2016b). The nearest approved residential project would be located approximately one mile west of the project site, south of Hovley Lane (Palm Desert 2016c).

During the construction phase, Phase I and Phase II sites would generate temporary noise levels that would be audible over existing ambient noise levels; however, construction noise would be limited consistent with the construction hour limitations provided in the Palm Desert City Code, shown in Table 19. Once constructed, Phase I and Phase II sites are expected to operate at noise levels comparable to current conditions, except for noise that would occur due to maintenance of detention basins and temporary berms following storm events, which may reach unmitigated peak construction levels. This maintenance and replacement work during project operations would be intermittent, and would not change existing characteristics of the noise environment.

Construction and operation of cumulative projects, described above, may individually generate noise levels in excess of existing measured noise levels. However, the nearest approved non-

residential project is a telecommunication tower that would be located one mile northwest of the project. Construction and operation noise is localized in nature and generally does not contribute to cumulative noise impacts at distances over 1,000 feet, due to the rapid falloff of construction noise over larger distances. Therefore, operational noise levels resulting from the proposed project would not exceed Palm Desert standards for sensitive receptors, nor would they result in substantial permanent increases in ambient noise levels in the project vicinity above levels existing without the project; and construction noise would be temporary and restricted to Palm Desert's allowable construction hours. Therefore, as described above, noise impacts associated with the proposed project would not be cumulatively considerable.

3.13 Population and Housing

This section identifies existing and projected population and housing characteristics within the local jurisdictions where proposed project facilities would be located. This section analyzes the potential for the project to induce substantial population growth, displace housing, create a substantial demand for additional housing in the area, or necessitate the construction of housing outside the area.

3.13.1 Environmental Setting

The project site consists of the existing WRP10 and an adjacent section of the Whitewater River Stormwater Channel in the Palm Desert, as well as the existing Mid-Valley Pipeline Pump Station in the Indio. These places comprise the project study area for the population and housing analysis.

As of January 1, 2017, Riverside County (including the incorporated jurisdictions within the County) was home to approximately 2,384,783 residents and had approximately 834,652 housing units (California Department of Finance 2017). The estimated population and housing units for the jurisdictions within the study area are summarized in Table 25.

Table 25 Estimated Population and Housing Units in January 2017

Jurisdiction	Estimated Population	Estimated Number of Housing Units
Palm Desert	50,740	38,315
Indio	88,718	31,674

Source: California Department of Finance 2017

According to the California Department of Finance (2017), both Palm Desert and Indio have experienced population growth in recent years. As shown Table 26, with the exception of a slight decrease in Palm Desert during 2013, population has continuously grown for the last five years.

Table 26 Annual Population Estimates from 2012 to 2017

Jurisdiction	Estimated Population					
	2012	2013	2014	2015	2016	2017
Palm Desert	49,043	48,817	49,113	49,526	50,154	50,740
Indio	79,087	82,986	84,167	86,142	87,382	88,718

Source: California Department of Finance 2017

The total number of housing units in Palm Desert and Indio has also continuously grown for the last five years, although at a slower rate than population. The housing unit vacancy rate in Palm Desert has increased from 38.4 percent in 2012 to 39.6 percent in 2017. In Indio, the vacancy rate has decreased from 18.6 percent in 2012 to 17.5 percent in 2017 (California Department of Finance 2017).

3.13.2 Regulatory Framework

There are no federal, State, or local regulations governing population and housing that apply to the proposed project.

3.13.3 Impacts and Mitigation Measures

3.13.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would meet any of the following criteria:

- a. *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).*
- b. *Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.*
- c. *Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.*

3.13.3.2 Approach to Analysis

Impacts to population and housing were assessed using the significance criteria listed above. This analysis evaluates whether the project would directly or indirectly induce population growth, displace existing housing, or displace substantial numbers of people.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to the three above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- a. *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).*

The proposed project does not include construction of new housing or businesses. The project would not require rezoning of land to a zone that allows for housing development at higher densities. Construction of the proposed project would draw from the workforce currently residing in Palm Desert, Indian Wells, Indio, and other nearby communities. Thus, the proposed project would have no direct impacts with regards to inducing substantial population growth.

Groundwater is the primary source of domestic water supply in the Coachella Valley. The proposed project would not increase the annual amount of water from the Colorado River that is currently allocated to the CVWD, but would enable the CVWD to receive its full existing annual allocation. The proposed project would increase the capacity for groundwater recharge in the valley and thereby would increase available local supply; this may induce growth, but not beyond what existing Colorado River supplies would allow, and would be consistent with the applicable General Plan and Urban Water Management Plan. Therefore, the project would not generate excess domestic water

supplies or represent a new source of domestic water that would support additional population growth in Coachella Valley. The proposed project would have no indirect impacts with regards to inducing substantial population growth.

- b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.*

The project site consists of the existing WRP10 and an adjacent section of the Whitewater River Stormwater Channel in Palm Desert, as well as the existing Mid-Valley Pipeline Pump Station in Indio. No houses or residential structures or dwellings are located within the project site. The proposed project would not displace any existing housing. There would be no impact.

- c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.*

The project site consists of the existing WRP10 and an adjacent section of the Whitewater River Stormwater Channel in Palm Desert, as well as the existing Mid-Valley Pipeline Pump Station in Indio. No people reside within the project site. The proposed project would not displace people, and there would be no impact.

3.13.3.3 Construction Impacts and Mitigation Measures

As discussed above, there would be no population-related growth or displacement impacts related to or resulting from the proposed project. Construction of the proposed project would have no impact on population and housing.

3.13.3.4 Operation Impacts and Mitigation Measures

As discussed above, there would be no population-related growth or displacement impacts related to or resulting from the proposed project. Operation of the proposed project would have no impact on population and housing.

3.13.3.5 Cumulative Impacts

The proposed project would have no direct or indirect impacts to population and housing. Thus, the proposed project would not have a cumulatively considerable contribution to cumulative impacts on population and housing.

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3.14 Public Services

This section describes the existing conditions and regulatory setting for public services and evaluates impacts on public services that could occur as a result of the implementation of the proposed project. Public services addressed in this section include fire protection services, law enforcement services, schools, and libraries. Impacts on parks and recreational facilities are addressed in Section 3.15, Recreation.

3.14.1 Environmental Setting

Fire Protection

The City of Palm Desert (Phase I and Phase II of the project) and the City of Indio (location of the existing MVP Pump Station) contract with the Riverside County Fire Department for the provision of fire protection services. There are three fire stations located in the City of Palm Desert and four fire stations located in the City of Indio, staffed with a combined total of 56 full time personnel. Advanced life support services are provided with City Fire Ambulances staffed with two paramedic firefighters, and two paramedic assessment engines. (City of Indio 2017)

Police Protection

City of Palm Desert

The City of Palm Desert Police Department is served under contract by the Riverside County Sheriff's Department. The Palm Desert Police Contract consists of 80 sworn deputy sheriff's positions. Currently, for every 1,000 citizens of Palm Desert, there are 1.56 sworn officers. Thirty-six of the 80 positions are dedicated to the patrol division with the remaining deputies dedicated to special assignments such as the Traffic Division, Special Enforcement Team, the Motorcycle Enforcement Unit, Police Canine Officer, Business District Team, School Resource Officers, the Coachella Valley Violent Crime Gang Task Force and Narcotics Enforcement. The deputy sheriff's positions are further supported by sworn supervision and administration. The police contract also contains several non-sworn support positions to assist with the daily operation of the station and to support field services. (City of Palm Desert 2017)

City of Indio

Within the City of Indio, police protection and law enforcement services are provided by the Indio Police Department, which is responsible for enforcement of local, state, and federal public safety, traffic enforcement, and maintaining public order. There are currently three divisions within the department, including Field Services, Investigative Services and Support Services. Programs employed to address issues and provide services include: police canine teams, police motorcycles, code enforcement, animal control, police reserves, cadets, citizens on patrol, neighborhood watch, and a chaplain program. The Indio Police Department is located at 46800 Jackson Street.

Schools

City of Palm Desert

Public education services and facilities are provided in the City of Palm Desert by the Desert Sands Unified School District (DSUSD) and Palm Springs Unified School District. The DSUSD operates four elementary schools, one middle school, and one high school in the City and City's Sphere of Influence. Public schools are supplemented by fourteen private schools that provide early education to children of residents. The Palm Springs Unified School District owns a future elementary and middle school site within Palm Desert. The Palm Desert High School is located approximately 275 feet southwest of the project site.

City of Indio

Public education services in the City of Indio are provided by the DSUSD. The DSUSD consists of 19 elementary schools, seven middle schools, four comprehensive high schools, two continuation high schools, one alternative education school, and preschool (DSUSD 2017). The Indio Middle School is located approximately 0.3 mile southeast of the MVP Pump Station, and Carrillo Rancho Elementary School is located approximately 0.3 mile north of the MVP Pump Station.

Libraries

The Riverside County Library System operates 40 branches, including the Palm Desert Public Library in the City of Palm Desert and the Indio Public Library in the City of Indio. In addition to book loans and rentals, the Riverside County Library System also offers children's programs, literacy tutoring, English classes, internet access, word processors, tax forms, and copiers. The Indio Public Library houses more than 89,000 items. The library is also the region's resource for microfilm access to local newspapers dating as far back as 1890s. (Riverside County Library System 2017)

3.14.2 Regulatory Framework

3.14.2.1 Federal

There are no federal regulations governing public services that apply to the proposed project.

3.14.2.2 State

There are no state regulations governing public services that apply to the proposed project.

3.14.2.3 Local

The City of Palm Desert General Plan (2016) provides the following public services policy that is applicable to the proposed project:

Policy 7.2 Review of New Development. Work with the Riverside County Sheriff's Department and the Riverside County Fire Department to review and modify development proposals to incorporate defensible space, Crime Prevention through Environmental Design, and other public safety design concepts into new development.

3.14.3 Impacts and Mitigation Measures

3.14.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *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:*
 - i. *Fire protection?*
 - ii. *Police protection?*
 - iii. *Schools?*
 - iv. *Parks?*
 - v. *Other public facilities?*

3.14.3.2 Approach to Analysis

This impact analysis focuses on the potential for project construction or operations to directly affect public services. The analysis considers whether construction or operation of the project would affect the ability of fire, police, and school service providers to maintain acceptable service or other performance objectives, resulting in the need for new or expanded facilities.

Areas of No Project Impact

The proposed project would not substantially increase the demand for police, fire, and school services in the project area. It is expected that construction workers would be local to Palm Desert, Indio, Indian Wells, and the surrounding Coachella Valley area, and construction would not generate new population growth. The existing CVWD workforce would operate the proposed project. New employment opportunities that would support or generate population growth in the region would not be created from construction of the proposed project. As construction of the proposed project would not generate population growth, it would also not affect established service ratios for fire protection, police protection, schools, or libraries. There are no fire stations, police stations, schools, or libraries within the project site. Thus, construction of the proposed project would not affect existing public service facilities.

Operation of the proposed project would enable the CVWM to receive its full existing annual allocation of water from the Colorado River. It would not increase the annual allocation such that an additional amount of domestic water supply would be created that would support population growth. Existing CVWD staff would operate the proposed project and no additional employment or staffing would be required for operations. As operation of the proposed project would not generate population growth, it would also not affect established service ratios for fire protection, police protection, schools, or libraries. Operation of the proposed project would have no impact on public services.

The proposed project does not include the construction of new fire or police stations, schools, libraries or other public facilities. Neither construction nor operation of the proposed project would have no impact on public services.

3.14.3.3 Construction Impacts and Mitigation Measures

As discussed above, the proposed project would not result in construction-related impacts to public services.

3.14.3.4 Operation Impacts and Mitigation Measures

As discussed above, the proposed project would not result in operation- or maintenance-related impacts to public services.

3.14.3.5 Cumulative Impacts

The proposed project would have no direct or indirect impacts to public services. Thus, the proposed project would not have a cumulative contribution to cumulative impacts on public services.

3.15 Recreation

This section provides an overview of the recreational resources in the vicinity of the project sites and evaluates the potential impacts of construction and operation of the project on these recreational resources.

3.15.1 Environmental Setting

3.15.1.1 Description of Recreational Resources

The project site is located in the City of Palm Desert and City of Indio. The following describes recreational resources within each of these cities.

City of Palm Desert

There are approximately 12 parks within the City of Palm Desert (City of Palm Desert 2017). According to the City of Palm Desert General Plan (2016), there are eight types of parks in Palm Desert: 1) Mini Parks; 2) Plazas/Greens; 3) Neighborhood Parks; 4) Community Parks; 5) Special Use Parks; 6) Nature/Open Space; 7) Greenways/Trails; and, 8) Linear Parks. All parks are comprised of both passive and active facilities.

The closest city park to the project site is the Hovley Soccer Park, located approximately 3,600 feet west of the WRP10 site. The Magnesia Falls City Park is located approximately 4,200 feet west of the project site. According to the City of Palm Desert General Plan, Greenways/Trails type of parks may include waterways, such as the Whitewater River Stormwater Channel. A review of aerial imagery does not show any formal trails in the segment of the Whitewater River Stormwater Channel within the project site, and this section of the channel is currently used for flood control and management. Sections of the Whitewater River Stormwater Channel both upstream and downstream of the project site do provide open space recreation and are incorporated into golf courses.

Public golf courses are another recreational resource available to residents and visitors of the City of Palm Desert. The Golf Center of Palm Desert, a public golf course, is located across Cook Street from the WRP10 site.

City of Indio

There are approximately 12 city parks located in the City of Indio (n.d.). All of the City of Indio parks include benches and sitting areas, and most include playground equipment, barbeque areas, and water play areas. Several parks also include athletic fields and courts, such as tennis courts, basketball courts, and softball fields. Golf courses are also a recreational opportunity provided in the City of Indio.

The Heritage Palms Golf Course is located across the Coachella Canal from the MVP Pump Station, and it is the closest public recreational amenity to the project site in the City of Indio. Shields Park, located approximately 4,500 feet south of the MVP Pump Station, is the closest City Park to the project site in Indio. Shields Park includes a walking path, park bench, and water fountain.

3.15.2 Regulatory Framework

3.15.2.1 *Federal*

There are no federal regulations governing recreational resources that apply to the proposed project.

3.15.2.2 *State*

There are no State regulations governing recreational resources that apply to the proposed project.

3.15.2.3 *Local*

City of Palm Desert General Plan

The Health and Wellness Element of the City of Palm Desert General Plan provides the following policy applicable to the proposed project:

Policy 1.9 Open space trails. Develop and enhance existing open space and trails that provide City residents and visitors access to undisturbed desert and mountain environments, while preserving these resources, including sensitive plant and animal species, in their natural environments.

City of Indio General Plan

There are no local regulations or policies in the City of Indio governing recreation that apply to the proposed project.

3.15.3 Impacts and Mitigation Measures

3.15.3.1 *Significance Criteria*

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would be any of the following criteria:

- a. *Would the project 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?*
- b. *Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

3.15.3.2 *Approach to Analysis*

Impacts to recreational resources were assessed using the significance criteria above. This analysis evaluates whether existing or planned recreational resources would be displaced or removed from any of the proposed project components. This analysis also evaluates whether indirect impacts on existing or planned recreational resources would occur, such as increased use or demand.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to one of the above-listed significance criteria. This significance criteria is not discussed further in the impact analysis for the following reason:

- a. Would the project 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?*

Phase I of the proposed project would include activities at the existing WRP10 site, where public access and recreational uses are not permitted. Thus, construction of Phase I of the project would not displace any recreational uses or users that would otherwise result in increased use elsewhere.

Construction of Phase II of the project would involve constructing an extension of the Mid-Valley Pipeline and new detention basins within the Whitewater River Stormwater Channel, located to the south/southeast of the WRP10 site. As described above, waterways, such as the Whitewater River Stormwater Channel, are considered an open space recreational amenity in Palm Desert. However, the segment of the Whitewater River Stormwater Channel within the project site does not contain any constructed hiking trails or other developed recreational facilities, and it is used for flood control. As this section of the Whitewater River Stormwater Channel is not used for open space or passive recreation, recreational users would not be displaced from the area from construction or operation of Phase II of the project. The proposed project would have no effects on use at existing neighborhood and regional parks or other recreational facilities. The proposed project would have no impact.

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

The proposed project does not include the construction of recreational facilities or require the construction or expansion of recreational facilities. Thus, the proposed project would have no impact.

3.15.3.3 Construction Impacts and Mitigation Measures

As discussed above, the proposed project would not result in construction-related impacts to recreation.

3.15.3.4 Operation Impacts and Mitigation Measures

As discussed above, the proposed project would not result in operation- or maintenance-related impacts to recreation.

3.15.3.5 Cumulative Impacts

The proposed project would have no direct or indirect impacts to recreational resources or facilities. Thus, the proposed project would not contribute to cumulative impacts on recreation.

3.16 Transportation and Traffic

This section describes the transportation conditions within the vicinity of the project sites, including the existing roadway network, public transit and non-motorized travel, air traffic patterns, and emergency access. This section presents an assessment of the transportation impacts associated with construction and operation of the project, and identifies mitigation measures, as appropriate.

3.16.1 Environmental Setting

3.16.1.1 Regional and Local Roadways

The proposed project is located in the Coachella Valley in central Riverside County, within the incorporated city of Palm Desert (Phase I and Phase II of the project), and including a small portion in Indio, where the MVP Pump Station is located. Regional access in this area is provided by Interstate 10 (I-10) and State Route 111 (Highway 111). I-10 is a northwest-southeast trending freeway that provides inter-regional access to San Bernardino, Orange and Los Angeles counties to the west, and to eastern Riverside County and Arizona to the east. Highway 111 is the major northwest-southeast trending state highway in the Coachella Valley that runs from I-10 to the U.S.-Mexico border crossing in Calexico.

The project area is served by numerous collector and arterial streets, which are generally low-to-medium speed and capacity roadways that provide connections between neighborhood areas, commercial centers, and regional highways. Table 27 provides a list of major local roadways throughout the project region that are most likely to provide access during construction and operational activities of the proposed project.

Table 27 Major Local Roadways in Project Vicinity

Jurisdiction	Major Roadways	Direction of Travel
City of Palm Desert	Fred Waring Drive	east-west
	Hovley Lane East	east-west
	Country Club Drive	east-west
	Cook Street	north-south (I-10/Hwy 111 access)
	El Dorado Drive	north-south (Hwy 111 access)
City of Indio	Fred Waring Drive	east-west
	Jefferson Street	north-south (I-10/Hwy 111 access)

3.16.1.2 Transit Service

The SunLine Transit Agency provides public transit service to the project area and throughout the Coachella Valley. SunLine has a service area of approximately 1,120 square miles. Its fifteen transit lines provide public bus service with a fleet of 70 fixed route buses and 33 paratransit vans throughout Coachella Valley. SunLine Transit Agency buses are wheelchair accessible, and have bicycle racks that can accommodate either two or three bicycles per bus. SunLine routes provide

transit service throughout the project area (accounting for both the Phase I and II sites in Palm Desert, and the MVP Pump Station in Indio). (SunLine Transit Agency 2017)

3.16.1.3 Bicycle and Pedestrian Network

Local jurisdictions are responsible for planning and maintaining bicycle and pedestrian facilities throughout the project area. The member cities of the Coachella Valley Association of Governments (CVAG) have also participated in coordinated regional planning efforts. CVAG's (2010) Non-Motorized Transportation Plan Update identifies existing and planned bikeways and hiking and equestrian trails throughout the Coachella Valley. A bikeway and trail classification system was devised as part of the Plan's mapping efforts. The definitions of each classification are as follows:

- **Class I Bikeways:** Typically called bike paths, they provide for bicycle travel on paved rights-of-way completely separated from any street or highway.
- **Class II Bikeways:** These are often referred to as bike lanes. They provide a striped, stenciled and signed lane for one-way travel on a street or highway.
- **Class III Bikeways:** Generally referred to as bike routes, they provide for shared use with pedestrian or motor vehicle traffic and are identified by signing, and sometimes stencils.
- **Golf Cart Paths:** Paved off-street paths that permit use by golf carts, bicycles and pedestrians.
Golf Cart Lanes: Striped lanes that permit use by golf carts, bicycles and equestrians.

In addition, the Plan provides guidelines for local jurisdictions to ensure safe, convenient, and friendly environments for pedestrian movement, including improved accessibility, safety lighting, sidewalks, street furniture, and bus shelters. Following is a description of bikeways in the project area.

City of Palm Desert

Palm Desert currently has one Class I bikeway, 29 Class II bikeways, and 13 Class III bikeways, totaling 54.8 miles. Five bikeway projects, totaling 10.2 miles, are proposed in the CVAG Non-Motorized Transportation Plan. The five proposed bikeway projects are comprised of two Class I bikeways, two Class II bikeways, and one combination of a Class II and III bikeway. (CVAG 2010)

No bikeways in Palm Desert would be traversed by or otherwise affected by the project.

City of Indio

Indio currently has one Class I bikeway and 19 Class II bikeways totaling 18.9 miles. Forty-nine bikeway projects, totaling 68.1 miles, are proposed in Indio in the CVAG Non-Motorized Transportation Plan (CVAG 2010). The 49 proposed bikeway projects are comprised of one Class I bikeway, 32 Class II bikeways, and 16 Class III bikeways.

No bikeways in Indio would be traversed by or otherwise affected by the project.

3.16.1.4 Airports

The nearest public airport to the project site is the Bermuda Dunes Executive Airport, located approximately five miles east of the project site along Avenue 42 in Bermuda Dunes (a census-designated place). The next closest airport to the project site is the Jacqueline Cochran Regional

Airport, located approximately 20 miles to the southeast in the unincorporated community of Thermal, CA. Project construction and operation are not anticipated to be affected by or affect existing airport facilities.

3.16.1.5 Railroad Facilities

The Coachella Valley is served by the Union Pacific Railroad, which enters the Valley from the west through the San Geronio Pass, generally parallels I-10 through the Valley center, and then parallels Highway 111 from Indio to the east shore of the Salton Sea, where it then continues southeast towards Yuma. The Union Pacific Railroad is a major transcontinental railway carrying extensive freight operations as well as Amtrak passenger trains. This facility carries an average of between 40 and 50 trains per day. Project construction and operation are not anticipated to be affected by or affect existing railroad facilities.

3.16.1.6 Traffic – Level of Service

The Riverside County Transportation Commission (RCTC) is the designated Congestion Management Agency (CMA) responsible for the development and implementation of the Congestion Management Program (CMP) in the project area. Section 65089(b)(2) of the California Government Code states that the CMP must contain a performance element that includes performance measures to evaluate current and future multimodal system performance for the movement of people and goods. The RCTC's adopted minimum Level of Service (LOS) threshold is LOS D. The LOS is a qualitative measurement that describes operational conditions within a traffic stream and considers speed, travel time, driving comfort, safety and traffic interruptions. Levels of Service are described as a range of alphabetical connotations, A through F, which are used to characterize roadway operating conditions. LOS A represents the best, free flow conditions, and LOS F indicates the worst conditions and severe constraint on the system (see Table 28). According to the current (year 2011) CMP, all regional roadways within the project area are operating at acceptable levels of service (LOS D or better).

Table 28 Level of Service Definitions

Level of Service	Traffic Conditions
A	Free flow, little or no congestion
B	Stable flow, small amount of traffic congestion
C	Stable flow, average traffic congestion
D	High-density but stable flow
E	Low speeds, very high traffic congestion
F	Forced or breakdown flow, stop-and-go conditions

Existing peak daily traffic volumes on the arterial roadway system in the vicinity of the project sites vary widely. Construction activities at the WRP10 site and the MVP Pump Station are expected to occur entirely within the boundaries of these sites or within the Whitewater River Stormwater Channel; while construction vehicles will access these sites from adjacent roadways, construction staging on adjacent roadways is not anticipated. Detailed existing traffic conditions along the

roadways in the vicinity of the project site are described below. Daily traffic volumes were obtained from the CVAG 2015 Traffic Census Report (CVAG 2015).

- **Cook Street (Palm Desert).** This roadway lies directly west of the WRP10 site and will likely be used as an access road for construction traffic. Daily traffic volumes on Cook Street between Hwy 111 and Country Club Drive range between approximately 27,000 and 27,900 vehicles per day (VPD).
- **Fred Waring Drive (Palm Desert).** This roadway is situated directly south of the WRP10 site, and crosses over the Whitewater River Stormwater Channel. As such, it may be used by construction traffic coming from Hwy 111 and/or I-10. Daily traffic volumes on the segment of Fred Waring Drive east of Cook Street are approximately 33,800 VPD.
- **Hovley Lane (Palm Desert).** This roadway lies to the north of the WRP10 site and may be used for construction traffic coming to the northern side of the project site, particularly related to the construction of the operations parking lot. Daily traffic volumes on Hovley Lane east of Cook Street are approximately 13,300 VPD.
- **Fred Waring Drive (Indio).** This roadway lies directly north of the MVP Pump Station site. It will likely be used for construction traffic coming to upgrade the capacity of the pump station. Daily traffic volumes on Fred Waring Drive west of Jefferson Street are approximately 21,600 VPD.
- **Jefferson Street (Indio).** This roadway is situated to the west of the MVP Pump Station site. It may be used by construction traffic coming from I-10. Daily traffic volumes on Jefferson Street between Indio Boulevard and Miles Avenue range between approximately 27,300 and 30,000 VPD.

3.16.2 Regulatory Framework

3.16.2.1 *Federal*

There are no federal regulations that address transportation impacts associated with the proposed project.

3.16.2.2 *State*

The California Department of Transportation (Caltrans) is the responsible agency for implementing State level policies and standards for highway facilities under State jurisdiction. Although the project is not a transportation project, any work that requires movement of oversized or excessive load vehicles on highway facilities requires a transportation permit by Caltrans. It is not anticipated that this will be necessary for the proposed project.

3.16.2.3 *Local*

The RCTC is the designated CMA responsible for the development and implementation of the CMP in the project area. The CVAG is the responsible local agency for traffic count data collection in the Coachella Valley.

Local jurisdictions are responsible for implementing driving and transportation standards on local roadways, including speed limits, bicycle and pedestrian networks, and hauling permits for oversized or excessive load vehicles on city streets. Local jurisdictions set forth future transportation

goals, policies, and programs in their General Plans and other planning documents. Applicable policies from the City of Palm Desert General Plan include the following:

- **Policy 1.2 Transportation System Impacts.** Evaluate transportation and development projects in a manner that addresses the impacts of all travel modes on all other travel modes through the best available practices.
- **Policy 1.3 Facility Service Levels.** Determine appropriate service levels for all modes of transportation and develop guidelines to evaluate impacts to these modes for all related public and private projects.
- **Policy 1.6 Emergency Vehicle Access.** Evaluate the impacts of transportation network changes on emergency vehicle access and response times.

3.16.3 Impacts and Mitigation Measures

3.16.3.1 Significance Criteria

According to Appendix G of the State CEQA Guidelines, a project would have a significant impact on traffic or transportation if it were to meet any of the following significance criteria for transportation and traffic:

- a. *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.*
- b. *Conflict with an 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.*
- c. *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.*
- d. *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*
- e. *Result in inadequate emergency access.*
- f. *Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

3.16.3.2 Approach to Analysis

Impacts to traffic and transportation were assessed using the significance criteria listed above. Potential impacts were evaluated for both construction and operation of the project. Construction impacts are evaluated qualitatively. Because operation of the project would generate very few staff vehicle or truck delivery trips at any individual location, operational traffic impacts are also evaluated qualitatively.

Areas of No Project Impact

The project would not result in impacts related to some of the significance criteria listed above. These significance criteria are not discussed further in the impact analysis for the following reasons:

- b. Conflict with an 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.*

The LOS standards established by the CMP are intended to regulate long-term impacts due to future operation of projects and were not developed for temporary construction projects. Therefore, this significance criterion is not applicable to project construction. Operational impacts are evaluated in Section 4.17.4.4 below. Significance criterion “a” is used for the evaluation of construction-related traffic impacts in Section 4.17.4.3 below.

- c. 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.*

There are two airports within the project area, the Jacqueline Cochran Regional Airport (Thermal) and the Bermuda Dunes Airport (Bermuda Dunes). The project will have no impact on the facilities or operations of regional airports, and will not result in a change in air traffic patterns or an increase in traffic levels. The project proposes only ground-based travel; therefore, no project construction or operation would have impacts with respect to air traffic levels. This impact is not discussed further.

- d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

Proposed project facility site plans do not include sharp curves or unsafe designs. The project does not include new road designs or alterations of existing features that could substantially increase hazards. Therefore, no impact associated with design features are expected for any project site and this impact is not discussed further.

- f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.*

A review of the relevant SunLine bus routes was conducted to determine whether and to what extent project construction or operations and maintenance could adversely affect access to transit services. Construction activities on the WRP10 site and the MVP Pump Station site were evaluated for their potential to impact bus service or access.

SunLine Line 53 passes directly west of the WRP10 site, where it travels north-south along Cook Street. SunLine provides a bus stop at the intersection with Merle Drive, near the project site. An additional bus stop lies several hundred feet south of the project site, at the intersection between Cook Street and Santa Fe Trail. Neither bus stop will be impacted by the proposed project.

Near the MVP Pump Station site, SunLine Line 54 has eastbound and westbound service along Fred Waring Drive. Bus stop 7 is situated directly adjacent to the pump station site, located on the westbound side of Fred Waring Drive. Bus stop 12 is the closest bus stop on the eastbound side of the street; the stop is located on the other side of Jefferson Street. Neither bus stop will be impacted by the proposed project.

In summary, construction, operation and maintenance of the proposed project facilities will not have an adverse impact on mass transit infrastructure or activities. Project-related traffic during construction may occur on the same roadways as mass transit vehicles, but such activities would not impede existing activities. There will be no conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

3.16.3.3 Construction Impacts and Mitigation Measures

IMPACT TR-1 PROJECT CONSTRUCTION WOULD CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM, OR RESULT IN INADEQUATE EMERGENCY ACCESS. (LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED)

During construction of the proposed project, there would be a temporary increase in truck trips and construction worker vehicles in the vicinity of each project site. Construction-related traffic would utilize the existing regional and local roadway network. The traffic related to construction will consist primarily of passenger cars (or light duty pickup trucks), with occasional movement of heavy equipment to and from the project sites.

Construction Traffic Estimates

During construction activities, it is assumed that construction workers would arrive prior to construction activities, and would depart after completing construction activities for the day. For this reason, potential impacts related to construction worker traffic are distinct and independent from potential impacts related to the construction itself. Phase I construction is anticipated to take place between January 1, 2018, and December 31, 2018. Phase II construction is anticipated to take place between March 1, 2018, and September 28, 2018. Table 29 presents the anticipated trip generation related to all construction activities.

Table 29 Project Construction Traffic Trip Generation Estimate

Project Phase	Construction Activity	Offroad Equipment Count	Worker Trip Number
Phase I	Grading	9	23
	Paving	6	15
	Phase I Total	15	38
Phase II	Grading	9	23
	Phase II Total	9	23
Construction Total		24	61

Based on the amount of construction equipment and number of construction workers, the construction traffic is not expected to result in a change in LOS. Construction traffic merging onto adjoining streets or intersections could potentially disrupt traffic flows. In order to ensure that significant impacts do not occur, including such that emergency access would not be impeded, CVWD shall prepare and implement a Construction Traffic Management Plan. Emergency access to all of the project sites will be from existing roadways. Roadway closures during construction would maintain access for emergency vehicles at all times, and no roadway closures are proposed during operation of the project.

Mitigation Measures

Mitigation Measure TRA-1: Construction Traffic Management Plan

The contractor shall prepare and implement a Construction Traffic Management Plan that specifies traffic and/or construction controls. Implementation of this measure would ensure that construction traffic impacts maintain a less than significant level.

Timing	Prior to initiation of construction
Party Responsible for Implementation	Construction contractor
Agency Responsible for Monitoring	Coachella Valley Water District
Monitoring Method	Coachella Valley Water District shall consult with resource agencies

3.16.3.4 Operation Impacts and Mitigation Measures

IMPACT TR-2 OPERATION AND MAINTENANCE OF THE PROPOSED PROJECT WILL NOT CONFLICT WITH AN 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. (LESS THAN SIGNIFICANT)

Operational traffic associated with the proposed project would be comparable to existing operation and maintenance of the Phase I and Phase II sites, comprised primarily of worker vehicle trips. The proposed project will have a very limited impact on roadway and intersection operations, and other components of the regional and local transportation system both during construction and operation. During operation of the proposed project, vehicles and equipment needed to repair or replace temporary berms in the Phase II site will be obtained from the existing vehicles and equipment stored and regularly used at the WRP10 site. Operation of the proposed project will not conflict with an applicable congestion management program. Potential impacts would be less than significant with no mitigation required.

3.16.3.5 Cumulative Impacts

Total project construction and operation and maintenance traffic associated with the project would be very low. Consistent with State CEQA Guidelines Section 15130 (b)(1)(B), the cumulative impacts analysis was performed using growth projects in the affected jurisdictions. The project would contribute to cumulative traffic impacts if the proposed project, when added to the traffic levels in the vicinity of the project site, would exceed LOS levels on adjacent roads. Based on review of the cumulative projects obtained from the City of Palm Desert where project facilities are located (City of Palm Desert 2015, 2016b), no cumulative projects have been identified in close proximity to the project site. LOS levels would not be exceeded by potential project-related traffic in conjunction with existing traffic and cumulative project traffic. The traffic-related impacts of the proposed project would therefore not be cumulatively considerable.

3.17 Utilities and Service Systems

This section addresses potential impacts on utilities and service systems that could occur as a result of implementing the proposed project. Utilities and service systems discussed in this section include water service, wastewater service, stormwater management, and solid waste facilities.

3.17.1 Environmental Setting

Proposed project facilities would be constructed and operated at the existing WRP10 site and adjacent Whitewater River Stormwater Channel in Palm Desert, and at the existing MVP Pump Station in Indio.

3.17.1.1 *Water Service*

CVWD serves the water-related needs of a population of about 300,000 throughout the Coachella Valley in Riverside County, California. The service area also includes portions of Imperial County and San Diego County. The following areas of water-related service are provided by CVWD: domestic (drinking) water supply, sanitation (wastewater), irrigation and drainage, non-potable water (recycled wastewater and/or Colorado River water), regional stormwater/flood protection, and groundwater management and replenishment.

The Coachella Valley relies on a combination of local groundwater, Colorado River water, State Water Project (SWP) water, and recycled water to meet water demands. The Coachella Canal brings Colorado River water from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Coachella Valley. SWP water is obtained via Colorado River water exchange with The Metropolitan Water District of Southern California (Metropolitan) and delivered at the northwest margin of the Coachella Valley via the Colorado River Aqueduct. Recycled water is produced at two of CVWD's five water reclamation plants and is blended with Colorado River water for service to its non-potable water customers, which are primarily golf courses and large landscaped areas.

The only direct water source used by CVWD for urban potable water use is local groundwater. The CVWD operates more than 100 wells to obtain groundwater from both the Whitewater River and the Mission Creek subbasins of the Coachella Valley Groundwater Basin (CVWD 2017a). The Coachella Valley Groundwater Basin has been identified by DWR as being in a condition of overdraft since the 1940s. Although Colorado River and SWP water are used to replenish the groundwater basin, the potable water distribution system does not currently receive water directly from either imported water source.

3.17.1.2 *Wastewater Service*

CVWD provides wastewater treatment services to much of the Coachella Valley in Riverside County, including the cities of Palm Desert and La Quinta; the city of Indio (where the MVP Pump Station is located) is primarily served by Valley Sanitation District. CVWD treats nearly 6.3 billion gallons of wastewater annually, and has the capacity to increase its wastewater treatment as population grows in the Coachella Valley. CVWD operates five water reclamation plants (i.e., wastewater treatment plants), including the WRP10 site in Palm Desert. Two of the water reclamation plants, including the WRP10 site, are equipped to treat wastewater to meet State standards for non-

potable water for irrigation use (CVWD 2017c). Recycled non-potable water is primarily used for irrigation of golf courses and large landscaped areas.

3.17.1.3 Stormwater Management and Protection

Within CVWD's boundaries there are 16 stormwater protection channels. The entire system includes approximately 135 miles of channels built along the natural alignment of dry creeks that naturally flow from the surrounding mountains into the Whitewater River. Along with the channels, a number of dikes and levees have been designed and built to collect rapidly flowing flood water as it pours from the adjacent mountains onto the floor of Coachella Valley (CVWD 2017b).

The backbone of the stormwater protection system is a 50-mile stormwater channel that runs from the Whitewater area north of Palm Springs to the Salton Sea. The western half of the channel runs along the natural alignment of the Whitewater River that cuts diagonally across the valley to La Quinta, between the cities of Palm Desert and Indio. Because the riverbed flattens out naturally downstream from La Quinta, a constructed stormwater channel funnels flood waters to the Salton Sea. The entire length of this flood protection facility is known as the Whitewater River Stormwater Channel. The channel was built to withstand a flow of 80,000 cubic feet per second, which is greater than flows generated by a 100-year flood event (CVWD 2017b).

3.17.1.4 Solid Waste

Burrtec Waste and Recycling Services provides solid waste and recycling collection services for the cities of Rancho Mirage, La Quinta, Palm Desert, and Indio, and the unincorporated community of Thermal. Solid waste that is collected for these communities is directed to the Badlands Sanitary Landfill in Moreno Valley. The Badlands Sanitary Landfill is a Class III landfill operated by the Riverside County Department of Waste Resources. According to the California Department of Resources Recycling and Recovery (CalRecycle) (2017a), the Badlands Sanitary Landfill has a permitted capacity of 34,400,000 cubic yards and a maximum disposal capacity of 4,500 tons per day. As of January 2015, the remaining capacity at the landfill was 15,748,799 cubic yards. The landfill solid waste permit lists an estimated closure date of 2022. The landfill accepts a variety of materials including construction and demolition materials, contaminated soil, agricultural waste, wood waste, and mixed municipal waste (CalRecycle 2017a).

The Riverside County Department of Waste Resources also operates the Mecca II Landfill, located in the unincorporated community of Mecca, approximately 14 miles south of the project site. The Mecca II Landfill has a permitted capacity of 452,182 cubic yards and a maximum disposal capacity of 400 tons per day. The remaining capacity as of August 2014 was approximately 6,371 cubic yards. The landfill solid waste permit lists an estimated closure date of 2098. The landfill accepts a variety of materials including construction and demolition materials, agricultural waste, green materials, and mixed municipal waste (CalRecycle 2017b).

3.17.2 Regulatory Framework

3.17.2.1 Federal

No federal regulations relative to utilities and service systems would be applicable to the proposed project. Federal regulations pertaining to discharge of waste in stormwater runoff are provided in Section 3.9, Hydrology and Water Quality.

3.17.2.2 State

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (Public Resources Code, Division 30), enacted through Assembly Bill (AB) 939 and modified by subsequent legislation, required all California cities and counties to implement programs to reduce, recycle, and compost at least 50 percent of wastes by the year 2000 (Public Resources Code Section 41780). CalRecycle determines compliance with this mandate to divert generated waste (which includes both disposed and diverted waste).

In 2007, Senate Bill (SB) 1016 amended AB 939 to establish a per capita disposal measurement system. The per capita disposal measurement system is based on a jurisdiction's reported total disposal of solid waste divided by a jurisdiction's population. California's Integrated Waste Management Board sets a target per capita disposal rate for each jurisdiction. Each jurisdiction must submit an annual report to California's Integrated Waste Management Board with an update of its progress in implementing diversion programs and its current per capita disposal rate.

Title 22 California Code of Regulations

The California Department of Public Health promulgates and enforces state regulations for drinking water treatment facilities and distribution systems. These state regulations are at least as strict as federal drinking water regulations, although not all federal regulations are currently incorporated into corresponding state regulations. These state drinking water regulations are codified in California Code of Regulations (CCR) Title 22. The California Department of Public Health also regulates the distribution and use of recycled water through CCR Title 22.

CALGreen Code

CALGreen Code Section 4.408, Construction Waste Reduction, Disposal and Recycling mandates that, in the absence of a more stringent local ordinance, a minimum of 50 percent of non-hazardous construction and demolition debris must be recycled or salvaged. The Code also requires the applicant to have a waste management plan for on-site sorting of construction debris.

3.17.2.3 Local

Riverside County Integrated Waste Management Plan

In compliance with AB 939, Riverside County adopted an Integrated Waste Management Plan in 1996 to divert a minimum of 25 percent solid waste landfill by 1995 and 50 percent by the year 2000. The Integrated Waste Management Plan does not specifically address the reduction of construction and demolition debris or operational waste as related to the project.

City of Palm Desert General Plan

The City of Palm Desert General Plan (City of Palm Desert 2016) includes goals to reduce the generation of solid waste, to slow the filling of local and regional landfills and expand recycling programs that divert valuable resources from the waste stream and returning these materials to productive use. Additionally, the General Plan requires and encourages the recycling of mineral-based construction materials, including asphalt, concrete, gypsum and similar materials, as well as the facilities to assure their efficient recycling.

3.17.3 Impacts and Mitigation Measures

3.17.3.1 Significance Criteria

Based on Appendix G of the State CEQA Guidelines, a project would have a significant impact to this issue area if it would meet any of the following criteria:

- a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.*
- b. 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.*
- c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.*
- d. Have insufficient water supplies available to serve the project from existing entitlements and resources, or required new or expanded entitlements.*
- e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*
- f. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.*
- g. Fail to comply with federal, state, and local statutes and regulations related to solid waste.*

3.17.3.2 Approach to Analysis

The focus of this analysis is on water, wastewater, stormwater management, and solid waste services, and the potential for the project to affect these services. The impact on utilities and service systems would be considered significant if new or expanded facilities would be required beyond those included in the proposed project, the construction of which could result in an environmental impact. The solid waste analysis focuses on potential impacts related to landfill capacity resulting from the disposal of construction and operational waste, as well as the ability of local jurisdictions to comply with federal and State solid waste goals and regulations.

Areas of No Project Impact

As explained below, the proposed project would not result in impacts related to two of the above-listed significance criteria. These significance criteria are not discussed further in the impact analysis for the following reasons:

- b. 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.*
- e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*

The analysis of impacts on water and wastewater treatment facilities typically evaluates whether existing utilities and service systems are adequate to serve a proposed project, or whether they require expansion or new construction to accommodate the proposed project and, if so, whether construction of the new or expanded utilities and/or service systems could have an adverse impact on the environment. The proposed project differs from typical development projects, because the project is a proposal to construct new secondary effluent ponds at the WRP10 site and construct new groundwater infiltration basins. The construction and operation of the proposed project, in and of itself, would not generate population growth or new water and sanitary sewer connections requiring expansion of a water or wastewater treatment plant. Likewise, demand for new treatment facilities would not be generated by the project. Thus, the proposed project would have no impact.

Phase I of the proposed project includes an expansion of the parking area for CVWD operations and maintenance vehicles. The parking area would be impervious and precipitation falling on the parking area would generate stormwater runoff. Under existing conditions, on-site stormwater runoff is not directly connected to a stormwater conveyance system, but instead occurs as sheet flow that is directed to the pervious ground to encourage infiltration into the local ground surface. With implementation of the project, these patterns would be retained, with an emphasis placed on limiting site disturbance to the maximum extent practical. The additional impervious surface generated from the project would not require the expansion of existing stormwater drainage facilities. The construction of new stormwater drainage facilities would not be required to facilitate project operations and no impact would occur.

Phase II of the proposed project includes the construction of new detention basins within the Whitewater River Stormwater Channel for the purposes of groundwater replenishment. As described above, the Whitewater River Stormwater Channel is the backbone of the CVWD stormwater protection system. The proposed basins would be situated on the sides of the existing flow channel, and designed to allow stormwater flow through the channel, as occurs under present conditions. Project design features such as breakaway fencing or temporary berms would be implemented at the upstream and downstream ends of the basins in order to facilitate the detention and infiltration of Colorado River water delivered to the site as part of the project, while also facilitating the removal of barriers to flow when needed, particularly in anticipation of or during a storm event. By ensuring that barriers to flow are removed in anticipation of or during a storm event, function of the channel for stormwater conveyance is maintained, and the potential for flooding due to the presence and function of the Phase II basins is avoided. Operation of the proposed project would have no impact regarding the need for new or expanded stormwater management facilities or structures and no impact would occur.

3.17.3.3 Construction Impacts and Mitigation Measures

IMPACT U-1 CONSTRUCTION OF THE PROPOSED PROJECT WOULD NOT GENERATE NEW SOURCES OF WASTEWATER. CONSTRUCTION WOULD INCREASE THE POTENTIAL FOR EROSION AND SEDIMENTATION FROM STORMWATER RUNOFF. IMPLEMENTATION OF THE REQUIRED STORMWATER POLLUTION PREVENTION PLAN AND ASSOCIATED BEST MANAGEMENT PRACTICES WOULD MINIMIZE EROSION AND DISCHARGE OF POLLUTED RUNOFF. NEW OR EXPANDED STORMWATER MANAGEMENT FACILITIES WOULD NOT BE REQUIRED. (LESS THAN SIGNIFICANT)

Wastewater is water containing wastes from residential, commercial, and industrial processes, such as sanitary sewer or cooling water. Construction of the proposed project would not require residential, commercial, or industrial processes involving the use of water. Thus, construction of the proposed project would not generate wastewater. Project construction would not exceed the

wastewater treatment requirements of the Colorado River Regional Water Quality Control Board (RWQCB).

Although construction of the project would not generate wastewater, it could result in erosion and siltation from earthmoving activities during construction. Exposed soil from excavated areas, stockpiles, and other areas where ground cover would be removed could be inadvertently transported off-site by wind or water. If not properly managed, this could increase sediment loads in surface water bodies near project sites, potentially exceeding the Colorado River Basin RWQCB waste discharge requirements.

As construction of each of the two phases of the project would disturb more than one acre of land, construction of each phase would be required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ), compliant with the federal Clean Water Act NPDES requirements. In compliance with the Construction General Permit, a construction SWPPP would be prepared for each phase of the proposed project. The SWPPP would include and require appropriate BMPs to be implemented to control erosion and discharge of polluted stormwater runoff.

During construction of the proposed project, a dewatering system would be implemented as needed if groundwater is encountered during pipeline installation or other excavation activities. This would provide a dry work area to protect waters and preserve the work area. Any groundwater encountered during pipeline work would be disposed of in a beneficial reuse pond or discharged to existing drainage systems for agriculture lands or stormwater facilities in conformance with the State Water Resources Control Board's Stormwater General Permit and applicable local discharge requirements.

With implementation of the SWPPP and associated BMPs, impacts related to exceeding wastewater treatment requirements would be less than significant with no mitigation required.

IMPACT U-2 CONSTRUCTION OF THE PROPOSED PROJECT WOULD REQUIRE WATER AND TEMPORARILY INCREASE WATER DEMAND. THE CVWD WRP10 SITE HAS SUFFICIENT WATER SUPPLIES TO MEET EXISTING WATER DEMAND IN COMBINATION WITH THE TEMPORARY, SHORT-TERM DEMANDS OF PROJECT CONSTRUCTION. (LESS THAN SIGNIFICANT)

Water required for construction of the project and testing of equipment would be potable water obtained on-site from the existing WRP10 site. The WRP10 site has sufficient water supplies to meet existing demand in combination with the temporary, short-term demands of project construction. New or expanded entitlements would not be required. Construction of the proposed project would have a less than significant impact.

IMPACT U-3 THE PROPOSED PROJECT WOULD BE SERVED BY A LANDFILL WITH SUFFICIENT PERMITTED CAPACITY TO ACCOMMODATE THE PROJECT'S CONSTRUCTION SOLID WASTE DISPOSAL NEEDS. CONSTRUCTION WOULD NOT RESULT IN A SUBSTANTIAL ADVERSE EFFECT RELATED TO COMPLIANCE WITH FEDERAL, STATE, AND LOCAL STATUTES AND REGULATIONS PERTAINING TO SOLID WASTE. (LESS THAN SIGNIFICANT)

Project construction would result in the generation of waste materials, including construction debris and excess excavated soil. Materials excavated during facility construction and pipeline extension installation could be used as backfill around the facilities. Remaining soil and construction waste materials would be hauled off-site for recycling or disposal at a landfill. As the project does not include construction of structures or other facilities requiring large amounts of lumber, dry wall,

roofing materials, and so forth, the amount of waste generated from construction would be minimal. The landfills serving the project site have sufficient permitted capacity to accommodate the project's solid waste disposal needs during construction. As described above, the remaining capacity of the Badlands Sanitary Landfill as of January 2105 was 15,748,799 cubic yards (Cal Recycle 2017a). The minimal waste that would be anticipated by project construction would be only a small fraction of the remaining capacity of the Badlands Sanitary Landfill. The management and disposal of all solid waste generated from project construction would be compliant with federal, State, and local statutes and regulations related to solid waste. Impacts would be less than significant.

3.17.3.4 Operation Impacts and Mitigation Measures

As described above, operation and maintenance of the proposed project would not result in impacts to utilities and service systems.

3.17.3.5 Cumulative Impacts

Because CVWD maintains and operates all water and wastewater services where proposed project facilities would be located and has identified that adequate capacity exists to serve the project along with current and future projects, the project's contribution to a cumulative impact related to these services would not be cumulatively considerable.

The project's impacts related to landfill capacity and compliance with solid waste statutes and regulations during construction and operation would be less than significant. Since capacity within the landfills exists for both construction the project, and operations would not generate additional quantities of solid waste, the project's contribution to a cumulative impact would not be cumulatively considerable.

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4 Other CEQA Required Discussions

This section discusses growth-inducing impacts, irreversible environmental impacts, and energy impacts that would be caused by the proposed project.

4.1 Growth Inducement

Section 15126(d) of the State CEQA Guidelines requires a discussion of a proposed project's potential to foster economic or population growth, including ways in which a project could remove an obstacle to growth. Growth does not necessarily create significant physical changes to the environment. However, depending upon the type, magnitude, and location of growth, it can result in significant adverse environmental effects. The proposed project's growth inducing potential is, therefore, considered significant if project-induced growth could result in significant physical effects in one or more environmental issue areas.

4.1.1 Population Growth

As discussed in Section 3.13, *Population and Housing*, the proposed project would not directly generate population growth because it does not include residential uses. Water stored and replenished to the groundwater through the proposed project is allocated to the CVWD and would be managed to provide water supply reliability to CVWD's service territory. This would not facilitate additional population growth, but rather would support existing population and activities and land uses in the area, particularly in light of ongoing long-term drought conditions in California.

4.1.2 Economic Growth

Construction of the proposed project would utilize existing CVWD employees and skilled and general workers from the project area; some temporary employment opportunities may be introduced during project construction. Because construction workers would be expected to be drawn from the existing regional work force, construction of the project would not be growth-inducing from a temporary employment standpoint. Operation and maintenance of the proposed project would not add long-term employment opportunities in addition to the existing CVWD workforce.

The proposed project would not induce economic expansion such that direct physical environmental effects would result. Moreover, the environmental effects associated with any future development in or around Palm Desert would be addressed as part of the CEQA environmental review for such development projects.

4.1.3 Removal of Obstacles to Growth

The proposed project is located in a previously disturbed and urbanized area that is well-served by existing infrastructure. Existing infrastructure associated with utilities and transportation would be adequate to serve the project during the temporary construction period. The water stored and

infiltrated under the proposed project would be utilized for regional water supply reliability and would not remove existing obstacles to growth. No new roads would be installed as part of the project, and the project would not increase access to or through the area. Therefore, project implementation would not remove an obstacle to growth.

4.2 Summary of Cumulative Impacts

CEQA requires that an EIR contain an assessment of the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. As defined in CEQA Guidelines §15065(a)(3), "cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects. The potential for the proposed project to contribute to significant cumulative impacts has been assessed on a categorical basis in Chapter 3 of this EIR.

Guidance for cumulative impact analysis is provided in §15130 of the CEQA Guidelines and directs this analysis when the project's incremental effect is "cumulatively considerable". The Guidelines also describe that a project's contribution is less than cumulatively considerable, and thus not significant, if the project is required to implement mitigation measures that alleviate the project's contribution to the cumulative impact. The cumulative analysis for the proposed Palm Desert Groundwater Replenishment Project generally relies on a combined list-based and growth projections approach. For Air Quality and GHG analyses, cumulative impacts were analyzed in the context of regional and State plans, and the projection approach was used. Cumulative projects in the area are identified on Figure 4.

The cumulative impacts analysis conducted in the individual environmental issue area sections assessed in Chapter 3 of this EIR concluded that the proposed project may result in a significant unavoidable impact for GHG emissions (see Section 3.7), resulting from the exceedance of SCAQMD thresholds for annual GHG emissions, and for water quality (see Section 3.9), resulting from higher TDS concentrations in imported Colorado River water than in the existing groundwater. Therefore, the proposed project would result in a cumulatively considerable contribution with regard to GHG emissions and water quality degradation (specific to TDS). As described throughout Chapter 3 of this EIR, the proposed project would not result in significant cumulative impacts under other environmental issue areas.

4.3 Significant and Unavoidable Impacts

Significant and unavoidable impacts are those that cannot be reduced to acceptable or insignificant levels by the implementation mitigation measures. The proposed Palm Desert Groundwater Replenishment Project provides for the infiltration of imported Colorado River water to the underlying groundwater basin in Palm Desert, for the purposes of water supply reliability. The Phase I and Phase II sites are both previously disturbed, and the MVP extension would also be located within the previously disturbed stormwater channel. Impacts associated with development of the proposed project are addressed in detail in Chapter 3 of this EIR. Comprehensive mitigation measures, as well as monitoring and reporting programs, have been developed to address potential impacts. Project design incorporates energy, site development, and other resource management strategies that are intended to result in avoidance of most and minimization of all potential resource impacts. Significant and unavoidable impacts of the proposed project are listed below.

- **Greenhouse Gas emissions.** Potential environmental impacts would be significant and unavoidable due to the exceedance of SCAQMD thresholds for annual emissions, and conflicts with AB 32 and SB 32.
- **Hydrology and Water Quality.** Potential environmental impacts would be significant and unavoidable due to increased TDS concentrations near the recharge areas, where wells could exhibit increased TDS concentrations that exceed the recommended consumer acceptance contamination level of 500 mg/L for drinking water.

4.4 Irreversible Environmental Effects

The State CEQA Guidelines require that EIRs contain a discussion of significant irreversible environmental changes. This section addresses non-renewable resources, the commitment of future generations to the proposed uses, and irreversible impacts associated with the proposed project.

The proposed project involves the transmission and infiltration of imported Colorado River water to provide water supply reliability to the CVWD jurisdiction, particularly in light of long-term ongoing drought conditions. The project would involve the use of building materials and energy, some of which are non-renewable resources, to construct the WRP10 pipeline extension for Phase I and the MVP extension for Phase II, as well as for the operation of construction vehicles and equipment during implementation of the project. Consumption of these resources would occur with other water supply reliability projects in the region, and are not unique to the proposed project.

The project would not require a new commitment of law enforcement, fire protection, water supply, wastewater treatment, or solid waste disposal services. Irreversible environmental effects (also discussed for Significant and Unavoidable Impacts), could occur for *Greenhouse Gas Emissions* and *Hydrology and Water Quality*.

- As discussed in Section 3.7, *Greenhouse Gas Emissions*, development and operation of the project may generate GHG emissions that would result in a significant impact during project operations. CEQA requires decision-makers to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve a project. As described in this analysis, the proposed project would result in a significant and unavoidable impact due to GHG emissions.
- As discussed in Section 3.9, *Hydrology and Water Quality*, operation of the project may result in increased TDS concentrations near the recharge areas, where wells could exhibit increased TDS concentrations that exceed the recommended consumer acceptance contamination level of 500 mg/L for drinking water. As described in this analysis, the proposed project would result in a significant and unavoidable impact due to elevated TDS concentrations.

4.5 Energy Effects

Public Resources Code Section 21100(b)(2) and Appendix F of the State CEQA Guidelines require that EIRs include a discussion of the potential energy consumption and/or conservation impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, or unnecessary consumption of energy.

The proposed project would involve the use of energy during the construction and operational phases of the project, to improve and implement the proposed infiltration ponds, and to operate

ponds and pumps during construction for transmittal of Colorado River water to the ponds. Energy use during the construction phase would be in the form of fuel consumption (e.g., gasoline and diesel fuel) to operate heavy equipment, light-duty vehicles, and machinery. Long-term operation of the proposed project would require permanent grid connections for electricity and natural gas service to power internal and exterior security lighting and operate pumps, which occur under existing conditions at the WRP10 site. As discussed in this EIR, the proposed project would also include installation of a new pump station on the WRP10 site, to facilitate the transmission of imported Colorado River water to the Phase I ponds located adjacent to the north of the WRP10 site, as well as installation of new pumps within the existing Mid-Valley Pipeline Pump Station; these new pumps would increase energy usage associated with CVWD's water supply operations.

CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operation of a variety of land use projects. The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, the model identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user. Complete CalEEMod results and assumptions are provided as Appendix A of this EIR.

During construction, the proposed project would result in increased weekday trips and vehicle miles traveled (VMT), as compared to current activities on the current site. During operation, the proposed project would result in increased energy usage to power new pumps for both Phase I and Phase II. However, these activities would make a minimal contribution to statewide energy consumption, and therefore would not adversely affect statewide energy supplies.

5 Alternatives

In Chapter 4, this EIR found that the project would avoid significant environmental impacts with the implementation of the mitigation measures set forth in that section. All the impacts of the proposed project, including the significance determination before and after mitigation, are listed in the Executive Summary.

5.1 Alternatives Considered but Eliminated

As noted at the beginning of this section and in accordance with the State CEQA Guidelines, the lead agency is responsible for selecting a range of potentially feasible project alternatives for examination, and must briefly discuss the alternatives it considered and eliminated from detailed consideration. It should be noted that the proposed project is geographically and technologically specific. During the design engineering phase of this project, a variety of alternative projects were considered. These alternatives are also considered from the perspective of their physical and/or environmental viability. Alternatives that failed to meet basic project objectives, were infeasible, or did not substantially lessen or avoid significant environmental impacts were considered but not further analyzed in detail in this EIR (see Section 2.9.2).

5.2 Selected CEQA Alternatives

5.2.1 Alternative 1: No Project Alternative

Under this alternative, the proposed land disposal and infiltration ponds would not be implemented, the pump stations would not be upgraded, and the existing Mid-Valley Pipeline would not be extended. Existing operation and maintenance activities at the WRP10 site would continue. However, CVWD would not be able to store increased allocation of Colorado River water that could be delivered as early as calendar year January 2018, as allocation requests are placed in October 2017; associated benefits to groundwater replenishment would not occur.

5.2.1.1 *Avoid / Lessen Impacts*

Under the No Project Alternative, no action would occur and no adverse environmental impacts associated with improvement and construction of the proposed infiltration basins and pipeline extension would occur.

5.2.1.2 *Meeting Project Objectives*

CVWD would not be able to store or recharge its maximum requested allocation of Colorado River water. No project objectives would be met, including the objective to meet goals of the Water Management Plan, as stated in Section 2.4, *Project Objectives*.

5.2.1.3 Feasibility of Alternative

The No Project Alternative is feasible, as no action would occur.

5.2.2 Alternative 2: Phase I Only Alternative

Under this alternative, the proposed percolation ponds in the Whitewater River Stormwater Channel would not be implemented, and the associated extension of the Mid-Valley Pipeline would not occur. The proposed improvements included under Phase I of the project would be implemented, and a portion of the Colorado River water allocation would thereby be stored and infiltrated to the underlying groundwater basin. However, without implementation of Phase II (the Whitewater River Stormwater Channel ponds), CVWD would not be able to store and utilize its maximum allocation of Colorado River water; as described in 2.4, CVWD's allocation of Colorado River water is the amount of water requested by CVWD based upon anticipated annual needs. CVWD requests only the amount of Colorado River water that would be utilized by CVWD, including for the purposes of groundwater replenishment such as would occur under the proposed project or this alternative to the proposed project. However, under Alternative 2, this amount would be minimized due to fewer replenishment ponds.

5.2.2.1 Avoid / Lessen Impacts

Under the Phase I Only Alternative, Phase II of the project would not occur, and no construction within the Whitewater River Stormwater Channel would occur. Additionally, the Mid-Valley Pipeline extension would not occur, and associated environmental impacts would be avoided. Potential impacts associated with Phase I would occur as described for the proposed project.

5.2.2.2 Meeting Project Objectives

CVWD may not be able to store or recharge its allocation of Colorado River water and therefore would not fully meet objectives associated with maximizing groundwater recharge and water supply reliability.

5.2.2.3 Feasibility of Alternative

The Phase I Only Alternative is feasible, as it would only implement Phase I of the proposed project, and would avoid construction of Phase II of the proposed project.

5.2.3 Alternative 3: Revised Phase II Alternative

Under this alternative, only Phase II of the proposed project would be implemented. As described for the proposed project, this would include the construction of detention/infiltration ponds within the Whitewater River Stormwater Channel, as well as an approximately 0.5-mile extension of the MVP located within the stormwater channel, consistent with the design of the existing MVP within the channel; as such, the pipeline extension would be buried to a depth of approximately 20 feet, and backfilled with a material designed to protect the pipeline extension. Infiltration ponds within the stormwater channel would be located on either side of the pipeline extension, to maximize permeability and infiltration potential. Secondary effluent ponds in the southern portion of the

WRP10 site would not be improved, and a new secondary effluent pump station would not be constructed within the WRP10 site.

5.2.3.1 Avoid / Lessen Impacts

Under the Revised Phase II Alternative, no construction would occur on or adjacent to CVWD's WRP10 site, and associated environmental impacts also would not occur. Potential impacts associated with this alternative would be similar to but less than impacts described under Phase II of the proposed project, because construction activities would not occur on the WRP10 site.

5.2.3.2 Meeting Project Objectives

CVWD may not be able to store or recharge its allocation of Colorado River water and therefore would not fully meet objectives associated with maximizing groundwater recharge and water supply reliability.

5.2.3.3 Feasibility of Alternative

The Revised Phase II Alternative is feasible, as it would only implement a minimized version of Phase II of the proposed project, and would avoid construction of Phase I of the proposed project.

5.3 Alternatives Analysis

5.3.1 Overview

As set forth in section 15126.6 of the State CEQA Guidelines, the purpose of the alternatives analysis is to focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly. CEQA Guidelines Section 15126.6(e)(2) states that if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives evaluated. The environmentally superior alternative is generally defined as the alternative that would result in the fewest adverse environmental impacts on the project sites and surrounding areas.

5.3.2 Aesthetics

5.3.2.1 Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. Construction of project facilities associated with Phase I or Phase II would not occur. Therefore, there would be no temporary or long term changes to scenic resources or the visual character of the project site, and no new sources of light or glare would be introduced. Although no development would occur under this alternative, impacts would be less than significant, and less than the proposed project.

5.3.2.2 Alternative 2: Phase I Only Alternative

The Phase I Only Alternative would include re-purposing of existing ponds located adjacent to the north of CVWD's WRP10 site, extension of the existing water transmission pipeline within the WRP10 site, installation of a Colorado River water pump station adjacent to the Back Feed Reservoir (within WRP10), and installation of two new 800-HP pumps and a hydropneumatic tank within the existing MVP Pump Station. Phase II would not be implemented, and therefore no development would occur within the Whitewater River Stormwater Channel, the Mid-Valley Pipeline would not be extended, and ponds in the southern portion of the WRP10 site would not be revised. Like the proposed project, development included in Phase I would occur within the existing disturbed area adjacent to the north of the WRP10 site and partially within the WRP10 site, and project uses would be consistent with existing uses and would be shielded from public view. Therefore, Phase I construction and operational activities would not affect scenic resources or the visual character of the site or surrounding area and would not create substantial new sources of light or glare. Some glare may be introduced through the presence of construction vehicles and equipment, but this would be similar to current vehicle and equipment activity on the existing site. Existing lighting on the WRP10 site would be used during operation of Phase I development. Impacts would be less than significant and slightly less than the proposed project.

5.3.2.3 Alternative 3: Revised Phase II Alternative

The Revised Phase II Alternative would include development of the Whitewater River Stormwater Channel ponds, extension of the MVP (within the stormwater channel), re-purposing of existing ponds on the southern portion of the WRP10 site, and installation of two new 800-HP pumps and a hydropneumatic tank within the existing MVP Pump Station. No re-purposing or construction activities regarding storage ponds adjacent to the north of the WRP10 site would occur under this alternative; additionally, the pipeline extension within the WRP10 site would not occur and the new pump station adjacent to the Back Feed reservoir would not occur. Further, unlike the proposed project, storage ponds under this alternative would be located further upstream from the project site, between Cook Street and Portola rather than between Fred Waring Drive and Cook Street, causing the Mid-Valley Pipeline extension to be substantially longer than under the proposed project and generating the need for construction of an additional pump station. However, like the proposed project, although the water retention ponds within the Whitewater River Stormwater Channel would constitute a visual change compared to the existing dry, vegetated state, there are no scenic vistas or high-quality visual resources in the area. In addition, the pipeline extension would be located underground. Potential impacts to scenic resources and the visual character of the site would therefore be less than significant.

Development activities under this alternative would not introduce substantial new sources of light or glare to the area. Like the proposed project, though new lighting would need to be installed on the Phase II site, this lighting would be angled down and only employed as needed, and would not expose surrounding land uses to new or intrusive levels of lighting. Temporary changes in glare would only occur during construction activities from vehicles and equipment. However, this would be similar to glare generated from existing on-site vehicles and equipment. Impacts under this alternative would be comparable to the proposed project and would be less than significant.

5.3.3 Agriculture and Forest Resources

5.3.3.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at both of the project sites. No new facilities would be developed within the existing WRP10 location or within the Whitewater River Stormwater channel. There would be no changes to existing zoning, land use, or conversion of existing agricultural lands. Therefore, there would be no impacts to agricultural resources.

5.3.3.2 *Alternative 2: Phase I Only Alternative*

Development under the Phase I Only Alternative would only occur as described for Phase I of the proposed project, including ponds adjacent to the north of the WRP10 site and a pipeline extension and pump station within the existing WRP10 site. Similar to the proposed project, there are no lands within the project site or adjacent to the project site that have been mapped as farmland by the California Department of Conservation's Farmland Mapping and Monitoring Program or that are under a Williamson Act contract. Further, development under this alternative would not convert any Farmland to non-agricultural use, convert forest land to non-forest use, or conflict with existing forest land or timberland zoning. As with the proposed project, no impact would occur.

5.3.3.3 *Alternative 3: Revised Phase II Alternative*

Development under the Revised Phase II Alternative would include construction of detention basins and temporary berms within the Whitewater River Stormwater Channel, as well as improvement of the secondary effluent pump on the WRP10 site and extension of the MVP within the stormwater channel to provide for conveyance of Colorado River water to the new detention basins. Like the proposed project and Alternative 2, all land within and adjacent to the Phase II project site is mapped as either "Urban and Built-up Land" or "Other Land" categories by the Farmland Mapping and Monitoring Program, and there is no identified farmland within or adjacent to the site. Further, development under this alternative would not convert any Farmland to non-agricultural use, convert forest land to non-forest use, or conflict with existing forest land or timberland zoning. As with the proposed project, no impact would occur.

5.3.4 Air Quality

5.3.4.1 *Alternative 1: No Project Alternative*

The No Project Alternative would result in the continuation of existing conditions; there would be no construction at any of the project sites and no change in operations. The No Project Alternative would have no impact associated with air quality.

5.3.4.2 *Alternative 2: Phase I Only Alternative*

Phase I of the project involves the re-purposing of existing ponds and removal of existing ponds from WRP10 site operations, including installation of a new secondary effluent pump station, construction of new ponds adjacent to the north of the WRP10 site, and modification to existing piping and controls to facilitate delivery of imported Colorado River water to the proposed

percolation ponds north of the WRP10 site. In addition, the northeastern-most percolation pond (located adjacent to the north of the WRP10 site and east of the proposed Phase I ponds) would be re-purposed for relocated operations parking and removed from the existing WRP10 site. Impacts associated with GHG emissions during operation would be significant and unavoidable. However, NO_x emissions associated with the Phase I Only Alternative would be less than 100 lbs/day, the SCAQMD threshold for significance, and air quality impacts for this alternative would therefore be less than significant. No additional mitigation would be required for this alternative.

5.3.4.3 *Alternative 3: Revised Phase II Alternative*

Phase II of the project includes the construction of temporary berms and extension of the Mid-Valley Pipeline within the Whitewater River Stormwater Channel. As with the Phase I Only Alternative, NO_x emissions associated with the Revised Phase II Alternative would be less than 100 lbs/day, the SCAQMD threshold for significance, and air quality impacts would therefore be less than significant. Emissions associated with the Revised Phase II Alternative would be greater than those associated with the Phase I Only Alternative, due to a greater area of ground disturbance and associated vehicle/equipment usage that would occur under this alternative. The air quality impacts for the Revised Phase II Alternative would be less than significant and no mitigation would be required.

5.3.5 Biological Resources

5.3.5.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new facilities at the project site or the Phase II site. No impacts to biological resources, including endangered species and wetlands, would occur. The character and quality of on-site and surrounding habitats, including those within Coachella Valley MSHCP Conservation Areas, would be unaffected. Therefore, impacts associated with the No Project Alternative would be less than all other alternatives.

5.3.5.2 *Alternative 2: Phase I Only Alternative*

This alternative would involve development on the existing WRP10 site which contains suitable nesting habitat for burrowing owls and common native birds. Like the proposed project, construction activities could affect these species if construction occurs when they are in the vicinity of the site. However, Alternative 2 would implement the same mitigation measures as the proposed project to reduce the risk of potential impacts to these species. No development would occur within the Whitewater River Stormwater Channel, and therefore no changes to the existing hydrological conditions would occur. Further, the project site under this alternative would not be located in a Coachella Valley MSHCP Conservation area and would not affect wildlife movement. Impacts to biological resources would be less than the proposed project and would be less than significant with mitigation incorporated.

5.3.5.3 *Alternative 3: Revised Phase II Alternative*

This alternative would only involve development within the Whitewater River Stormwater Channel with the installation of storage ponds and the extension of the underground MVP. Construction

activities within the stormwater channel site would be generally similar to the proposed project, but would require a longer extension of the MVP and would require tunneling under an existing roadway. Like the proposed project, the Phase II project site would be located in suitable habitat for burrowing owls and other native birds. However, like the other two alternatives, Alternative 3 would implement mitigation measures to reduce the risk of potential impacts to these species. Further, as development under this alternative would be subject to regulation by the CDFW, Colorado River Basin RWQCB, and USACE, the same mitigation measures as the proposed project would be implemented to ensure consultation and engagement with these entities and compliance with all permit conditions and measures. The Phase II site would not be located in a Coachella Valley MSHCP Conservation area and would not affect wildlife movement. Therefore, impacts to biological resources would be slightly larger than the proposed project but would be less than significant.

5.3.6 Cultural and Tribal Resources

5.3.6.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new ground disturbance or facilities at the project site or Phase II site. No impacts to cultural resources would occur and the character and quality of on-site and surrounding lands would be unaffected.

5.3.6.2 *Alternative 2: Phase I Only Alternative*

As Phase I would occur on existing disturbed land adjacent to the north of the WRP10 site, where the percolation ponds would be located, and within the WRP10 site where the pipeline extension and new pump station would occur. This would involve grading and excavation to re-purpose existing ponds and to construct new storage ponds as well as a new effluent pump station. Although it is not anticipated that project construction would disturb identified cultural resources, such as Resource CA-RIV-64/H, and no tribal cultural resources or fossils have been identified at the project site, it is possible that ground disturbing activities could potentially uncover unknown buried cultural and tribal resources. However, Alternative 2 would implement the same mitigation measures as the proposed project to address the potential for unanticipated discovery of such resources. Therefore, impacts would be similar to the proposed project and less than significant after mitigation is incorporated.

5.3.6.3 *Alternative 3: Revised Phase II Alternative*

This alternative would only involve development within the Whitewater River Stormwater Channel, with installation of new storage ponds and extending the MVP, which would require construction activities, such as ground clearing, grading, and surface excavation. Although it is not anticipated that project construction would disturb identified cultural resources, such as Resource CA-RIV-64/H, and no tribal cultural resources or fossils have been identified at the project site, it is possible that ground disturbing activities could potentially uncover unknown buried cultural and tribal resources. However, Alternative 3 would implement the same mitigation measures as the proposed project to address the potential for unanticipated discovery of such resources. Therefore, impacts would be similar to the proposed project and less than significant after mitigation is incorporated.

5.3.7 Geology and Soils

5.3.7.1 *Alternative 1: No Project Alternative*

Under the No Project Alternative, there would be no ground disturbance at either the Phase I or Phase II sites. There would therefore be no potential for the loss of topsoil or soil erosion from wind or water, beyond that which would occur currently. The No Project Alternative would also not result in the construction of facilities in a seismically active area, including the construction of facilities crossing a known earthquake fault, or in areas with a high potential for liquefaction. There would not be any potential for impacts to structures or people as a result of the No Project Alternative. Therefore, impacts associated with geology and soils would be less than those associated with any other alternative.

5.3.7.2 *Alternative 2: Phase I Only Alternative*

The implementation of the Phase I Only Alternative would re-purpose existing ponds adjacent to the north of the WRP10 site, and implement a pipeline extension and new pump station within the WRP10 site. No development would occur within the Whitewater River Stormwater Channel. As the Phase I site is already disturbed, potential erosion may result from construction activities. However, like the proposed project, erosion control plans and construction BMPs would be implemented and a SWPPP would be prepared under this alternative to reduce potential erosion. Further, though the Phase I site would not be located in a seismically active region, or area with unstable or corrosive soils, development under this alternative would comply with all applicable federal, state, and local construction and design standards to minimize risks to life and property. Therefore, impacts would be similar to the proposed project and would be less than significant.

5.3.7.3 *Alternative 3: Revised Phase II Alternative*

The implementation of the Revised Phase II Alternative would only involve development within the Whitewater River Stormwater Channel with installation of new storage ponds, extension of the MVP within the stormwater channel, and re-purposing of ponds in the southern portion of the WRP10 site. As the Phase II site is already disturbed, potential erosion may result from construction activities including grading and excavation. Further, installation of underground pipelines may result in the potential for soil instability or collapse during pipeline trenching. These potential effects would be larger than those of the proposed project, as this alternative would require further extension of the MVP; however, like the proposed project, erosion control plans and construction BMPs would be implemented and a SWPPP would be prepared under this alternative to reduce potential erosion and reduce the risk to people or structures from soil instability. The Phase II site would not be located in a seismically active region, or area with unstable or corrosive soils, development under this alternative would comply with all applicable federal, state, and local construction and design standards to minimize risks to life and property. Therefore, impacts would be slightly larger than the proposed project but would be less than significant.

5.3.8 Greenhouse Gases

5.3.8.1 *Alternative 1: No Project Alternative*

The No Project Alternative would result in no construction at any of the project sites and no change in operations. Under this alternative, there would therefore be no new greenhouse gas emissions from construction or operations activities. The No Project Alternative would have no impact associated with greenhouse gases.

5.3.8.2 *Alternative 2: Phase I Only Alternative*

The Phase I Only Alternative would re-purpose the existing storage ponds located adjacent to the north of the WRP10 site, and construct a new secondary effluent pump station and pipeline extension within the WRP10 site. No development would occur within the Whitewater River Stormwater Channel under the Phase I Only Alternative. Greenhouse gas emissions associated with the operation of the new pump station, in addition to the existing MVP Pump Station, would exceed the SCAQMD threshold for annual GHG emissions and conflict with AB 32 and SB 32; as with the proposed project, potential GHG impacts would be significant and unavoidable.

5.3.8.3 *Alternative 3: Revised Phase II Alternative*

The Revised Phase II Alternative would involve development activities within the Whitewater River Stormwater Channel, including development of groundwater replenishment basins in the southern portion of the WRP10 site, extension of the MVP, and upgrades to the existing MVP Pump Station. No development would occur north of the WRP10 site under the Revised Phase II Alternative. Greenhouse gas emissions associated the operation of the upgraded pump station would exceed the SCAQMD threshold for annual GHG emissions and conflict with AB 32 and SB 32; as with the proposed project, potential GHG impacts would be significant and unavoidable.

5.3.9 Hazards and Hazardous Materials

5.3.9.1 *Alternative 1: No Project Alternative*

The No Project Alternative would result in no change in the environment, and no construction at any of the project sites. Under this alternative, there would be no new use of chemicals or other substances, and therefore no potential for release of these substances beyond that which currently is possible at the existing WRP10 site. The No Project Alternative would have no impact associated with hazards or hazardous materials.

5.3.9.2 *Alternative 2: Phase I Only Alternative*

The Phase I Only Alternative would re-purpose the existing storage ponds adjacent to the north of the WRP10 site, construct a pipeline extension and new pump station within the WRP10 site, and upgrade the existing MVP Pump Station. No development would occur within the Whitewater River Stormwater Channel. The impacts associated with hazards and hazardous materials under this alternative would be equivalent to those under the proposed project, since the facilities would be the similar except for development within the channel. The construction impacts would be equivalent to those described for the proposed project, and the mitigation measures included in this

document would be applied to development under this alternative. Further, construction activities would comply with all relevant regulations, including the enforcement of hazardous materials transportation regulations and the County's General Plan Safety Element regarding hazardous materials. Although implementation of this alternative would result in less overall development, the impacts would be equivalent to those under the proposed project and would be less than significant with mitigation incorporated.

5.3.9.3 *Alternative 3: Revised Phase II Alternative*

The implementation of the Revised Phase II Alternative would involve development within the Whitewater River Stormwater Channel in installation of new groundwater replenishment ponds and extension of the MVP and secondary effluent pump station, and re-purposing of ponds in the southern portion of the WRP10 site. However, as the replenishment ponds would be located further west compared to those under the proposed project, the pipeline would have to also be extended further west, and would require construction of an additional pump station. The general construction activities for the replenishment ponds and the pipeline extension would be the same as the proposed project, and impacts associated with that construction would be subject to the same mitigation measures to reduce the risk of impacts from an accidental spill or release. Further, construction activities would comply with all relevant regulations, including the enforcement of hazardous materials transportation regulations and the County's General Plan Safety Element regarding hazardous materials. Although implementation of this alternative would result in greater construction activities and the impacts would be larger than those under the proposed project, impacts would be less than significant with mitigation incorporated.

5.3.10 Hydrology and Water Quality

5.3.10.1 *Alternative 1: No Project Alternative*

As discussed in Section 4.10 of this EIR, a majority of the project area is covered with impervious surfaces; sheet runoff from the WRP10 site flows to either the surrounding pervious ground or to the adjacent section of the Whitewater River Stormwater Channel within the project site. The channel is located in an area with a one percent annual chance of flooding, and the MVP Pump Station is located in an area subject to 0.2 percent annual flood risk but is protected by an accredited levee. These conditions would continue under the No Project Alternative as no alterations to existing or new storage ponds within the WRP10 site or the Whitewater River Stormwater Channel would occur. There would be no increase in runoff, no changes to local or area-wide drainage patterns, and neither groundwater nor surface water quality would be affected. No impact would occur.

5.3.10.2 *Alternative 2: Phase I Only Alternative*

The Phase I Only Alternative would primarily involve re-purposing of the existing storage ponds adjacent to the north of the WRP10 site, and extension of an existing pipeline and construction of a new pump station within the WRP10 site. Construction activities would be generally the same as the proposed project, with the exception that no development would occur within the Whitewater River Stormwater Channel, and would have the same impacts and would require the same mitigation measures as the proposed project, including implementation of the SWPPP and BMPs.

As no development would occur within the Whitewater River Stormwater Channel and the MVP would not be extended under this alternative, a dewatering system would not be required for groundwater discharge. Like the proposed project, the expansion of the parking area for the WRP10 site would increase the impervious surface area adjacent to the WRP10 site; any increase in stormwater runoff would be minimal and runoff would flow to surrounding pervious ground surface similar to existing conditions. Further, the secondary effluent and percolation ponds would be subject to the same Colorado River Basin RWQCB discharge requirements and standards. Impacts to water quality resulting from increased TDS concentrations in imported Colorado River water would still occur, and would be significant and unavoidable, but would be slightly less than the proposed project because this alternative wouldn't facilitate the same quantity of groundwater replenishment. As with the proposed project, other impacts to hydrology and water quality would be less than significant.

5.3.10.3 Alternative 3: Revised Phase II Alternative

The Revised Phase II Alternative would involve development of groundwater replenishment basins within the Whitewater River Stormwater Channel, extension of the MVP, construction of a new secondary effluent pump station, and expanded secondary effluent storage. The Whitewater River Stormwater Channel is a regularly maintained drainage channel that is used for stormwater conveyance during storm events. Although construction within the stormwater channel would be to a greater extent than under proposed project, as the MVP would be extended further to reach the replenishment basins, construction would not occur during flood conditions. Activities for the pipeline extension would be the same as the proposed project and would include use of a dewatering system to minimize impacts to groundwater recharge. Further, as no development would occur on the existing WRP10 site, there would be no increase in impervious surfaces that would generate increased stormwater runoff.

Similar to the proposed project, though the groundwater replenishment basins would be developed further upstream of the WRP10 site, periods of increased stormwater runoff may cause flows to expand outside of the drainage and into the basins. However, the same project design features would be implemented to maintain the function of the channel for stormwater conveyance, and the basins would not substantially affect drainage patterns. Impacts to water quality resulting from increased TDS concentrations in imported Colorado River water would still occur, and would be significant and unavoidable, but would be slightly less than the proposed project because this alternative wouldn't facilitate the same quantity of groundwater replenishment. As with the proposed project, other impacts to hydrology and water quality would be less than significant.

5.3.11 Land Use and Planning

5.3.11.1 Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no alterations to or construction of storage ponds at the WRP10 site nor development within the Whitewater River Stormwater Channel, and the MVP would not be extended. There will be no impacts on existing communities, conflicts with land planning and regulatory programs, or conflicts with habitat conservations plans.

5.3.11.1 Alternative 2: Phase I Only Alternative

Development under this alternative would only involve re-purposing of existing storage ponds adjacent to the north of the WRP10 site, and construction of a pipeline extension and new pump station within the WRP10 site. Construction and operation of this alternative within this area would be similar to that of the proposed project and would not conflict with any existing land use plan, policy or regulations. In addition, the proposed project activities would be consistent with existing land uses in the project area. Therefore, impacts would be equivalent to the proposed project and would be less than significant.

5.3.11.3 Alternative 3: Revised Phase II Alternative

Development under this alternative would only involve development of new groundwater replenishment basins and extension of the MVP within the Whitewater River Stormwater Channel. Construction and operation of this alternative within this area would be similar to that of the proposed project and would not conflict with any existing land use plan, policy or regulations. In addition, the proposed project activities would be consistent with existing land uses in the project area. Therefore, impacts would be equivalent to the proposed project and would be less than significant.

5.3.12 Mineral Resources

5.3.12.1 Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no new loss in mineral resources, and no impact on such resources would occur.

5.3.12.2 Alternative 2: Phase I Only Alternative

Like the proposed project, though the City General Plan identifies the city as a MRZ-3 classification, the existing site is already developed which precludes exploration or development of mineral resources on the site. There are no known valuable mineral resources within the project site, and therefore there would be no impacts to such resources.

5.3.12.3 Alternative 3: Revised Phase II Alternative

The Revised Phase II Alternative would involve development activities within the Whitewater River Stormwater Channel, including development of groundwater replenishment basins upstream of the WRP10 site and extension of the MVP. However, as the replenishment basins would be located further west of the WRP10 facility compared to the proposed project, the MVP would have to be extended further, as well, and would require construction of an additional pump station. Like the proposed project, though the City General Plan identifies the city as within an area classified as MRZ-3 classification, the existing site is already developed to manage stormwater runoff events, which precludes exploration or development of mineral resources on the site. Further, there are no known valuable mineral resources within the project site, and therefore there would be no impacts to such resources.

5.3.13 Noise and Vibration

5.3.13.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no development of storage ponds at the WRP20 facility, no construction of groundwater replenishment basins in the Whitewater River Stormwater Channel, and the MVP would not be extended. The No Project Alternative would not result in any construction noise level or vibration impacts. Operational noise and vibration impacts would be equivalent to the proposed project.

5.3.13.2 *Alternative 2: Phase I Only Alternative*

The Phase I Only Alternative would involve development adjacent to the north of the existing WRP10 site and improvements within the WRP10 site including a pipeline extension and construction of a new pump station. The highest construction noise level impacts during the Phase I Only Alternative would occur during grading activities. Peak noise levels would be the same as the peak noise levels associated with the proposed project. With mitigation measures such as limited construction hours, potential impacts from construction-related noise levels would be less than significant. Since the Phase I Only Alternative would require less vibration-causing construction equipment than the proposed project, it would have a smaller vibration impact. Vibration impacts would still be less than significant with no mitigation. Once constructed, operational noise levels of Phase I Only Alternative project sites would be the same as current conditions.

5.3.13.3 *Alternative 3: Revised Phase II Alternative*

The Revised Phase II Alternative would only occur within the existing Whitewater River Stormwater Channel, located to the south-southwest of WRP10. The highest construction noise level impacts during Revised Phase II would be the same as the peak noise levels associated with the Phase I Only Alternative or the proposed project. With mitigation measures, construction noise impacts would be less than significant. Since the Revised Phase II Alternative would require less vibration-causing construction equipment than the proposed project, it would have a smaller vibration impact. Vibration impacts would still be less than significant with no mitigation. Once constructed, operational noise levels of Revised Phase II Alternative project sites would be the same as current conditions.

5.3.14 Population and Housing

5.3.14.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no development of storage ponds adjacent to or within the WRP10 site, no construction of groundwater replenishment basins in the Whitewater River Stormwater Channel, and the MVP would not be extended. As the proposed project would enable the CVWD to maximize annual storage of allocated Colorado River water, which would increase local supply, population growth may be indirectly induced but not beyond what existing Colorado River allocations currently allow. The potential for such growth would not occur under the No Project Alternative. Therefore, the No Project Alternative may potentially limit the capacity for natural growth.

5.3.14.2 Alternative 2: Phase I Only Alternative

The Phase I Only Alternative would only involve development adjacent to the north of the existing WRP10 site and would include construction of a pipeline extension and new pump station within the WRP10 site. No housing or other residential uses are included. Like the proposed project, this alternative would not require land rezoning to increase housing development density, and the construction workforce would be sourced from nearby communities. Further, as the WRP10 site is already developed with no housing or residential uses, no housing or individuals would be displaced. In addition, though this alternative would help CVWD obtain a larger amount of its water allocation from the Colorado River, it would not enable CVWD to capture their full allocation. This would not induce population growth. Therefore, this alternative would have equivalent effects in not generating adverse impacts to housing or population growth compared to the proposed project.

5.3.14.3 Alternative 3: Revised Phase II Alternative

The Revised Phase II Alternative would only involve development within the Whitewater River Stormwater Channel, which would include development of groundwater replenishment ponds within the channel and extension of the MVP. No housing or other residential uses would be developed. Like the proposed project, this alternative would not require land rezoning to increase housing development density, and the construction workforce would be sourced from nearby communities. Further, there are no housing or residential uses located within this site. Similar to the other two alternatives, though the Revised Phase II Alternative would help CVWD obtain a larger amount of its water allocation from the Colorado River, it would not enable CVWD to capture their full allocation, and would not induce substantial population growth. Therefore, this alternative would have equivalent effects associated with population and housing as the other alternatives.

5.3.15 Public Services

5.3.15.1 Alternative 1: No Project Alternative

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no re-purposed or new storage ponds, and no new pump stations. There would also be no extension of the MVP and no development of groundwater replenishment basins within the Whitewater River Stormwater Channel. There would be no additional population increase or demand for public services. Therefore, there will be no impact to these resources.

5.3.15.2 Alternative 2: Phase I Only Alternative

The Phase I Only Alternative would involve development adjacent to the north of the WRP10 site, which would include the re-purposing and construction of storage ponds, as well as construction of a pipeline extension and new pump station within the WRP10 site. Construction and operational activities at the WRP10 site under this alternative would be similar to the proposed project, and therefore would not generate population growth such that existing service ratios for fire protection, police protection, schools, or libraries are affected. Therefore, construction and operation of this alternative would have no impact on public services.

5.3.15.3 *Alternative 3: Revised Phase II Alternative*

The Revised Phase II Alternative would only involve development within the Whitewater River Stormwater Channel, which would include development of groundwater replenishment basins and extension of the existing MVP. Construction and operational activities within the stormwater channel site under this alternative would be similar to the proposed project, and therefore would not generate population growth such that existing service ratios for fire protection, police protection, schools, or libraries are affected. Therefore, construction and operation of this alternative would have equivalent impacts as the proposed project and the other alternatives.

5.3.16 Recreation

5.3.16.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no re-purposed or new storage ponds, and no new secondary effluent pump station at the WRP10 site. There would also be no extension of the MVP and no development of groundwater replenishment basins within the Whitewater River Stormwater Channel. The project has no impact on recreational resources, and this alternative would not impact these resources either.

5.3.16.2 *Alternative 2: Phase I Only Alternative*

This alternative would involve development adjacent to the north of the WRP10 site and within the existing WRP10 site. As with the proposed project, public access and recreational uses are not permitted at the WRP10 site, and therefore construction and operation of this alternative would not displace any recreational users or increase demand for recreational resources. There would be no impacts to these resources under this alternative.

5.3.16.3 *Alternative 3: Revised Phase II Alternative*

The Revised Phase II Alternative would involve development within the Whitewater River Stormwater Channel, which would include development of groundwater replenishment basins and extension of the existing MVP. As under the proposed project, though waterways are considered as open space recreational areas in Palm Desert, the segment of the Whitewater River Stormwater Channel within the site of this alternative, west southwest of the WRP10 site, is used for flood control. This segment does not contain any recreational facilities. Therefore, similar to the proposed project, this alternative would not displace recreational users or increase demand for recreational resources. There would be no impacts to these resources under this alternative.

5.3.17 Traffic and Transportation

5.3.17.1 *Alternative 1: No Project Alternative*

The No Project Alternative will result in the continuation of existing conditions at each of the project sites. There would be no re-purposed or new storage ponds, and no new secondary effluent pump station at the WRP10 site. There would also be no extension of the MVP and no development of

groundwater replenishment basins within the Whitewater River Stormwater Channel. Construction-related traffic would therefore not occur. The No Project Alternative would have no traffic impacts.

5.3.17.2 Alternative 2: Phase I Only Alternative

Development under this alternative would only involve re-purposing of existing storage ponds, construction of new storage ponds, and construction of a pipeline extension and new pump station. During construction of the Phase I Only Alternative, there would be a temporary increase in truck trips and construction worker vehicles in the vicinity of each project site. The number of vehicle trips associated with ongoing O&M activities would not be substantially different from existing conditions, and impacts would therefore be less than significant. It is assumed that a Construction Traffic Management Plan would be prepared and implemented to control construction traffic. Overall, traffic and transportation impacts associated with the Phase I Only Alternative would be less than significant with mitigation.

5.3.17.3 Alternative 3: Revised Phase II Alternative

The Revised Phase II Alternative would include development of the Whitewater River Stormwater Channel ponds and extension of the MVP. No re-purposing or construction activities regarding storage ponds within the WRP10 site would occur and no new effluent pump stations would be constructed. During construction of the Revised Phase II Alternative, there would be a temporary increase in truck trips and construction worker vehicles in the vicinity of each project site. The number of vehicle trips associated with ongoing O&M activities would not be substantially different from existing conditions, and impacts would therefore be less than significant. It is assumed that a Construction Traffic Management Plan would be prepared and implemented to control construction traffic. Overall, traffic and transportation impacts associated with the Revised Phase II Alternative would be less than significant with mitigation.

5.3.18 Utilities and Service Systems

5.3.18.1 Alternative 1: No Project Alternative

The No Project Alternative would not include any construction or additions to existing facilities, and as a result would not generate construction waste or excavated soil, and would therefore have no impact on landfills. This alternative would also not require any additional water for the start up or on going operation of facilities, and would not affect stormwater drainage at the existing site. The No Project Alternative, therefore, will have no impact on utilities or service systems.

5.3.18.2 Alternative 2: Phase I Only Alternative

This alternative would involve development adjacent to the north of the existing WRP10 site, as well as within the WRP10 site. Construction and operational activities at these locations would be the same as the proposed project. Therefore, implementation of this alternative would not generate population growth, and therefore would not increase demand for wastewater treatment facilities. Further, expansion of the parking area would not require additional stormwater drainage facilities.

As construction activities would be similar to the proposed project, this alternative would be subject to the same permit requirements and would implement a SWPPP and the appropriate BMPs to reduce wastewater impacts and minimize soil erosion. In addition, as less excavation would occur

compared to the proposed project, waste generated under this alternative would be minimal and could be accommodated by nearby landfills. Water requirements would also be slightly less than the proposed project, and could be sufficiently served with existing water supply of the WRP10 site. Overall impacts to public utilities under this alternative would be similar, possibly smaller, and would be less than significant.

5.3.18.3 *Alternative 3: Revised Phase II Alternative*

This alternative would involve development within the Whitewater River Stormwater Channel, which would include development of groundwater replenishment basins and extension of the existing MVP. As the replenishment basins would be located further upstream west of their location under the proposed project, the MVP would have to be extended further west as well, and would require construction of an additional pump station. General construction and operational activities within the stormwater channel site under this alternative would be the same as the proposed project. Therefore, implementation of this alternative would not generate population growth, and therefore would not increase demand for wastewater treatment facilities.

As construction activities would be generally similar to the proposed project, this alternative would be subject to the same permit requirements and would implement a SWPPP and the appropriate BMPs to reduce wastewater impacts and reduce soil erosion. Further, a dewatering system would be implemented if groundwater is encountered during pipeline installation or other excavation activities, and disposal of potential groundwater would comply with permit requirements. In addition, the level of excavation would be similar to the proposed project, therefore waste generated under this alternative would be minimal and could be accommodated by nearby landfills. Water requirements would also be comparable to, if not slightly larger than, proposed project, and could be sufficiently served with existing water supply of the WRP10 site. Overall impacts to public utilities under this alternative would be slightly larger than the proposed project but would be less than significant.

5.4 Environmentally Superior Alternative

The CEQA Guidelines Section 15126.6(e) requires that an environmentally superior alternative be identified among the alternatives considered. According to CEQA Guidelines Section 15126.6(e)(2), if the environmentally superior alternative is the No Project Alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives evaluated. The environmentally superior alternative is generally defined as the alternative that would result in the fewest adverse environmental impacts on the project sites and surrounding areas.

Table 30 provides an overview comparison of the proposed project and alternatives, using the following symbols to indicate how potential impacts under each environmental issue area compare to the proposed project:

- “+” indicates that the alternative would be preferable (have less substantial impacts) than the proposed project for this issue area;
- “-” indicates that the alternative would be less preferable (have more substantial impacts) than the proposed project for this issue area;
- “=” indicates that the alternative would be approximately comparable to the proposed project for this issue area.

Table 30 Comparison of Impact Significance Determinations

Environmental Issue Area	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Phase I Only Alternative	Alternative 3: Revised Phase II Alternative
Aesthetics	Less than Significant	+	+	+
Agriculture and Forest Reserves	No Impact	=	=	=
Air Quality	Significant and Unavoidable	+	+	+
Biological Resources	Less than Significant with Mitigation Incorporated	+	+	+
Cultural and Tribal Resources	Less than Significant with Mitigation Incorporated	+	=	=
Geology and Soils	Less than Significant	+	=	-
Greenhouse Gases	Less than Significant	+	+	+
Hazards and Hazardous Materials	Less than Significant with Mitigation Incorporated	+	=	-
Hydrology and Water Quality	Less than Significant	+	+	+
Land Use and Planning	Less than Significant	=	=	=
Mineral and Energy Resources	No Impact	=	=	=
Noise and Vibration	Less than Significant	+	=	=
Population and Housing	No Impact	-	=	=
Public Services	No Impact	=	=	=
Recreation	No Impact	=	=	=
Traffic and Transportation	Less than Significant with Mitigation Incorporated	+	+	+
Utilities and Service Systems	Less than Significant	+	+	-
+ Superior to the proposed project (reduced level of impact) - Inferior to the proposed project (increased level of impact) = Similar level of impact to the proposed project				

In this case, the No Project Alternative is the environmentally superior alternative, insofar as it would result in no direct impacts on the environment. However, the No Project Alternative would not meet any of the project objectives.

The Phase I Only Alternative and Revised Phase II Alternative generally have similar impacts when compared to the proposed project, with exceptions in some environmental issue areas where impacts are tied to ground-disturbing activities. Both alternatives would slightly reduce impacts of the proposed project because each would reduce the area of disturbance. The Phase I Only Alternative would be slightly preferable to the Revised Phase II Alternative due to the avoidance of impacts associated with air quality and GHG emissions during ground-disturbing activities within the Whitewater River Stormwater Channel, because less land disturbance would occur under the Phase I Only Alternative than the Revised Phase II Alternative.

However, neither the Phase I Only Alternative nor the Revised Phase II Alternative would have capacity to implement all identified objectives of the proposed project. The proposed project would meet all project objectives, and all potential environmental impacts would be mitigated to less-than-significant levels with the exception of greenhouse gasses, where potential emissions would be significant and unavoidable.

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Appendix A

Air Quality Technical Report and CalEEMod Results

Appendix B

Biological Resources Assessment

Appendix C

Cultural Resources Assessment

Appendix D

Noise Modeling Results

Appendix E

Notice of Preparation and Scoping Meeting Materials