Coachella Valley Water District Whitewater River Groundwater Replenishment Facility Project

Final Environmental Impact Report
SCH#2020020004

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EXECUTIVE SUMMARY

The Coachella Valley Water District (CVWD) has prepared this Environmental Impact Report (EIR) to evaluate potential environmental impacts related to the proposed right-of-way grant for the Whitewater River Groundwater Replenishment Facility (Facility). CVWD is the lead agency under the California Environmental Quality Act (CEQA) for this proposed Project.

This EIR has been prepared in accordance with CEQA (California Public Resources Code Sections 21000 – 21189.3) and the 2021 CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sections 15000-15387) as well as CVWD's Local CEQA Guidelines (2019 update). Under CEQA Guidelines Section 15121 (Informational Document):

> *"An EIR is an informational document which 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. The public agency shall consider the information in t*
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> *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 CEQA Guidelines Section 15123, this Executive Summary presents a summary of the proposed Project, potentially significant impacts, and required mitigation measures. Also identified in this section is a summary of the alternatives to the Project evaluated in this EIR, 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 to best mitigate potentially significant effects.

SUMMARY OF THE PROPOSED PROJECT

The proposed Project described in this EIR is a right-of-way grant for the Whitewater River Groundwater Replenishment Facility to continue to provide groundwater replenishment and deliver groundwater in the Coachella Valley within Riverside, Imperial, and San Diego counties. Groundwater replenishment in the Coachella Valley Groundwater Basin is critical to maintaining groundwater levels and ensuring local availability of irrigation and domestic water within CVWD's and the Desert Water Agency's (DWA's) service area. The proposed Project would consist of continuation of ongoing operations and maintenance activities at the Facility including but not limited to sediment removal, dike repair, road maintenance, low-

flow dike and channel crossing maintenance, and flood control berm maintenance. Maintenance activities at the Facility would continue to average approximately 60 working days per year.

The Project site consists of the following two individual areas:

- The "renewal area" covers a portion the existing Facility, including portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. This area is located on public lands administered by the Bureau of Land Management (BLM) within portions of Section 24 of Township 3 South, Range 3 east; and Sections 20, 28, and 30 of Township 3 South, Range 4 East (approximately 509.7 acres). The renewal area also includes the existing low-flow dike and channel crossing on a portion of Section 14, Township 3 South, Range 3 East (approximately 2.2 acres).
- The "amendment area" consists of public lands administered by the BLM that are used to access the Facility and for conveyance of natural flows and Colorado River water, includes portions of Sections 23 and 24 of Township 3 South, Range 3 East (approximately 178.83 acres).

STATEMENT OF PROJECT OBJECTIVES

In accordance with CEQA Guidelines Section 15124(b), the Project description shall include a statement of objectives. These objectives have been designed to assist CVWD in developing a range of reasonable alternatives to evaluate the EIR, and aid 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 Project. CVWD has identified the following criteria as objectives for the proposed Project:

1. Request and obtain a right-of-way grant for the Facility including portions of the 19 replenishment ponds, conveyance channels, and low-flow dike and channel crossing located on public lands administered by the BLM;
2. Request and obtain a right-of-way grant to include the area located north of State Route 111 (SR-111) and west of the 19 replenishment ponds, which CVWD currently uses to access and maintain existing flood control berms;
3. Allow for continued operation of the Facility, consistent with agreements and contractual obligations with the Metropolitan Water District of Southern California (Metropolitan) and DWA; and applicable Federal, State, and local regulations and policies in a manner consistent with operations since the original permit authorization by the U.S. Department of the Interior in 1924 up to, and including, the BLM's right-of-way grant in 1984;

4. Deliver up to 511,000 acre-feet of Colorado River water to the Facility in any given year, including replenishment at the Facility with natural surface flows from the Whitewater River utilizing existing infrastructure; and
5. Meet the objectives of the Coachella Valley Water Management Plan (2010) that individually contribute to improved water supply reliability for the Coachella Valley including:
    1) Meet current and future water demands with a 10 percent supply buffer;
    2) Eliminate long-term groundwater overdraft;
    3) Manage water quality;
    4) Comply with state and federal regulations;
    5) Manage future costs; and,
    6) Minimize adverse environmental impacts.

The objectives of the proposed Project are further discussed in Section 2.4, *Project Objectives*, of this EIR.

SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

Section 3.0, *Environmental Impact Analysis*, provides an assessment of potential environmental impacts for all applicable CEQA resource topics, and identifies mitigation measures to reduce significant impacts to a less than significant level, where necessary. A summary of all impacts and mitigation measures from Section 3 is provided in Table ES-1 at the end of this chapter. Please refer to Section 3 for the complete analysis and discussion.

ALTERNATIVES SUMMARY

Section 5.0, *Alternatives,* presents the alternatives analysis for the proposed Project. The CEQA Guidelines state that an "*EIR shall describe a range of reasonable alternatives to the proposed project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives*" (CEQA Guidelines Section 15126.6). 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. As such, the EIR evaluates three alternatives, including a No Project Alternative, in compliance with CEQA. The alternatives evaluated in the EIR were identified based on input from CVWD and identification of the potentially significant environmental impacts associated with the proposed Project. The alternatives were selected in consideration of the following factors:

- Extent to which the alternative would accomplish basic Project objectives;
- Extent to which the alternative would avoid or lessen any identified significant adverse environmental effects of the proposed Project;
- Feasibility of the alternative including economic viability, design viability, and consistency with regulatory requirements; and
- Appropriateness of the alternative in contributing to a reasonable range of alternatives necessary to permit an informed 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 and CVWD would not receive the right-of-way grant renewal and amendment from the BLM. CVWD would retain ownership over CVWD-owned lands – including the Windy Point intake/sluicing structure, Intake Structure 1, portions of the concrete-line and earthen conveyance channels, Ponds 1 through 5, and portions of Ponds 6 through 19. In addition to being unable to use Ponds 6 through 19 for replenishment, CVWD would no longer have access to the low-flow dike and channel crossing or the existing berms within the 178.83-acre amendment area. The low-flow dike and channel crossing channelizes the water delivery towards the replenishment Facility. The existing berms in this amendment area are used to direct surface flows toward the Windy Point intake/sluicing structure. Berm #2 requires modification prior to storm events and to return the berm to its existing condition following storm events. Without the modification of Berm #2, the berm would no longer divert the stormwater around the Facility to the Whitewater River Stormwater Channel (WRSC). Under the No Project Alternative, CVWD would no longer be able to use the Whitewater River Groundwater Replenishment Facility in its current configuration and would have to cease its operation of the Facility.
- **Alternative 2: Amendment Area Only / Decrease Operations Alternative.** CVWD would request a right-of-way grant for the amendment area (178.83 acres) and the low-flow dike and channel crossing portion of the renewal area (2.2 acres). This alternative would remove large portions of Ponds 6 and 7 and would eliminate the ability of CVWD to convey water to Ponds 8 through 19. The replenishment capacity of the Facility would be reduced to approximately 87,000 acre-feet per year, or approximately 17 percent of the existing capacity.
- **Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD.** CVWD would purchase or exchange land with BLM for the purpose of unifying CVWD ownership of the existing Whitewater River Groundwater Replenishment Facility. Under this alternative, CVWD would not require issuance of a right-of-way grant to continue operation of the Facility. The BLM has discretionary

authority to approve a land exchange to improve land management objectives by consolidating ownership and protecting environmentally sensitive areas.

These alternatives are further discussed in Section 2.8, *Alternatives* and assessed in Section 5.0, *Alternatives* of this EIR.

In addition, this EIR considered additional alternatives including those discussed and evaluated in the 2002 Coachella Valley Water Management Plan and State Water Project Entitlement Transfer Program EIR, and 2010 Coachella Valley Water Management Plan Update Subsequent Program EIR, to consider all potential feasible alternatives that also meet proposed Project objectives. Alternatives considered but eliminated for the purposes of this document are discussed in Section 2.8.2, *Alternatives Considered but Eliminated*.

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 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.

The No Project Alternative and Alternative 2 would not avoid the total dissolved solids (TDS) impact described for the proposed Project (see Impact HWQ-2) and would result in significant impacts to groundwater related to significant overdraft and potential subsidence; therefore, these alternatives were removed from consideration as environmentally superior.

Alternative 3 is the environmentally superior alternative because: 1) no demolition, reclamation, or construction activities would occur, which result in ground disturbance and associated impacts to environmental resources; and 2) the Facility would continue to provide groundwater storage, recharge, and supplies to the Whitewater River Subbasin consistent with existing levels. If the Facility is removed or the size is reduced, the Coachella Valley region would not have sufficient groundwater supplies to meet existing demands, which would result in overdraft in the Whitewater River Subbasin over time. Alternative 3 is superior to the proposed Project because transference of land ownership to CVWD of BLM-managed lands would ensure long-term groundwater storage and supply stability and prevent overdraft conditions, which would meet Project objectives to a greater extent.

PRIMARY ISSUES OF CONCERN

As a first step in complying with the procedural requirements of CEQA, CVWD conducted a public scoping process consistent with CEQA Guidelines Section 15082. Pursuant to CEQA Guidelines Section 15082, the Notice of Preparation (NOP) was filed with the Riverside

County Clerk and submitted to the State Clearinghouse on February 3, 2020. The NOP was also distributed to responsible and trustee agencies; other relevant Federal, State, and local agencies; and interested organizations and members of the public previously requesting notice in writing (CEQA Guidelines Section 15082; California Public Resources Code Section 21092.2). CVWD also held a public scoping meeting on February 18, 2020 from 5:00 p.m. to 7:00 p.m. See Section 1.5.1, *Public Scoping Comments and Responses*, for a summary of comments received and the location where each individual issue is addressed in the Draft EIR. Consistent with CEQA Guidelines 15105(a), the Draft EIR has is being circulated for public review for period of 45 days.

Based on the comments received in response to the NOP and during the public scoping meeting, the following issues of concern are discussed and analyzed in the EIR.

- Potential impacts to groundwater quality
- Potential impacts to sensitive plant habitat and special-status species

Table ES-1 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 in each issue area section included in Section 3.0, *Environmental Impact Analysis*. Where no impact would occur under a particular significance criterion, the impact analyses provides discussion of how and why no impact would occur, in issue-area-specific subsections titled *"Areas of No Project Impact."* Impact significance determinations listed in Table ES-1 below are either "Less than Significant," "Less than Significant with Mitigation," or "Significant and Unavoidable." A full description of each mitigation measure for the proposed Project is provided in Section 3, *Environmental Impact Analysis*.

Table ES-1 does not include existing and ongoing CVWD best management practices for the Facility (e.g., maintenance activities are not perfomed when wind speeds exceed 25 miles per hour). However, these best management practices are routine CVWD practices and are not necessary to reduce impacts to a less than significant level. Further, CVWD has committed to ongoing mitigation measures under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) associated with biological resources, such as contribution to an Endowment Fund. CVWD would continue to comply with existing mitigation commitments under the proposed Project, so existing mitigation obligations are not included below.

Table ES-1. Summary of Environmental Impacts, Mitigation Measures, and Residual Impacts

Impact	Mitigation Measures	Significance Determination
Air Quality		
Impact AQ-1. Continued operation and maintenance of the Facility under the proposed Project would contribute to Basin-wide criteria air pollutant emissions. However, criteria air pollutant emissions associated with the Facility would not increase the severity of or cause air quality violations and would not exceed the forecasts of the Air Quality Management Plan (AQMP). Therefore, the proposed Project would not conflict with the AQMP.	N/A	Less than Significant
Impact AQ-2. The Coachella Valley portion of the Salton Sea Air Basin is designated as a nonattainment area for O_3 and PM_{10} under Federal and/or State ambient air quality standards. Operational emissions of CO, NO_x, SO_x, PM_{10}, $PM_{2.5}$, and VOCs associated with the proposed Project would not exceed South Coast Air Quality Management District (SCAQMD) regional thresholds or expose sensitive receptors to substantial pollutant concentrations. Additionally, on-site operational emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ would not exceed SCAQMD localized significance thresholds (LSTs) at sensitive receptors.	N/A	Less than Significant
Impact AQ-3. The proposed Project would not emit objectionable odors.	N/A	No Impact
Biological Resources		
Impact Bio-1. The Project site contains federally designated critical habitat Coachella Valley milk-vetch and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)-modeled habitat for a variety of special status species. However, the proposed Project, including continued operation, maintenance, and repair of the existing Facility, are covered activities under the CVMSHCP and would not substantially impact special status species or their habitats due to existing management practices and existing mitigation obligations associated with the existing Facility.	N/A	Less than Significant
Impact Bio-2. The proposed Project would not substantially interfere with the movement of any native or migratory fish or wildlife species, nor would it impede the use of wildlife corridors or nursery sites.	N/A	Less than Significant
Impact Bio-3. The proposed 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 and Tribal Cultural Resources		
Impact CR-1. Operations and maintenance activities associated with the proposed Project would involve continued ground disturbance at the Facility, which has the potential to unearth or otherwise adversely impact archaeological resources.	**MM-CR-1.** Inadvertent Discoveries	Less than Significant with Mitigation
Impact CR-2. Operations and maintenance activities associated with the proposed Project would involve continued ground disturbance at the Facility. While unlikely, these activities have the potential to inadvertently uncover and adversely impact previously unidentified human remains.	N/A	Less than Significant
Impact CR-3. Operations and maintenance associated with the proposed Project would involve continued ground disturbance at the Facility, which has the potential to impact previously unidentified tribal cultural resources.	N/A	Less than Significant
Energy Resources		
Impact ENG-1. Operations and maintenance activities associated with the proposed Project would continue to use energy associated with the operation of radial gates and vehicle trips. However, energy use associated with the proposed Project would result in a no increase over existing conditions. Therefore, the proposed Project would neither create a wasteful use of energy resources nor would it conflict with relevant State or local plans for renewable energy or energy efficiency.	N/A	Less than Significant
Geology and Soils		
Impact GEO-1. The existing Whitewater River Groundwater Replenishment Facility is not located within a designated Alquist-Priolo Fault Zone. However, the Facility is located in a seismically active area and seismically induced ground shaking could destroy or damage the ponds or associated infrastructure, resulting in the loss of property or risk to human safety. Nevertheless, continued compliance with all applicable provisions of Federal, State, and local construction and design standards would limit potential hazards associated with the proposed Project and impacts would be less than significant.	N/A	Less than Significant
Impact GEO-2. The requested issuance of a right-of-way agreement would allow for the continued operation and maintenance of the Whitewater River Groundwater Replenishment Facility, but would not result in substantial soil erosion or the loss of topsoil. While the proposed Project would involve ground disturbance and excavation of soils for maintenance purposes, continued compliance with all applicable provisions of Federal, State, and local construction and design standards would render impacts less than significant for the life of the proposed Project.	N/A	Less than Significant

Impact GEO-3. The Project site is not located on a geologic unit that is unstable, or that would become unstable as a result of the proposed 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 GEO-4. Proposed soil disturbance and excavation associated with maintenance activities of the Project site has the potential to encounter unique paleontological resources in the subsurface. Continued compliance with all applicable provisions of State and local construction and design standards would render impacts less than significant for the life of the proposed Project.	N/A	Less than Significant
Greenhouse Gas Emissions		
Impact GHG-1. Continued operation of the Facility under the proposed Project would contribute to global greenhouse gas (GHG) emissions. However, GHG emissions associated with the proposed Project would result in a net zero increase over existing conditions. Therefore, the proposed Project would not conflict with GHG reduction policies in the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and City of Palm Springs Sustainability Plan.	N/A	Less than Significant
Hydrology and Water Quality		
Impact HWQ-1. Continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility would require intermittent grading and other ground-disturbing activities within the Whitewater River Stormwater Channel (WRSC), which would increase the potential for erosion and sedimentation of surface waters. Maintenance equipment operating in the WRSC would have the potential to leak oil, diesel, grease, and other chemicals, resulting in potential discharges to surface water or groundwater aquifers. Operations and maintenance activities would continue to abide by a Stormwater Pollution Prevention Plan (SWPPP) that sets forth specific actions to be put in place during operations and maintenance activities to both limit the potential for any spills to occur and actions to be implemented in response to spills.	N/A	Less than Significant
Impact HWQ-2. Continued operation of the existing Whitewater River Groundwater Replenishment Facility would continue the use of Colorado River water provided by Metropolitan Water District of Southern California (Metropolitan) in exchange for Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) State Water Project (SWP) water. Colorado River water has	**MM-HWQ-1.** Monitor Groundwater Drinking Wells and Ensure Health-Based Water Quality Standards are Met if exceeded due to Facility Recharge Activities.	Significant and Unavoidable

higher concentrations of total dissolved solids (TDS) than the local groundwater found near the Facility prior to its operation. Groundwater replenishment activities using Colorado River water have elevated groundwater concentrations of TDS over time and the continued use of this water for similar, ongoing uses would be expected to extend this elevated condition for the life of the proposed Project and would increase TDS in some groundwater to levels up to that found in delivered Colorado River water. This in turn could cause groundwater water produced from Coachella Valley wells in the vicinity of the Facility to contain TDS levels above the 500 milligrams per liter (mg/L) recommended consumer acceptance contaminant level for drinking water.		
Impact HWQ-3. Operation of the Whitewater River Groundwater Replenishment Facility would continue the use of Colorado River water provided by Metropolitan Water District of Southern California (Metropolitan) in exchange for Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) State Water Project (SWP) water supplies for groundwater replenishment within the over-drafted Coachella Valley Groundwater Basin. The proposed Project would continue groundwater recharge activities at the Facility that have been ongoing in one way or another since the 1900s and at the Facility since the 1970s.	N/A	Less than Significant
Impact HWQ-4. Operations and maintenance activities for the Facility require ground-disturbing activities within the Whitewater River Stormwater Channel (WRSC) that the Coachella Valley Water District (CVWD) operates to control stormwater flooding along the WRSC in the Coachella Valley. However, ongoing operations and maintenance of the existing Facility would not alter the greater drainage pattern of the WRSC, would not contribute new flood flows to the WRSC, and would not redirect flood flows outside of the existing WRSC.	N/A	Less than Significant
Impact HWQ-5. The existing Whitewater Groundwater Replenishment Facility is located in the Coachella Valley within a designated Special Flood Hazard Area (Zone A) for the Whitewater River Stormwater Channel (WRSC) and in proximity to the San Andreas Fault. However, operation of the Facility is a passive use that does not retain any hazardous materials or wastes or other pollutants on-site that would flow off-site during flood events or damage to the Facility.	N/A	Less than Significant
Impact HWQ-6. The ongoing, and proposed continuing, groundwater replenishment activities at the Whitewater Groundwater Replenishment Facility are in compliance with, and integral to, Coachella Valley Water District's (CVWD's) existing Water Management Plan (WMP). Additionally,	N/A	Less than Significant

continuation of ongoing groundwater recharge activities at the Whitewater River Groundwater Replenishment Facility would not result in any inconsistency with or obstruct implementation of the Colorado River Basin Regional Water Quality Control Board's (RWQCB's) Colorado Basin Plan.		
Land Use and Planning		
Impact LUP-1. Continued operation of the existing Whitewater River Groundwater Replenishment Facility under the proposed project would not conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.	N/A	Less than Significant

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ACRONYMS AND ABBRIEVIATIONS

°F	degrees Fahrenheit
µg/L	micrograms per liter
AB	Assembly Bill
AFY	acre-feet per year
APCD	air pollution control district
APE	area of potential effect
AQMP	Air Quality Management Plan
ARPA	Archaeological Resources Protection Act
ATCM	Airborne Toxic Control Measure
BACM	best available control measures
BCC	Birds of Conservation Concern
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BO	Biological Opinion
BRTR	Biological Resources Technical Report
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal-IPC	California Invasive Plant Council
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAP	Climate Action Plan
CARB	California Air Resources Board
CAS	California Adaption Strategy
CAT	Climate Action Team
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDCA	California Desert Conservation Area
CDFW	California Department of Fish and Wildlife
CEC	contaminant of emerging concern
CEC	California Energy Commission
CEC	cation exchange capacity
CEQA	California Environmental Quality Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulation
cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
CNDDB	California Natural Diversity Database

ACRONYMS AND ABBRIEVIATIONS (CONT.)

CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CSLC	California State Lands Commission
CVAG	Coachella Valley Association of Governments
CVCC	Coachella Valley Conservation Commission
CVMSHCP	Coachella Valley Multiple Species Habitat Conservation Plan
CVSC	Coachella Valley Stormwater Channel
CVWD	Coachella Valley Water District
CWA	Clean Water Act
cy	cubic yard
DDM	Development Design Manual
DNAPL	dense, non-aqueous phase liquid
DPM	diesel particulate matter
DRECP	Desert Renewable Energy Conservation Plan
DWA	Desert Water Agency
DWR	Department of Water Resources
EA	Environmental Assessment
ECORP	ECORP Consulting, Inc.
EIC	Eastern Information Center
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
ESA	Environmentally Sensitive Area
FEMA	Federal Emergency Management Agency
FIRM	Federal Insurance Rate Map
FLPMA	Federal Land Policy and Management Act
GAMA	Groundwater Ambient Monitoring and Assessment Program
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HCP	Habitat Conservation Plan
I-10	Interstate 10
IA	Implementation Agreement
IPaC	Information, Planning, and Consultation System
IRWM	Integrated Regional Water Management
LST	Localized Significance Threshold
MCL	Maximum Contaminant Level

ACRONYMS AND ABBRIEVIATIONS (CONT.)

mg/L	milligrams per liter
MLD	Most Likely Descendant
MMRP	Mitigation Monitoring and Reporting Program
MPO	Metropolitan Planning Organization
MSL	mean sea level
MW	megawatts
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NASA	National Aeronautics and Space Administration
ND	Negative Declaration
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO	nitric oxide
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOC	Notice of Completion
NOP	Notice of Preparation
NO_x	nitrogen oxides
NRCS	Natural Resources Conservation Service
NTU	nephelometric turbidity units
O&M	Operations and Maintenance
O_3	ozone
OHP	Office of Historic Preservation
OHV	off-highway vehicle
OPR	Office of Planning and Research
Pb	lead
PCE	Primary Constituent Element
PFAS	per- and poly-fluoroalkyl substance
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
ppm	parts per million
ppt	parts per thousand
ROD	Record of Decision

ACRONYMS AND ABBRIEVIATIONS (CONT.)

ROG	reactive organic gas
RPT	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCS	Sustainable Communities Strategy
SGMA	Sustainable Groundwater Management Act
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SNMP	Salt and Nutrient Management Plan
SO_2	sulfur dioxide
SR-111	State Route 111
SRA	source receptor area
SWP	State Water Project
SWPPP	stormwater pollution prevention plan
SWR	Stormwater Resource
SWRCB	State Water Resources Control Board
TAC	toxic air contaminant
TAF	thousand acre-feet
TDS	total dissolved solids
THM	trihalomethane
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VMT	vehicle miles traveled
VOC	volatile organic compound
WCTG	Woodward & Curran and Todd Groundwater
WET	Waste Extraction Test
WRSC	Whitewater River Stormwater Channel

1.0 INTRODUCTION

1.1 LEGAL AUTHORITY

Coachella Valley Water District (CVWD) is requesting a right-of-way grant from the U.S. Department of the Interior, Bureau of Land Management (BLM) for the continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility), a portion of which is located on public lands administered by the BLM. CVWD submitted an application requesting a new 30-year right-of-way grant covering two individual locations totaling 690.73 acres.[1] These locations are summarized below:

For over 100 years, CVWD has been replenishing the groundwater basin in this area known as Windy Point. Prior to 1973, the source of water for groundwater replenishment was snow melt runoff from the mountains and stormwater. In 1973, CVWD constructed and began operating and maintaining the Facility. Groundwater replenishment in the Coachella Valley Groundwater Basin is critical to maintaining groundwater levels and ensuring local availability of water within CVWD's service area.

- The "renewal area" consists of two individual areas originally included in right-of-way grant LA 052742, which was previously issued by the BLM in 1984 and expired in 2014, and right-of-way grant CA 19150, which was previously issued by the BLM in 1987 expired in 2012:
    - 509.7 acres that includes a portion the 19 replenishment ponds as well as the concrete-lined and earthen conveyance channels (right-of-way grant LA 052742); and
    - 2.2 acres that includes the low-flow dike and channel crossing (right-of-way grant CA 19150).
- The "amendment area" includes 178.83 acres located north of State Route 111 (SR-111) and west of the Facility. This area was included in right-of-way grant LA052742, which was previously issued by the BLM and authorizes CVWD's right to access and maintain existing water control structures in this area.

[1] Although 511.9 acres were included in previous right-of-way grants issued by the BLM (see Section 2.6.2, *History of Right-of-Ways Grants*), under the proposed Project CVWD would request a new right-of-way grant from the BLM. This right-of-way grant would include both the renewal area and the amendment area totaling 690.73 acres.

The proposed right-of-way grant would allow CVWD to continue groundwater replenishment at the Facility by delivering Colorado River water at a maximum rate of 511,000 acre-feet in any given year.[2] The proposed Project does not involve any new construction or any new ground-disturbing activities at the Facility, apart from the ongoing maintenance activities described in Section 2.6.5, *Proposed Project Operations and Maintenance*.

The proposed request for a right-of-way grant from the BLM as well as the continued operation and maintenance of the Facility requires a discretionary action by the CVWD Board of Directors and is therefore subject to the provisions of the California Environmental Quality Act (CEQA). In accordance with CEQA Guidelines Section 15121(a), 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 EIR pursuant to CEQA Guidelines Section 15161. As stated in the CEQA Guidelines:

> *"…[t]his 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 intended to serve as an informational document for the CVWD Board of Directors as well as relevant Federal, State, and local agencies and other interested organizations and members of the public. As described in Section 1.5, *CEQA Process Overview*, the preparation of the EIR has involved numerous opportunities for public input and will conclude with a public hearing during which the CVWD Board of Directors will consider certification of a Final EIR and approval of the proposed Project or its alternatives.

1.2 LEAD, RESPONSIBLE, AND TRUSTEE AGENCIES

The CEQA Guidelines define lead, responsible, and trustee agencies as follows:

Lead Agency. A lead agency is the public agency that has the primary responsibility for approving a project. Pursuant to CEQA Guidelines Section 15367, the lead agency is responsible for deciding whether an EIR or Negative Declaration (ND) is required for a project. CVWD – the lead agency for the proposed Project – determined that an EIR is the appropriate level of CEQA-compliant documentation for the proposed Project, due to the potential for significant and unavoidable environmental impacts as well as the potential for public interest. Therefore, this EIR assesses all of the environmental issue areas listed in

[2] As described in Section 2.6.5, *Proposed Project Operations and Maintenance*, the Colorado River Aqueduct turnouts at the Whitewater Groundwater Replenishment Facility (Facility) are capable of delivering a maximum flow rate of 720 cfs of imported water; the Facility is capable of receiving a total flow rate of 800 cfs.

Appendix G of the 2021 CEQA Guidelines and identifies feasible mitigation measures, as necessary, to reduce or minimize potentially significant environmental impacts. As described in Section 2.1, *Project Applicant and Lead Agency Contact Person*, the point of contact for CVWD is William Patterson, Environmental Supervisor, 75-515 Hovley Lane East, Palm Desert California 92211, WPatterson@cvwd.org

Responsible Agency. Responsible agencies include any public agencies (other than the lead agency) that have discretionary approval over a project (e.g., permits that must be issued for a project to be implemented). For the proposed Project, responsible agencies include:

- U.S. Department of the Interior, Bureau of Land Management – The BLM is responsible for administering the public lands currently used by CVWD for a portion of the Facility. As described further in Section 2.7, *Permits and Consultation*, the BLM is preparing separate environmental documentation pursuant to the National Environmental Policy Act (NEPA) and is considering issuance of the right-of-way grant that would be requested by CVWD under the proposed Project.[3]

1.3 PURPOSE OF THE EIR

CVWD has prepared this EIR to evaluate and provide information about potentially significant environmental impacts associated with the proposed Project, to identify reasonable and feasible measures intended to reduce potentially significant environmental impacts, as necessary, and to describe and analyze alternatives to the proposed Project.

This EIR has been prepared in accordance with CEQA (California Public Resources Code Sections 21000 – 21189.3), the 2021 CEQA Guidelines (California Code of Regulations, Title 14, Chapter 3, Sections 15000 – 15387), and CVWD's Local CEQA Guidelines (2019 update). Under CEQA Guidelines Section 15121:

> *"(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.*

[3] Issuance of a right-of-way grant by the BLM would constitute a Federal action that requires compliance with NEPA.

(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 evaluates each of the environmental issue areas listed in Appendix G of the 2021 CEQA Guidelines including Aesthetics, Air Quality, Agriculture and Forestry Resources, Biological Resources, Cultural Resources, Energy, Geology and Soils, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Services, Recreation, Transportation, Tribal Cultural Resources, Utilities and Service Systems, and Wildfire.

This EIR refers to pertinent CVWD policies, guidelines, and planning documents (e.g., Coachella Valley Water Management Plan [2010]), previously certified and previously adopted CEQA documents for the Facility (e.g., Final EIR for the Extension of Time for Utilizing Colorado River Water to Recharge the Upper Coachella Valley Groundwater Basins), and other relevant background documents and published materials. A full list of citations is provided in Section 6.1, *References*.

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

"[a]n 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 for environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the 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 good faith effort at full disclosure."

Section 2.8, *Alternatives*, was prepared in accordance with CEQA Guidelines 15126.6 and focuses on alternatives that are capable of the following:

- Eliminating or reducing significant adverse effects associated with the proposed Project; and
- Feasibly attaining the basic Project objectives.

1.5 CEQA PROCESS OVERIEW

The environmental review process, as required under CEQA, is summarized below, and presented in sequential order.

1. **Notice of Preparation.** After determining that an EIR was required for the proposed Project, CVWD circulated a Notice of Preparation (NOP) soliciting information on the environmental scope of the EIR. Pursuant to CEQA Guidelines Section 15082, the NOP was filed with the Riverside County Clerk and submitted to the State Clearinghouse on February 3, 2020. The NOP was also distributed to responsible and trustee agencies; other relevant Federal, State, and local agencies; and interested organizations and members of the public previously requesting notice in writing (CEQA Guidelines Section 15082; California Public Resources Code Section 21092.2). Scoping comments responding to the NOP – including written comments and verbal comments provided during the public scoping meeting – were received through March 4, 2020 (see Section 1.5.1, *Public Scoping Comments and Responses*).

   Pursuant to CEQA Guidelines 15082(a)(2), the NOP may be accompanied by an Initial Study that identifies the environmental issue areas for which the proposed Project may result in potentially significant environmental impacts. However, an Initial Study was not prepared for the proposed Project because CVWD determined that an EIR would be the appropriate level of environmental documentation in the early stages of the CEQA process. This determination was based on the potential for the proposed Project to result in significant and unavoidable environmental impacts as well as the potential for public interest (CEQA Guidelines Sections 15060[d] and 15081).

2. **Public Scoping Meeting.** CEQA requires a scoping meeting for projects of State-wide, regional, or local significance (CEQA Guidelines Section 15082[c][1]). In addition to filing the NOP with the Riverside County Clerk and submitting the NOP to the State Clearinghouse, CVWD published the NOP in *The Desert Sun* and announced the public scoping meeting, which was held on February 18, 2020, from 5:00 p.m. to 7:00 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 public scoping meeting to provide an overview of the proposed Project and the CEQA process. See Section 1.5.1, *Public Scoping Comments and Responses* for a summary of comments received and the location where each individual issue is addressed in the Draft EIR.

3. **Draft EIR.** CVWD has prepared this Draft EIR that contains: 1) table of contents; 2) executive summary; 3) project description; 4) environmental setting; 5) discussion of potentially significant environmental impacts (i.e., direct, indirect, cumulative, growth-inducing, and unavoidable impacts); 6) discussion of alternatives; 7) mitigation measures; and 8) discussion of irreversible changes (CEQA Guidelines Sections 15122 – 15127). Consistent with CVWD's Local CEQA Guidelines (2019 update) the Draft EIR has been internally reviewed and approved for circulation to the public. Consistent with CEQA Guidelines 15105(a), the Draft EIR has is being circulated for public review for period of 45 days.

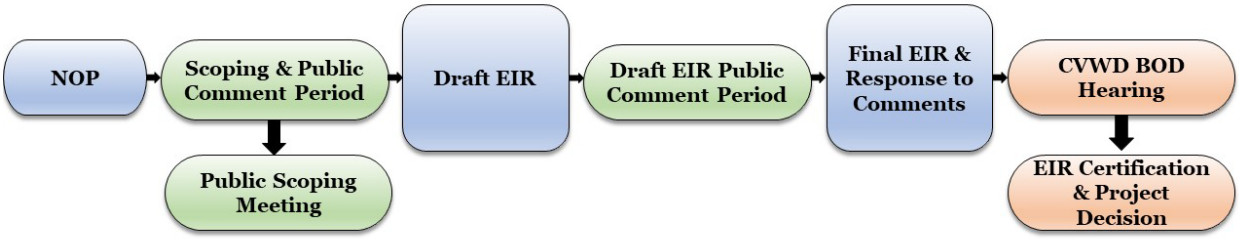
4. **Notice of Completion / Notice of Availability.** Pursuant to CEQA Guidelines Sections 15085 and 15087, CVWD filed a Notice of Completion (NOC) / Notice of Availability (NOA) announcing the availability of the Draft EIR for public review.
    - CVWD filed the NOC/NOA with the Riverside County Clerk (California Public Resources Code Section 21092) and sent a copy of the NOC/NOA to the State Clearinghouse. The NOC/NOA was published in *The Desert Sun* and circulated to those parties having responded in writing to the NOP, as well as, to Federal, State, and local agencies and other interested parties. The NOC/NOA provides a description of the proposed Project and the environmental issue areas discussed in the Draft EIR. The NOC/NOA also provides a list of reviewing agencies recommended to the State Clearinghouse by CVWD. The NOC/NOA describes where electronic versions and hard copies of the Draft EIR are available for review at:
        - www.cvwd.org
        - CVWD's Steve Robbins Administration Building, 75-515 Hovley Lane East, Palm Desert, CA 92211
        - CVWD's Coachella Office, 51-501 Tyler Street Coachella, CA 92236
    - The NOC/NOA also provides information describing how written comments on the Draft EIR can be submitted to CVWD during the 45-day public review period.
5. **Final EIR.** The Final EIR will include: 1) the Draft EIR; 2) copies of written comments received during 45-day public review period; 3) list of persons and entities commenting; 4) CVWD's response to written comments received on the Draft EIR; and 5) errata, or a list of revisions to the Draft EIR that are incorporated to the Final EIR, if any. The Final EIR for the proposed Project will be prepared following completion of the 45-day public review period for the Draft EIR.

    Pursuant to CEQA Guidelines Section 15088(b), CVWD will provide a written response to any public agency having submitted a written comment on the Draft EIR a minimum of 10 days prior to the CVWD Board of Directors public meeting. Pursuant public disclosure requirements of the Brown Act, the Final EIR will be available for public review online (www.cvwd.org) at least 3 days prior to the CVWD Board of Directors public meeting and will include responses to all other non-public agency commenters in the Final EIR.
6. **Certification of Final EIR.** Prior to making a decision on a proposed Project, the CVWD Board of Directors must certify that: 1) the Final EIR has been completed in compliance with CEQA; 2) the Final EIR was presented to the decision-making body of the lead agency; and 3) the decision-making body reviewed and considered the

information in the Final EIR prior to approving the proposed Project or its alternatives (CEQA Guidelines Section 15090).

7. **Lead Agency Project Decision.** The CVWD Board of Directors may: 1) disapprove the proposed Project because of its significant environmental impacts; 2) require changes to the proposed Project to avoid or substantially reduce significant environmental impacts; or 3) approve the proposed Project even though the proposed Project would cause a significant and unavoidable environmental impact if the agency makes a fully informed and publicly disclosed decision that: (a) There is no feasible way to lessen or avoid the significant effect (CEQA Guidelines Section 15091); and (b) Specifically identified expected benefits from the project outweigh the policy of reducing or avoiding significant environmental impacts of the project (CEQA Guidelines Sections 15042 and 15043). The CVWD Board of Directors will make a determination on this proposed Project during a CVWD Board of Directors public meeting.
8. **Findings of Fact and Statement of Overriding Considerations.** For each potentially significant environmental impact identified in the EIR, the CVWD Board of Directors must find, based on substantial evidence, that either: 1) the proposed Project has been changed to avoid or substantially reduce the magnitude of the impact; 2) changes to the proposed Project are within another agency's jurisdiction and such changes have been or should be adopted; or 3) specific economic, social, or other considerations make the mitigation measures or alternatives infeasible (CEQA Guidelines Section 15091). If the CVWD Board of Directors approves the proposed Project or one of its alternatives with significant and unavoidable environmental impacts, CVWD would be required to prepare a written Findings of Fact and Statement of Overriding Considerations that set forth the specific social, economic, or other reasons supporting the agency's decision.
9. **Mitigation Monitoring Reporting Program.** When the CVWD Board of Directors makes findings on the environmental impacts identified in an EIR, it must also adopt a reporting or monitoring program for mitigation measures that were adopted or made conditions of approval to mitigate potentially significant environmental impacts.
10. **Notice of Determination.** The lead agency must file a Notice of Determination (NOD) after deciding to approve a project for which the EIR is prepared (CEQA Guidelines Section 15094). Once the EIR is certified and the project is approved by the CVWD Board of Directors, CVWD will file the NOD with the Riverside County Clerk within 5 working days of the CVWD Board of Directors decision. 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 (California Public Resources Code Section 21167[c]).

Figure 1. EIR Process Overview and Milestones



1.5.1 Public Scoping Comments and Reponses

During the 30-day public scoping period, CVWD received six (6) written comment letters in response to the NOP. One (1) written comment letter was received from each of the following commenters:

- Native American Heritage Commission
- Metropolitan Water District of Southern California
- Agua Caliente Band of Mission Indians
- Bureau of Indian Affairs
- Colorado River Basin Regional Water Quality Control Board
- Sierra Club and Center for Biological Diversity

Table 1-1 identifies each of the commenters (by agency or tribal government) and summarizes the content of written comments received in response to the NOP and provides the location where each of these comments are addressed in this Draft EIR. All written comments and questions received during the public scoping period are addressed in this EIR.

A copy of these comment letters is provided in Appendix A.

Table 1-1. Scoping Comment Summary

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
Written Comments		
Native American Heritage Commission (NAHC) February 4, 2020	1. The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area the proposed Project as early as possible to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources.	Consultation pursuant to the requirements of Assembly Bill (AB) 52 is addressed in Section 3.4, *Cultural Resources and Tribal Cultural Resources*.
Metropolitan Water District of Southern California (Metropolitan) February 28, 2020	1. Metropolitan has a significant interest in CVWD's request for right-of-way authorization because the right-of-way grant is necessary to the continued exchange of water and basin replenishment under the exchange agreements.	The continued operation of the Facility consistent with agreement and contractual obligation with Metropolitan is a primary Project objective discussed under Section 2.4, *Project Objectives*. Additionally, issues related to existing groundwater exchanges are addressed in Section 3.7, *Hydrology and Water Quality*.
Agua Caliente Band of Mission Indians March 3, 2020	1. Clarify the discretionary action that CVWD will be taking that creates the need for an EIR.	As described in Section 1.1, *Legal Authority*, the proposed request of a right-of-way grant from the BLM as well as the continued operation and maintenance of the Facility requires a discretionary action by the CVWD Board of Directors.
	2. Clarify the role that Desert Water Agency (DWA) plays in the operation and management of financial support of the Facility.	DWA and the role that they play in the operation and management of the Facility are described in Section 2.5.1, *Water Supply Sources*.
	3. Analyze the environmental conditions relating to the mass salt loading problem associated with imported water recharge.	Issues related total dissolved solids (TDS) are addressed in Section 3.7, *Hydrology and*

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
		Water Quality (see Impact HWQ-2).
	4. Assess how the proposed Project is consistent with the Alternative Groundwater Management Plans submitted for Indio and Mission Creek basins under the Sustainable Groundwater Management Act (SGMA).	Issues related to water quality control plans and sustainable groundwater management plans are addressed in Section 3.7, *Hydrology and Water Quality* (see Impact HWQ-6).
	5. The Coachella Valley Groundwater Basin is designated as a Groundwater Ambient Monitoring and Assessment Program (GAMA) Priority 1 Basin, and as such, must have a Salt and Nutrient Management Plan (SNMP).	CVWD's SNMP is discussed in Section 3.7, *Hydrology and Water Quality*.
	6. Prior to the preparation of a groundwater quality report and the Coachella Valley Groundwater Basin Groundwater Quality Monitoring Program Work Plan, an EIR would not be able to accurately describe existing conditions or assess future effects on basin water quality.	Issues related to groundwater quality are addressed in Section 3.7, *Hydrology and Water Quality*.
	7. The full spectrum of contaminants introduced into the Coachella Valley aquifer through the imported Colorado River water CVWD recharges through the Facility must be fully revealed through the CEQA process.	Issues related to contaminants are addressed in Section 3.7, *Hydrology and Water Quality* (see Impact HWQ-2).
	8. CVWD must describe the baseline Facility size and annual recharge.	Baseline Colorado River Exchange Water delivered to the Facility is described in detail within Section 2.6.1, *Project Background* (see Table 2-1).
	9. A numerical flow model and calibrated fate and transport model should be relied upon as part of the EIR analysis to describe how Project operations will affect groundwater and groundwater-related resources in Coachella Valley. The consideration of alternatives to the	As described in Impact HWQ-2 in Section 3.7, *Hydrology and Water Quality*, the Coachella Valley Water Management Plan Program EIR found that overall impacts

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
	proposed Project must be robust and include options to reduce the impact on the environment. Such options may include reverse osmosis treatment of Colorado River water prior to recharge in order to reduce concentrations of salts, nutrients, and potential contaminants of emerging concern (CECs).	to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of Overriding Considerations for the Coachella Valley Water Management Plan Program EIR was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater.
Bureau of Indian Affairs (BIA) March 4, 2020	1. The scope should address impacts from vehicle/equipment traffic and define specific areas where vehicle traffic/disturbances are permitted in the new right-of-way.	On-going ground disturbing activities that would continue under the proposed Project are discussed in Section 3.3, *Cultural Resources and Tribal Cultural Resources* as well as Section 3.5, *Geology and Soils* and Section 3.7, *Hydrology and Water Quality*.
	2. The scope should address the potential effects of increased flooding on plants and wildlife adapted to desert conditions.	On-going operation of the Facility and its effects on plants and wildlife species are discussed in Section 3.2, *Biological Resources*.
	3. The Colorado River water released in the Whitewater River has created an incised channel. Mitigation to restore the natural function of the alluvial fan should be explored in the EIR.	Issues related to erosion are addressed in Section 3.5, *Geology and Soils* and related to surface water quality issues are addressed in Section 3.7,

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
		Hydrology and Water Quality.
	4. The BIA recommends conducting an engineering and economic study for the removal of TDS from the Colorado River water replenished in the Whitewater Facility.	Issues related to TDS are addressed in Section 3.7, *Hydrology and Water Quality* (see Impact HWQ-2).
	5. The increase in constituents impacting the groundwater system should be considered in the EIR and lower annual maximum alternatives should be considered and evaluated.	Issues related to increased constituents in groundwater are addressed in Section 3.7, *Hydrology and Water Quality* (see Impact HWQ-2). Alternatives aimed at reducing significant and unavoidable impacts associated with the proposed Project are described in Section 2.8, *Alternatives* and assessed in Section 5, *Alternatives*.
	6. The SNMP required by the State Water Resources Control Board should be carefully considered and the scope should consider a limited timeframe for the right-of-way. BIA supports the inclusion of issues raised previously by the Center for Biological Diversity and the U.S. Environmental Protection Agency (USEPA).	CVWD's SNMP is discussed in Section 3.7, *Hydrology and Water Quality*.
Colorado River Basin Regional Water Quality Control Board (RWQCB) March 4, 2020	1. The EIR must assess changes in water quality resulting from the groundwater recharge activities. This must include detailed evaluation of the historic (before groundwater recharge activities) and current groundwater analytical data for TDS, electric conductivity, chloride sulfate, and other "general mineral" constituents from prior 1973 to present, and include predictions of how the proposed continued recharge activities will impact groundwater quality for a range of recharge scenarios.	Issues related to groundwater quality are addressed in Section 3.7, *Hydrology and Water Quality*.

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
	2. Alternatives that should be considered include: • Reducing groundwater consumption through improved water conservation; • Reducing groundwater extraction and the need for subsequent recharge by blending imported Colorado River water with groundwater for direct use; • Increase the volume of Colorado River water used for non-potable purposes, thereby reducing the need for and use of Colorado River water for groundwater recharge; • Use of Colorado River water for groundwater recharge in areas of the basin where the receiving water has a higher TDS content, and therefore has less of an impact on water quality; • Importing low TDS water from the California State Water Project for groundwater recharge at the Facility.	Alternatives aimed at reducing significant and unavoidable impacts associated with the proposed Project are described in Section 2.8, *Alternatives* and assessed in Section 5, *Alternatives*.
	3. Mitigation measures that should be considered include: • Reducing the salt content of the Colorado River water prior to infiltration using a desalination system; • Using imported Colorado River water to recharge areas of the basin with higher naturally occurring TDS concentrations; • Maximize storm water capture for groundwater recharge to decrease the need for imported Colorado River water; • Establish groundwater monitoring programs to ensure beneficial uses of the groundwater are being protected; Develop and implement a salt management and disposal plan that addresses all of the salt	Feasible mitigation measures are identified throughout Section 3, *Environmental Impact Analysis*. As described in Impact HWQ-2 in Section 3.7, *Hydrology and Water Quality*, the Coachella Valley Water Management Plan Program EIR found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of

Comment Source	Summarized Comment or Request	Response or Location Where Comment is Addressed
	sources throughout the Coachella Valley, including importation of Colorado River water, and lays out a framework for maintaining high quality groundwater for decades to come.	Overriding Considerations for the Coachella Valley Water Management Plan Program EIR was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater.
Sierra Club and Center for Biological Diversity March 4, 2020	1. Sierra Club and the Center for Biological Diversity are concerned that the site location and design of the infrastructure and project configuration has been shown to have impacts to sand transport for Coachella Valley fringe-toed lizard (*Uma inornata*) habitat.	Potential impacts to the Coachella Valley fringe-toed lizard and its habitat are discussed in Section 3.2, *Biological Resources*.
	2. The Long-Term Sand Supply to Coachella Valley Fringe-Toed Lizard Habitat in the Northern Coachella Valley (U.S. Geological Survey [USGS] 2002), provided a detailed analysis of sand transport. The USGS found that the orientation of this project's galleries (levee and trough complex) creates a significant barrier to critical sand transport for endangered Coachella Valley fringe-toed lizard. These significant impacts should be fully identified and analyzed in the EIR and an alternative design/redesign must be considered in the EIR that would avoid these impacts, with any remaining impacts minimized and fully mitigated.	Potential impacts to the Coachella Valley fringe-toed lizard and its habitat are discussed in Section 3.2, *Biological Resources*.
	The Center submitted NEPA scoping comments to the BLM regarding this project on December 26, 2019, those comments fully incorporated herein by reference.	These issues are addressed throughout Section 3, *Environmental Impact Analysis*.

1.6 ORGANIZATION OF THE EIR

The organization of the EIR is as follows:

- **Executive Summary.** The Executive Summary includes a description of the proposed Project and summarizes the potential environmental impacts that the proposed Project would have on the resource areas evaluated in the EIR. Reasonable and feasible mitigation measures intended to reduce potentially significant environmental impacts are described, as necessary, and significant and unavoidable impacts are identified. A brief description of alternatives that would reduce or avoid significant and unavoidable impacts associated with the proposed Project are also summarized.
- **Chapter 1 – Introduction.** This chapter describes the CEQA process and the organization of this EIR.
- **Chapter 2 – Project Description.** This chapter provides an overview of the proposed Project, describes the Project objectives, and provides a list of permits and approvals that are anticipated to be required for implementation of the proposed Project.
- **Chapter 3 – Environmental Setting, Impacts, and Mitigation Measures.** This chapter presents the physical and regulatory setting by environmental issue area, identifies impact significance criteria, and analyzes potential impacts of the proposed Project. Reasonable and feasible mitigation measures are identified, as necessary. Pursuant to CEQA Guidelines 15060(d), Chapter 3 focuses the analysis of the EIR on the following environmental issue areas:
    - Section 3.1, *Air Quality*;
    - Section 3.2, *Biological Resources*;
    - Section 3.3, *Cultural Resources and Tribal Cultural Resources*;
    - Section 3.4, *Energy*;
    - Section 3.5, *Geology and Soils*;
    - Section 3.6, *Greenhouse Gas Emissions*;
    - Section 3.7, *Hydrology and Water Quality*; and
    - Section 3.8, *Land Use and Planning*.
- **Chapter 4 – Other CEQA Required Discussions.** This chapter discusses growth inducement, cumulative impacts, unavoidable significant environmental impacts, and irreversible environmental impacts associated with the proposed Project, and energy impacts. Further, this chapter provides a summary of environmental issue areas for which impacts were found to not be significant:
    - Section 4.6.1, *Aesthetics*;
    - Section 4.6.2, *Agriculture and Forestry Resources*;
    - Section 4.6.3, *Hazards and Hazardous Materials*;

  - Section 4.6.4, *Mineral Resources*;
  - Section 4.6.5, *Noise*;
  - Section 4.6.6, *Population and Housing*;
  - Section 4.6.7, *Public Services*;
  - Section 4.6.8, *Recreation*;
  - Section 4.6.9, *Transportation*;
  - Section 4.6.10, *Utilities and Service Systems*; and
  - Section 4.6.11, *Wildfire*.
- **Chapter 5 – Alternatives.** This chapter describes alternatives to the proposed Project and compares their impacts to those of the proposed 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.** Technical appendices providing supporting regional and/or Project-specific information are identified in the Table of Contents.

2.0 PROJECT DESCRIPTION

This chapter describes the proposed right-of-way grant for the continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility). This chapter describes the Project site and surrounding land uses, Project objectives, Project background and history, Project characteristics, and discretionary actions needed for approval of the proposed Project.

2.1 PROJECT APPLICANT AND LEAD AGENCY CONTACT PERSON

William Patterson, Environmental Supervisor
Coachella Valley Water District
75-515 Hovley Lane East
Palm Desert, CA 92211
(760) 398-2651
WPatterson@cvwd.org

2.2 PROJECT LOCATION

The Coachella Valley Water District (CVWD) service boundary comprises approximately 1,000 square miles of the Coachella Valley within Riverside, Imperial, and San Diego counties. The Facility is located in the northwest portion of CVWD's service area within the City of Palm Springs in Riverside County. The Project site is generally bounded by the Union Pacific Railroad and Interstate 10 (I-10) to the north, Indian Canyon Drive to the east, and State Route 111 (SR-111) to the west and south (see Figure 2). The Facility is located on public lands administered by the BLM as well as CVWD-owned lands.

The Facility is located within the City of Palm Springs in Riverside County. This Facility consists of 19 replenishment ponds used to receive imported Colorado River water and natural inflows.

Figure 2. Regional Setting

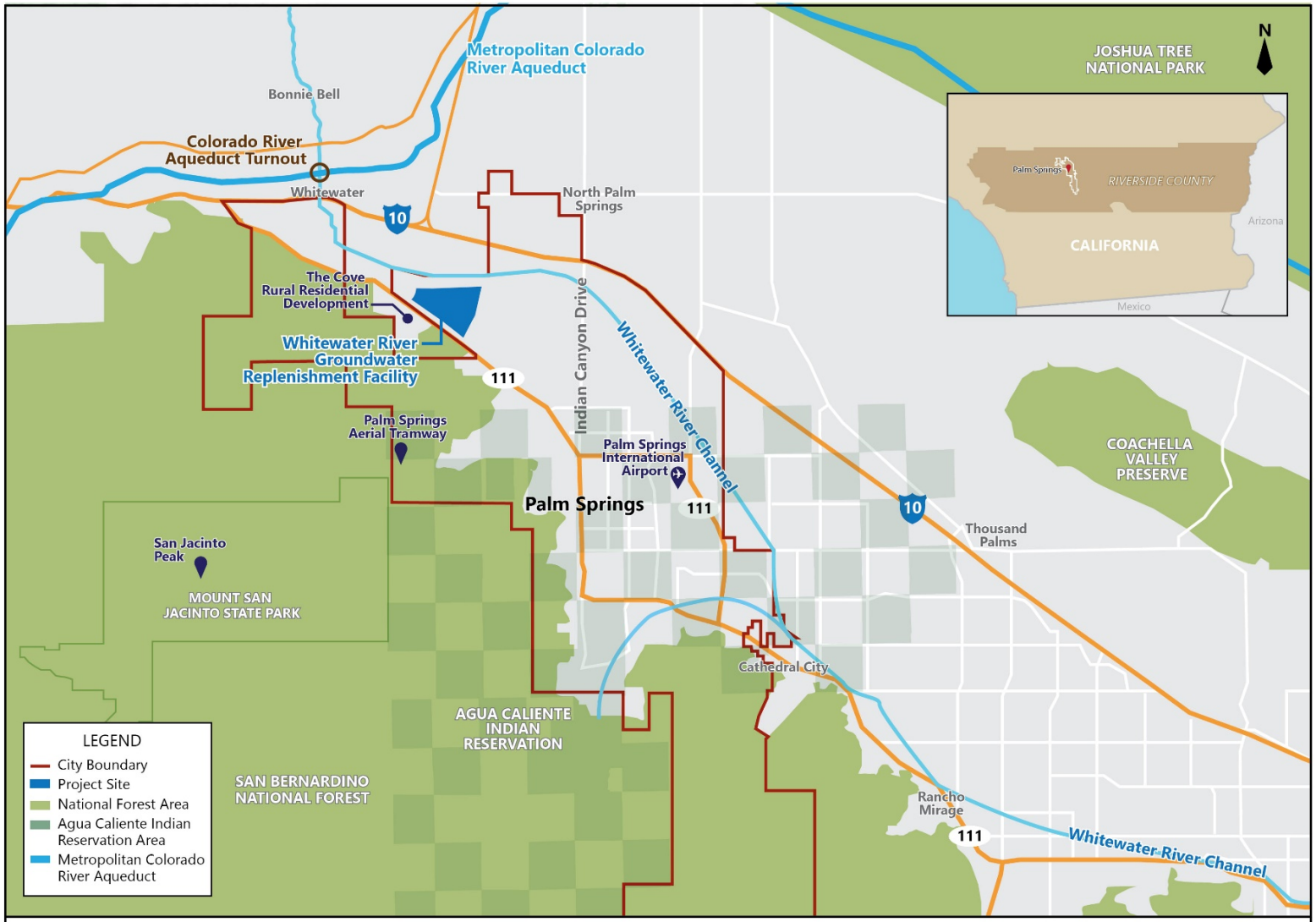


Figure 2 Regional Setting

The Project site consists of the following two individual areas (see Figure 3):

- The "renewal area" covers a portion the existing Facility, including portions of Ponds 6 through 19, the concrete-lined and earthen conveyance channels, and Intake Structure 2. This area is located on public lands administered by the Bureau of Land Management (BLM) within portions of Section 24 of Township 3 South, Range 3 east and Sections 20, 28, and 30 of Township 3 South, Range 4 East (approximately 509.7 acres). The renewal area also includes the existing low-flow dike and channel crossing on a portion of Section 14, Township 3 South, Range 3 East (approximately 2.2 acres).
- The "amendment area" consists of public lands administered by the BLM that are used to access the Facility and for conveyance of natural flows and Colorado River water, including portions of Sections 23 and 24 of Township 3 South, Range 3 East (approximately 178.83 acres).

2.3 SURROUNDING LAND USES

The Facility is located within the City of Palm Springs in Riverside County. The Facility is located south of the communities of Whitewater and North Palm Springs and north of The Cove subdivision in unincorporated Riverside County (refer to Figure 2).

In addition to limited rural residential development, the Facility is surrounded by wind energy development (i.e., wind towers and associated infrastructure) on public lands administered by the BLM, CVWD-owned lands, and other private lands and is bordered by the Union Pacific Railroad to the north, between the Facility and I-10.

The Facility is located adjacent to wind energy development and the Union Pacific Railroad between the Facility and I-10.

CVWD is a permittee under the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) and collaborated extensively with the Coachella Valley Association of Governments (CVAG) and Coachella Valley Conservation Commission (CVCC), Federal and State wildlife agencies, and other parties involved during the planning process of the regional habitat conservation plan. CVWD is a member of the CVCC committee, and a signatory to the Implementation Agreement. The Facility is located within the external boundaries of the Whitewater River Floodplain Conservation Area associated with the CVMSHCP; however, public lands administered by the BLM are excluded from this CVMSHCP conservation area. Additionally, the 19 replenishment ponds associated with the Facility were intentionally

excluded from this conservation area. Based on the CVMSHCP mapping, the use of the Facility is considered a *"covered activity"* (see Section 3.2, *Biological Resources*).

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 the decision makers in preparing findings or a statement of overriding considerations, if necessary. The statement of objectives should include the underlying purpose of the project and may discuss the project benefits."*

CVWD has identified the following criteria as the objectives for the proposed Project:

1. Request and obtain a right-of-way grant for the Facility including portions of the 19 replenishment ponds, conveyance channels, and low-flow dike and channel crossing located on public lands administered by the BLM;
2. Request and obtain a right-of-way grant to include the area located north of SR-111 and west of the 19 replenishment ponds, which CVWD currently uses to access and maintain existing flood control berms;
3. Allow for continued operation of the Facility, consistent with agreements and contractual obligations with the Metropolitan and DWA; and applicable Federal, State, and local law regulations, and policies in a manner consistent with operations since the original permit authorization by the U.S. Department of the Interior in 1924 up to, and including, the BLM's right-of-way grant in 1984;
4. Deliver up to 511,000 acre-feet of Colorado River water to the Facility in any given year, including replenishment at the Facility with natural, surface flows from the Whitewater River utilizing existing infrastructure; and
5. Meet the objectives of the Coachella Valley Water Management Plan (2010) that individually contribute to improved water supply reliability for the Coachella Valley including:
    1) Meet current and future water demands with a 10 percent supply buffer;
    2) Eliminate long-term groundwater overdraft;
    3) Manage water quality;
    4) Comply with state and federal regulations;

5) Manage future costs; and

6) Minimize adverse environmental impacts.

As described further in Section 2.8.1, *Alternatives Assessed in this EIR*, in the absence of the proposed Project, CVWD and DWA would be required to cease or substantially reduce the use of the Facility for groundwater replenishment, which would prevent CVWD and DWA from fully implementing the Coachella Valley Water Management Plan (2010), the primary goal of which is to eliminate the overdraft of local groundwater resources. Further, CVWD and DWA rely exclusively upon the Facility to receive its State Water Project (SWP) water supplies, and with a substantially reduced area, or closed Facility, CVWD and DWA would be unable to receive any of its annual allocation from the State or additional SWP supply acquisitions.

2.5 OVERVIEW OF WATER SUPPLY

CVWD is a special district established by the State legislature and certified by State officials on January 16, 1918. While CVWD was originally formed to protect and conserve local water sources, it has since grown into a multifaceted public agency that delivers irrigation and domestic (i.e., drinking) water, collects and recycles wastewater, provides regional stormwater protection, replenishes the groundwater basin, and promotes water conservation. As described in Section 2.2, *Project Location*, CVWD's service area covers approximately 1,000 square miles from the San Gorgonio Pass to the Salton Sea. CVWD currently meets the water-related needs for a population of approximately 300,000 people, including more than 109,000 residences and businesses.

Figure 3. Project Site

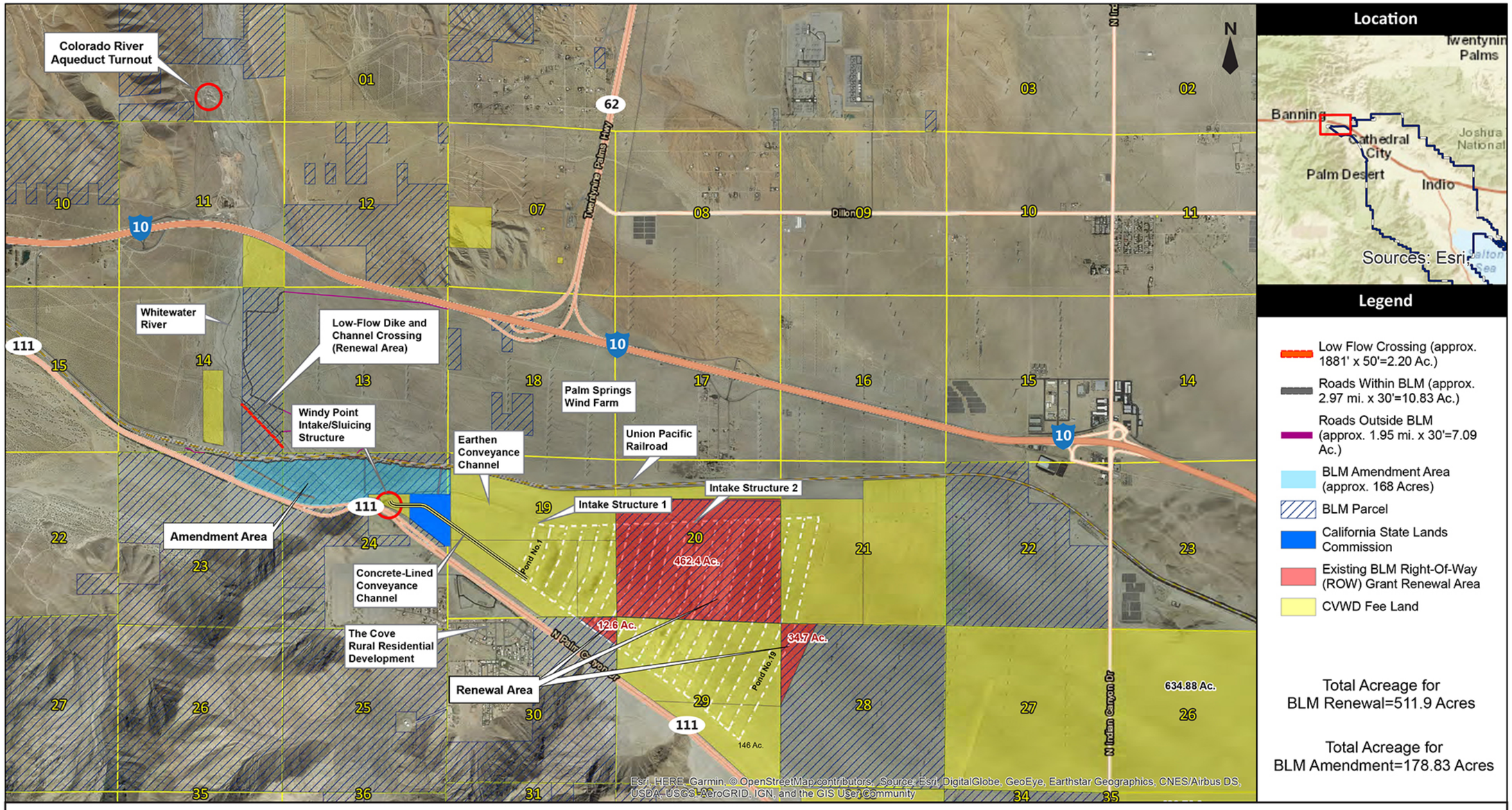


Figure 3 Project Site and Land Ownership

2.5.1 Water Supply Sources

As described within the Coachella Valley Water Management Plan (2010), water users within the Coachella Valley rely on a combination of local surface water, groundwater, Colorado River water, SWP water supplies via exchange agreements, and recycled water to meet water demands. The Coachella Canal brings Colorado River water into the Coachella Valley from the All-American Canal near the Mexico-U.S. border and traverses the southeastern margin of the Coachella Valley. SWP water supplies are obtained via Colorado River water exchange with the Metropolitan from the Colorado River Aqueduct.[4] Recycled water is produced by CVWD and DWA. Two of CVWD's five water reclamation plants produce recycled water that is blended with Colorado River water for service to its non-potable water customers – primarily golf courses and other large, landscaped areas. DWA supplies groundwater and some local surface water to its domestic water customers and the remaining domestic water purveyors, including CVWD, depend on local groundwater for domestic water uses. The Whitewater Groundwater Replenishment Facility is the only source of imported water supply within the DWA Groundwater Sustainability Agency (GSA) service area boundaries.

Groundwater Supply and Quality

Groundwater has been the principal domestic (i.e., drinking) water supply for the Coachella Valley for most of the 20th century and all of the 21st century to date. The groundwater source for the Coachella Valley is the Coachella Valley Groundwater Basin (California Department of Water Resources [DWR] Basin No. 7-21). This basin is bounded to the east side by the San Bernardino and Little San Bernardino Mountains, to the west by the Santa Rosa and San Jacinto Mountains, and to the south 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. These physical factors create five subbasins: San Gorgonio Pass, Whitewater River, Garnet Hill, Mission Creek, and Desert Hot Springs, which underlie the entire floor of the Coachella Valley. The Whitewater River Subbasin (DWR Basin No. 7-21.01)[5] is the largest of these five subbasins, encompassing approximately 400 square miles underlying 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.

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

[4] There are no physical facilities to deliver SWP water allotments to the Coachella Valley. Therefore, CVWD's and the DWA's SWP water allotments are exchanged with Metropolitan for a like amount of Colorado River water from Metropolitan's Colorado River Aqueduct that extends from Lake Havasu, through the Coachella Valley to Lake Mathews.

[5] DWR uses the name "Indio Subbasin" in Bulletin 118 (2006) in place of Whitewater River Subbasin used by CVWD and the Desert Water Agency.

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.

In 1975, DWR identified the Coachella Valley Groundwater Basin as being in a condition of overdraft (DWR 1975). Overdraft is defined as the condition of a groundwater basin in which the outflows (i.e., demand) exceed the inflows (i.e., supply) to the groundwater basin over the long term. Past overdraft conditions caused groundwater levels in the Coachella Valley Groundwater Basin to decline in some areas and has raised concerns about water quality degradation and land subsidence.

CVWD and DWA jointly operate direct groundwater replenishment programs in the Coachella Valley Groundwater Basin. CVWD prepared the Coachella Valley Water Management Plan to address 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. This plan was submitted as the Alternative Groundwater Sustainability Plan in compliance with SGMA and was approved by DWR. Management elements to be used by CVWD to meet the objectives of the Water Management Plan include the following:

- Water conservation measures;
- Acquisition of additional water supplies;
- Conjunctive use programs (i.e., mixed use of surface water and groundwater) to maximize supply reliability;
- Source substitution programs;
- Groundwater recharge programs (such as the Facility);
- Water quality protection measures; and
- Other management activities.

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 River Groundwater Recharge Facility, where artificial recharge has successfully raised groundwater levels (CVWD 2012).

Groundwater Quality

Groundwater quality in the Coachella Valley varies with depth, proximity to faults and recharge basins, presence of surface contaminants, naturally occurring constituents, and other hydrogeological or human factors. Colorado River water utilized for groundwater recharge at the Facility has higher TDS concentrations than some local groundwater sources. CVWD conducts water quality monitoring in monitoring wells located near the Facility and wells serving CVWD domestic water customers are tested in accordance with Federal and State drinking water requirements for more than 100 regulated and unregulated substances. Based on the most current water quality reports (CVWD 2019), these wells supply groundwater that complies with all Federal and State drinking water quality regulations.

Five naturally occurring substances, arsenic, chromium-6, fluoride, TDS, and uranium are among the over 100 constituents that are monitored in Coachella Valley's groundwater supply. Arsenic, fluoride, and uranium are found in portions of the Coachella Valley Groundwater Basin at levels above drinking water Maximum Contaminant Levels (MCLs) established by the State of California. Chromium-6 is found above the MCL that was withdrawn in 2017 by the State of California in response to a court order. TDS is found at levels above the consumer acceptance contaminant level ranges in the shallow perched aquifer and other areas where naturally saline groundwater is found including near faults and hot springs. CVWD avoids installing domestic water wells where elevated fluoride, TDS, and uranium levels are found, and already treats some groundwater wells to reduce arsenic and chromium-6 levels in the drinking water supply. CVWD has also performed water treatment studies in preparation to reduce chromium-6 levels in domestic water delivered from other groundwater wells if needed in the future to meet a new State MCL for chromium-6.

2.6 DESCRIPTION OF THE PROPOSED PROJECT

2.6.1 Project Background

Groundwater replenishment within the Whitewater River Subbasin began in 1918 with CVWD's establishment and operation of a spreading area. During this time, the spreading area was used to capture and replenish fast-moving stormwater and snowmelt flows from the drainage basin of the Whitewater River into the Whitewater River Subbasin.

CVWD and the DWA entered into separate contracts with the State of California in 1962 and 1963 to purchase water from the SWP. A direct connection from the SWP to the Coachella Valley does not exist. Therefore, CVWD and DWA entered into an agreement with Metropolitan to exchange water from Metropolitan's Colorado River Aqueduct for CVWD and DWA allocations of SWP water.

In 1973, CVWD, in conjunction with the DWA, began receiving Colorado River water from the Colorado River Aqueduct through an exchange agreement with Metropolitan. At that time, CVWD constructed the first 10 replenishment ponds to accept and infiltrate Colorado

River water exchanged for SWP water supplies. In 1983, an amended agreement between CVWD, DWA, and Metropolitan was negotiated providing additional Colorado River water. In 1984, CVWD constructed an additional nine ponds to infiltrate additional Colorado River water deliveries negotiated in the 1983 amended agreement with DWA and Metropolitan.

Since 1973, approximately 3.7 million acre-feet of Colorado River water have been delivered to the Facility. Annual requested SWP allocations are not always delivered and are subject to available water supplies, along with regulatory restrictions in the Delta (e.g., SWP-allocated supplies varied between 5 percent and 85 percent of requested supplies within the last 10 years). Colorado River water deliveries are also subject to the operational considerations of Metropolitan. The long-term estimated average for wet-period deliveries of SWP is 58 percent and for a single-wet year 97 percent (DWR 2019). During dry-periods, deliveries of SWP are estimated at an average of 30 percent for a 4-year drought. In addition, depending on availability, CVWD and DWA may receive water unrelated to their SWP allocation, which is also delivered through the Colorado River Aqueduct as part of the exchange agreement with Metropolitan in the form of Colorado River water. These additional water supplies include, but are not limited to, Pool A and Pool B water, Quantification Settlement Agreement water, Yuba water, Article 21 water, and Rosedale Rio Bravo water. A summary of water that has been historically delivered to the Facility is provided in Table 2-1.

Groundwater replenishment in the Coachella Valley Groundwater Basin is critical to maintaining groundwater levels and ensuring local availability of irrigation and domestic water within CVWD's and DWA's service area. The historical overdraft in the Coachella Valley had caused groundwater levels to decline in many portions of the East Valley from La Quinta to the Salton Sea, and raised concerns about water quality degradation and land subsidence. Groundwater levels in the West Valley from Palm Springs to La Quinta had also decreased substantially, except in areas adjacent to and down-gradient of the Whitewater River Groundwater Recharge Facility, where artificial recharge has successfully raised groundwater levels (CVWD 2012).

Table 2-1. Colorado River Exchange Water Delivered Annually to the Whitewater River Groundwater Replenishment Facility

Year	Acre-feet of Imported Water	Year	AF of Imported Water	Year	Acre-feet of Imported Water
1973	7,415	1989	12,479	2005	165,554
1974	15,396	1990	31,721	2006	98,959
1975	20,126	1991	14	2007	16,009
1976	13,206	1992	40,870	2008	8,008
1977	0	1993	60,153	2009	57,024
1978	0	1994	36,763	2010	228,330
1979	25,192	1995	61,318	2011	232,214
1980	26,341	1996	138,266	2012	257,214
1981	35,251	1997	113,667	2013	26,620
1982	27,020	1998	132,455	2014	3,553
1983	53,732	1999	90,601	2015	865
1984*	83,708	2000	72,450	2016	35,699
1985	251,994	2001	707	2017	385,994
1986	298,201	2002	33,435	2018	129,725
1987	104,334	2003	902	2019	243,357
1988	1,096	2004	13,224	**Total**	**3,691,162**

Notes: These values do not reflect natural stormwater or snowmelt flows in the Whitewater River catchment basin.

* Increased water deliveries from 1984 on reflect increase exchange capacity following amendment of exchange agreement with Metropolitan.

2.6.2 History of Right-of-Way Grants

In 2013, CVWD completed construction of a new intake/sluicing structure and a 12,000-foot-long concrete-lined conveyance channel as well as groundwater replenishment pond improvements.

CVWD has maintained a BLM permit for groundwater replenishment activities since 1924 including the first right-of-way grant issued by the BLM in 1937. The right-of-way has gone through a number of renewals over the years. The BLM issued the most recent iteration of right-of-way grant LA 052742 on April 5, 1984 for 509.7 acres in portions of Section 24 of Township 3 South Range 3 East and Sections 20, 28, and 40 of Township 3 South, Range 4 East. This right-of-way grant permitted construction of the existing replenishment ponds and was evaluated in a NEPA-compliant Environmental Assessment (BLM 1984). This was a 30-year right-of-way grant that expired on April 4, 2014. The BLM also issued right-of-way grant CA 19150 for 1.51 acres on a portion of Section 14 of Township 3 South, Range 3 East. This right-of-way grant permitted the construction, operation, maintenance, and termination a low-flow dike and conveyance channel on public lands administered by the BLM and was discussed in the NEPA-compliant Environmental Assessment (BLM 1984). This was a 25-year right-of-way grant that expired on March 3, 2012.

2.6.3 Existing Site Characteristics

The Facility includes a 5-mile-long earthen channel, an intake/sluicing structure into the Facility, two intake structures, concrete and earthen conveyance channels, 19 replenishment ponds, and numerous spillways, dikes, and berms used to control water flow.

The existing infrastructure that comprises the Facility – including a portion the 19 replenishment ponds and the conveyance channels – spans land owned by CVWD as well as public lands administered by the BLM. Of the approximately 1,990 total acres supporting and directly involved with this Facility, 1,480.7 acres are located on CVWD-owned land and 509.7 acres (i.e., the area included in the proposed right-of-way request) are located on public lands administered by the BLM. Refer to Table 2-2 for an acreage description of each pond.

Table 2-2. Replenishment Pond Land Ownership

Pond	Capacity (acre-feet)	Surface Area (acres)	Approximate % on CVWD-owned land	Approximate % on BLM-managed Land
1	78	16.00	100.0	0.0
2	85	16.95	100.0	0.0
3	107	21.36	100.0	0.0
4	127	26.36	100.0	0.0
5	145	28.95	100.0	0.0
6	137	27.33	66.4	33.6
7	144	28.86	17.6	82.4
8	157	31.32	9.0	91.0
9	170	34.07	23.6	76.4
10	165	33.07	29.7	10.7
11	197	39.31	31.6	68.4
12	213	42.59	34.6	65.4
13	220	44.08	40.5	59.5
14	231	46.22	41.0	59.0
15	244	48.74	45.3	54.7
16	261	52.11	46.1	53.9
17	269	53.84	59.2	40.8
18	279	55.18	84.9	15.1
19	288	57.51	86.5	13.5
Total	**3,514**	**702.85**	**55.6**	**44.4**

2.6.4 Proposed Right-of-Way Grant

Under the proposed Project, the CVWD would request a right-of-way grant from the BLM for two locations totaling 690.73 acres (refer to Figure 3):

- The "renewal area" consists of two individual areas originally included in right-of-way grant LA 052742, which was previously issued by the BLM in 1984 and expired in 2014, and right-of-way grant CA 19150, which was previously issued by the BLM in 1987 expired in 2012:
    - 509.7 acres that includes a portion the 19 replenishment ponds as well as the concrete-lined and earthen conveyance channels (right-of-way grant LA 052742); and
    - 2.2 acres that includes the low-flow dike and channel crossing (right-of-way grant CA 19150).
- The "amendment area" includes 178.83 acres located north of SR-111 and west of the Facility. This area was included in the previous right-of-way grant LA052742, which was previously issued by the BLM and authorizes CVWD's right to access and maintain existing water control structures in this area.

A summary of CVWD's application under the proposed Project is provided in Table 2-3. The areas that would be requested for the right-of-way grant from the BLM are described below and shown in Figure 3.

Table 2-3. Summary of Proposed Project

Project Component	Summary Description
Renewal Area (acres)	511.9 acres
Amendment Area (acres)	178.83 acres
Total Right-of-Way Grant Area (acres)	690.73 acres
Construction/Demolition Activities	No
Operation, Maintenance, and Repair	Existing operations, repair, and maintenance activities would not be modified. Sediment removal, dike repair, road maintenance, low-flow dike and channel crossing maintenance, and flood control berm maintenance would continue.
Maximum Groundwater Replenishment Delivery	511,000 acre-feet in any given year

Renewal Area

The renewal area would include 511.9 acres of public lands administered by the BLM, consisting of 509.7 acres within the Facility and 2.2 acres containing the low-flow dike and channel crossing authorized under the previous grants LA 052742 and CA 19150, respectively.

The renewal area includes portions of Section 24 of Township 3 South, Range 3 East and Sections 20, 28, and 30 of Township 3 South, Range 4 East (approximately 509.7 acres). This area is currently developed with the existing Facility. The construction, operation, and maintenance of the replenishment ponds on BLM-managed land was previously authorized by right-of-way grant LA 052742. There is no construction proposed for this Facility, either on CVWD-owned land or public lands administered by the BLM.

In addition to the public lands administered by the BLM within the Facility, the renewal area includes 2.2 acres on a portion of Section 14 of Township 3 South, Range 3 East. This area is currently developed with a berm/road known as the low-flow dike and channel crossing. The construction, operation, and maintenance of this Facility was previously authorized under right-of-way grant CA 19150. There is no construction proposed on these lands.

Amendment Area

The amendment area includes portions of Sections 23, and 24 of Township 3 South, Range 3 East (approximately 178.83 acres). Two existing berms in this area are used to divert surface flows toward the Windy Point intake/sluicing structure (Berm #1 on Section 23) or around the Windy Point intake/sluicing structure and into the Whitewater River when flows exceed 800 cubic feet per second (cfs) (Berm #2 on Section 24). Existing roads on BLM-managed lands within portions of the amendment area would be used for access for CVWD staff to perform maintenance and repairs on existing facilities (see Section 2.6.5, *Proposed Operations and Maintenance* for additional information on maintenance and repair activities). There is no construction proposed on these lands.

Colorado River water is conveyed along the 5-mile-long earthen channel, beneath I-10 to the Windy Point intake/sluicing structure.

2.6.5 Proposed Project Operations and Maintenance

Operations

Delivery flows to the Facility are released from Colorado River Aqueduct turnouts DWCV-01, DWCV-02, DWCV-03, DWCV-04 (A, B, C, and D), and DWCV-04 (P). Imported water may mix with natural surface flows (i.e., stormwater or snowmelt) in the Whitewater River and is conveyed

from the turnouts to the U.S. Geological Survey (USGS) Windy Point flow gauge via a 5-mile-long earthen channel.

The typical flow pattern of the Colorado River water is as follows:

- The 5-mile-long earthen channel conveys the water over lands owned or managed by a variety of private and public entities and agencies, until the water crosses Section 14 of Township 3 South, Range 3 East at the low-flow dike and channel crossing, which is located on public lands administered by the BLM.
- The water continues to flow across public lands administered by the BLM within Section 23 and 25 of Township 3 South, Range 3 East until it reaches the Windy Point intake/sluicing structure.

The Windy Point intake/sluicing structure is used to manage sediment loads in the water before it reaches the 19 replenishment ponds.

- Once the water reaches the Windy Point intake/sluicing structure, the water flows either along the northern or southern boundary of the replenishment ponds depending on the flow rate in the channels and existing day-to-day operating conditions:
    - The Colorado River Aqueduct turnouts at the Facility are capable of delivering a maximum flow rate of 720 cfs of imported water; the Facility is capable of receiving a total flow rate of 800 cfs.
    - During normal operations (i.e., non-storm events), when the flow rate is equal or less than 800 cfs (combined imported and natural flows), water is conveyed through the USGS Windy Point gauge and diverted at the Windy Point intake/sluicing structure to either be conveyed utilizing the cement-lined conveyance channel and discharged into Ponds 1, 10, and 14 or diverted via an earthen channel to Intake Structures 1 and 2, discharging to Ponds 1, 2, and 10.
    - Prior to, and during a storm event, normal operations are modified to prevent stormwater flows greater than 400 cfs from entering the replenishment Facility. During large storm events resulting in flows approaching or exceeding

400 cfs, imported water is not delivered to the replenishment Facility; however, deliveries continue during smaller events. Stormwater flows are diverted around the replenishment Facility in an effort to safely convey flows to avoid damage to the Facility's intake structures, cement-lined conveyance channel, replenishment ponds, and other related infrastructure.

CVWD and DWA request their full Table A SWP water allocation amounts from DWR each year, for a combined total of 194,100 acre-feet per year, and continue to exchange their SWP water for Colorado River water for delivery at the Facility through an exchange agreement with Metropolitan. As described in Section 2.6.1, *Project Background,* the entire allocation of SWP water is typically not delivered or guaranteed and may vary due to SWP limitations such as weather conditions (e.g., drought) that may be exacerbated by climate change, increased demand, restrictions on water export from the Sacramento-San Joaquin Delta to protect the federally endangered Delta smelt (*Hypomesus transpacificus*), and other factors. In addition, depending on availability, CVWD and DWA may receive water unrelated to their SWP allocation, which is also delivered through the Colorado River Aqueduct as part of the exchange agreement with Metropolitan in the form of Colorado River water. These additional water supplies include, but are not limited to, Pool A and Pool B water, Quantification Settlement Agreement water, Yuba water, Article 21 water, and Rosedale Rio Bravo water.

In addition, CVWD and DWA have an Advanced Delivery Agreement with Metropolitan that was executed in 1985 (with subsequent amendments and most recently updated in 2019). The Advance Delivery Agreement established a key asset in Metropolitan's water storage portfolio, the Advance Delivery Account, with a storage capacity of up to 800,000 acre-feet.

Depending on the flow and sediment load, water is delivered at the Windy Point intake/sluicing structure to either be conveyed utilizing the cement-lined conveyance channel (left) and discharged directly into Ponds 1, 10, and 14 or diverted via an earthen channel (middle) to Intake Structures 1 and 2 (right), discharging to Ponds 1, 2, and 10.

In wet years, deliveries often exceed available SWP supplies, and Metropolitan builds the

storage balance. Metropolitan draws upon this storage balance in dry years, when needed to meet Metropolitan service area demands. Metropolitan also draws upon this balance, making fewer deliveries than available DWA and CVWD SWP supplies, in years when Metropolitan is rebuilding depleted storage in other surface water and groundwater storage assets. Total storage in the Advance Delivery Account has ranged from a high of 552 thousand acre-feet (TAF) during 1987 to a low of 7 TAF during 2009. Within the calendar year, maximum deliveries to the Facility were 386 TAF, with 245 TAF being credited to the Advance Delivery Account during 2017, a wet year, where the account played a key role in capturing abundant water supplies for future dry years. The maximum withdrawal from the account within a calendar year was 120 TAF during 2016, when Metropolitan was rebuilding depleted surface water storage subsequent to the historic 2014-2015 drought.

Maintenance and Repair Activities

Ongoing maintenance and repairs at the Facility would continue under the proposed Project and are described in this section. The annual maintenance that occurs in the ponds includes ripping (i.e., tilling) the bottom of the pond during dry periods to maintain replenishment rates. Other maintenance includes armoring and repairing dikes and maintaining service roads around the ponds. Annual maintenance activities at the Facility has recently averaged 3 months of weekdays per year or 60 working days. The types of vehicles that access this area include mix of equipment typically including: one D8 bulldozer, one 800 class and one long stick excavator, three articulating rock trucks, one motor grader, five water trucks, and six standard CVWD service trucks. For all of these maintenance activities, dust control measures are in place (e.g., water trucks). Maintenance activities are not perfomed when wind speeds exceed 25 miles per hour.

Water that enters the replenishment ponds carries fine sediment that fills the ponds over time. Therefore, to maintain capacity and infiltration rates, CVWD routinely relocates fine sediments and rips (i.e., tills) the bottom of the ponds.

The following describes the type of routine maintenance, access, and vehicles that are used:

Berm #1 on Section 23. The types of activities that may occur in this area include access to and maintenance of the existing berm (Berm #1). However, maintenance activities have not been necessary in Section 23 in the last 30 years of operation. If maintenance would be required in the area in response to storm events it anticipated to include sloping, shaping, and restoring the berm where it has been washed out or eroded by stormwater. The types of

vehicles that access this area include excavators, bulldozers, and standard CVWD service trucks. CVWD uses existing roads in this area but does not maintain the roads. CVWD uses the existing service road along the Union Pacific Railroad. CVWD is requesting access to this area for maintenance of Berm #1 in the event of damage following storm events.

Berm #1 and #2 on Section 24. The type of activity in this area includes maintaining the existing Berm #1, as needed, and as described above, and the second existing berm (Berm #2) that is used to divert stormwater around the sluice gate structure when stormwater flows are expected. Maintenance frequency is based on storm events and typically occurs approximately five times per year. Maintenance entails sloping, shaping, and restoring the berms if they are washed or eroded by stormwater. The types of equipment that access this area during maintenance activities include one excavator and one bulldozer. There are service roads in this area that CVWD uses and maintains.

Low-Flow Dike and Channel Crossing. Access to this area may be needed to maintain the low-flow dike and channel crossing, which channelizes the water deliveries and stormwater run-off towards the replenishment Facility. Typical maintenance on the low-flow dike and channel crossing may entail excavating material, sloping, shaping, and restoring the berm where it has been washed out or eroded by stormwater. CVWD Stormwater Division does not perform preventative maintenance in the area upstream of the railroad alignment unless storm events necessitate repair and restoration within this area. There has been no need for heavy equipment to access this area from 2016 through 2018. However, if heavy equipment were needed, then the type of vehicles that would access this area would include bulldozers to repair portions of the low-flow dike and channel crossing. CVWD uses existing roads in this area, but only maintains the road that is part of the low-flow dike and channel crossing.

Pond Berm Maintenance. The type of maintenance activities that occurs on the replenishment pond berms includes repairing and/or reconfiguring berms and maintaining service roads around the ponds. Beyond typical maintenance of replenishment berms, reconfiguring the inter-pond berms may be necessary to route water flows around individual ponds may be undergoing maintenance activities. The types of vehicles that access this area include scrapers, bulldozers, excavators, front-end loaders, articulating rock trucks, motor graders, dump trucks, water trucks, bobcats, and standard CVWD service trucks.

Existing Avoidance and Minimization Measures

CVWD implements avoidance and minimization measures for the routine operations and maintenance activities at the Facility. For example, due to the location of the Facility within the floodplain of the Whitewater River and surrounded by the Whitewater Floodplain Conservation Area, CVWD provides worker education, conducts pre-activity surveys, avoids sensitive plant and wildlife species, avoids herbicide and pesticide use in habitat occupied by sensitive plant and wildlife species, limits off-road travel to BLM-designated routes of travel, and avoids fueling and maintaining vehicles in sensitive areas. Further, in compliance with

the CVMSHCP, deposition of excess sediment removed during maintenance activities is restricted to a designated deposition area. Additionally, CVWD complies with all applicable South Coast Air Quality Management District (SCAQMD) rules including Rule 403.1, which is intended to reduce fugitive dust in Coachella Valley. Rule 403.1 requires a Fugitive Dust Control Plan approved by SCAQMD or an authorized local government agency prior to initiating any construction/ earth-moving activity.

2.7 PERMITS AND CONSULTATION

As described in Section 1.2, *Lead, Responsible, and Trustee Agencies* CVWD is the 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 and trustee agencies as well as interested organizations and members of the public to understand the potential environmental effects associated with implementation of the proposed Project or its alternatives.

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 or other approvals that may be required to implement the project, and a list of related Federal, State, and local consultation requirements. Table 2-4 provides a list of the Federal, State, and local regulatory and permitting agencies as well as local Native American tribes under Assembly Bill (AB) 52, that may formally request consultation with CVWD regarding the proposed Project.

Table 2-4. Potential Permits and Consultation Requirements

Regulating Agency	Potential Permit / Consultation
Federal	
U.S. Bureau of Land Management	• Preparation of an Environmental Impact Statement (EIS) and Record of Decision (ROD) compliant with the National Environmental Policy Act (NEPA) • Issuance of right-of-way grant for continued operation of the Facility on public lands administered by the BLM
Native American Tribes	
• Agua Caliente Band of Cahuilla Indians • Augustine Band of Cahuilla Indians • Cabazon Band of Mission Indians	• Native American consultation pursuant to AB 52 Tribal Cultural Resources consultation. As discussed in Section 3.3, *Cultural*

Regulating Agency	Potential Permit / Consultation
• Morongo Band of Mission Indians • Soboba Band of Luiseño Indians • Torres Martinez Desert Cahuilla Indians • Twenty-Nine Palms Band of Mission Indians	*Resources and Tribal Cultural Resources*, AB 52 consultation was conducted and concluded prior to the release of the Draft EIR

2.8 ALTERNATIVES

CEQA Guidelines Section 15126.6(a) states that the EIR need not consider every conceivable alternative to a project; rather, an EIR must describe and evaluate a reasonable range of potential feasible alternatives to the proposed Project that would foster informed decision making and public participation. An EIR should also evaluate the comparative merits of the proposed Project. Specifically, CEQA Guidelines Section 15126.6 sets forth criteria for selecting and evaluating alternatives.

2.8.1 Alternatives Assessed in this EIR

In addition to the proposed Project, this EIR assesses three alternatives:

- Alternative 1 – No Project Alternative
- Alternative 2 – Amendment Area Only / Decrease Operations Alternative
- Alternative 3 – Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

A brief summary of each of these alternative is provided below. Additionally, Table 2-5 demonstrates a comparison of these alternatives to the proposed Project including a description of the affected land area, any construction or demolition activities, operation/maintenance/repair activities, and the maximum groundwater replenishment delivery per each alternative. These alternatives are analyzed in Section 5, *Alternatives*.

Alternative 1 - No Project Alternative

Under the No Project Alternative, CVWD would not receive the right-of-way grant renewal and amendment from the BLM. CVWD would be required to cease activities on public lands administered by the BLM, and the land would be reclaimed in accordance with BLM requirements.

CVWD would retain ownership over CVWD-owned lands – including the Windy Point intake/sluicing structure, Intake Structure 1, portions of the concrete-line and earthen conveyance channels, Ponds 1 through 5, and portions of Ponds 6 through 19. However, the remainder of the Facility would be located on public lands administered by the BLM. In addition to being unable to use Ponds 6 through 19 for replenishment, CVWD would no longer have access to the low-flow dike and channel crossing or the existing berms within the 178.83-acre amendment area. The low-flow dike and channel crossing channelizes the water delivery

towards the replenishment Facility. The existing berms in this amendment area are used to direct surface flows toward the Windy Point intake/sluicing structure. Berm #2 requires modification prior to storm events and to return the berm to its existing condition following storm events. Without the modification of Berm #2, the berm would no longer divert the stormwater around the Facility to the Whitewater River Stormwater Channel (WRSC).

Under the No Project Alternative, CVWD would no longer be able to use the W Facility in its current configuration and would have to cease its operation of the Facility.

The No Project Alternative would not meet the basic Project objectives as it would require CVWD to cease operation of the Facility, which has been in operation since 1973. Although historically, CVWD has been using the area for spreading ponds dating back to 1918 and under various permits from Federal entities, as needed.

The No Project Alternative is in direct conflict with CVWD water management goals identified and in the Coachella Valley Water Management Plan (2010) and would require substantial revision to the Water Management Plan, which relies on groundwater recharge to address overdraft conditions in the Coachella Valley Groundwater Basin, and calls for the expansion of groundwater replenishment at most recharge facilities.

Pursuant to CEQA Guidelines Section 15126.6(e)(2), the No Project Alternative analysis has been carried forward for analysis to discuss the existing conditions at the time the NOP is published (January 31, 2020) and to compare the potential environmental impacts of the No Project Alternative to those of the proposed Project.

Alternative 2: Amendment Area Only / Decrease Operations Alternative

Under Alternative 2 (Amendment Area Only / Decrease Operations Alternative), the BLM would only approve a right-of-way grant for the amendment area (178.83 acres) and the low-flow dike and channel crossing portion of the renewal area (2.2 acres). CVWD's application for a right-of-way grant for the portion of the 509.7-acre portion of the renewal area would not be approved by the BLM. This would include portions of Ponds 6 through 19, portions of the concrete-lined and earthen conveyance channels, and Intake Structure 2. CVWD would cease activities on these public lands administered by the BLM, and the land would be reclaimed in accordance with BLM requirements.

This alternative would remove large portions of Ponds 6 and 7 and would eliminate the ability of CVWD to convey water to Ponds 8 through 19. With this alternative, only Ponds 1 through 5 and a portion of Ponds 6 and 7, which are located on CVWD lands, would be available for groundwater replenishment. (The construction of berms to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands would also be necessary.) Therefore, the replenishment capacity of the Facility would be reduced to approximately 87,000 acre-feet per year, or approximately 17 percent of the existing capacity. As described for the proposed Project in Section 2.6.5, *Proposed Project Operations and Maintenance*, under this alternative water would be conveyed from the existing Colorado River Aqueduct turnouts

downstream to the infiltration ponds via a 5-mile reach of the Whitewater River. Water would enter the Facility through USGS Windy Point gauge to the Windy Point intake/sluicing structure where it would be directed into the infiltration ponds. Maintenance activities and the implementation of avoidance and minimization measures would be the same as those described for the proposed Project in Section 2.6.5, *Proposed Project Operations and Maintenance*.

Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Under this alternative CVWD would purchase or exchange land with the BLM for the purpose of unifying CVWD ownership of the existing Facility. Under this alternative CVWD would not require issuance of a right-of-way grant to continue operation of the Facility.

The BLM has discretionary authority to approve a land exchange to improve land management objectives by consolidating ownership and protecting environmentally sensitive areas. By exchanging public lands that are of limited interest to the BLM but of value to others, the BLM can acquire other lands with important recreation, conservation, scenic, cultural, and other resource uses. Land exchanges also allow the BLM to reposition or consolidate lands into more manageable units and to meet community expansion needs. The BLM's Land Exchange Handbook provides specific guidance to ensure that statutory and regulatory requirements are followed, and the public interest protected.

Table 2-5. Summary Comparison of Alternatives

Project Component	Summary Description			
	Proposed Project	**Alternative 2**	**Alternative 3**	**No Project Alternative**
Renewal Area (acres)	511.9 acres	2.2 acres	511.9 acres	0 acres
Amendment Area (acres)	178.83 acres	178.83 acres	178.83 acres	0 acres
Total Right-of-Way Grant Area (acres)	690.73 acres	180.93 acres	Under this alternative CVWD would purchase or exchange land with the BLM. Under this alternative CVWD would not require issuance of a right-of-way grant to continue operation of the Facility.	0 acres
Construction/Demolition Activities	No	Yes. Demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2.	No	Yes. Demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2.

Project Component	Summary Description			
	Proposed Project	**Alternative 2**	**Alternative 3**	**No Project Alternative**
Operation, Maintenance, and Repair	Existing operations, repair, and maintenance activities would not be modified. Sediment removal, dike repair, road maintenance, low-flow dike and channel crossing maintenance, and flood control berm maintenance would continue.	Existing operations, repair, and maintenance activities would not be modified. However, the physical footprint of the Facility would be reduced without a right-of-way grant issued by the BLM.	Existing operations, repair, and maintenance activities would not be modified. Sediment removal, dike repair, road maintenance, low-flow dike and channel crossing maintenance, and flood control berm maintenance would continue.	Existing operations, repair, and maintenance activities would no longer occur.
Maximum Groundwater Replenishment Delivery	511,000 acre-feet in any given year.	87,000 acre-feet in any given year. Based on the utilization of ponds on CVWD-owned land (i.e., ponds 1-5, and portions of 6-7).	511,000 acre-feet in any given year.	0 acre-feet per year.

2.8.2 Alternatives Considered but Eliminated

CEQA Section 15126.6(c) states an EIR should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and 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; or (iii) inability to avoid significant environmental impacts.

Alternative Replenishment Facility Location

Under this alternative CVWD would construct a new groundwater replenishment facility at an alternate location that would not require issuance of a right-of-way grant by the BLM. This alternative was rejected for several reasons including the fact that the construction of a new facility and the reclamation of the existing Facility would result in greater environmental impacts related to ground-disturbing activities compared to the proposed Project, which does not include any new construction or ground-disturbing activities. Under this alternative, new ponds would need to be constructed including a water delivery/conveyance system, among other unknown infrastructure. Another constraint is the location necessary with soil and geologic characteristics suitable for adequate percolation are limited within the Coachella Valley. Other obstacles to achieve this alternative would be the availability of lands in CVWD's service area sufficient in size needed for a groundwater replenishment Facility and the limited availability and proximity of existing Colorado River Aqueduct turnouts, in order for CVWD to utilize its SWP water allocation.

Reduced Total Volume

Under this alternative, CVWD would continue to operate and maintain the existing Facility as described in Section 2.6, *Description of the Proposed Project*, but with a reduced maximum permissible annual infiltration volume. The Facility would receive and infiltrate up to an annual maximum of 220,000 AFY of water, representing the maximum allocation-based infiltration volume evaluated in the NEPA-compliant Environmental Assessment prepared for the original right-of-way grant (BLM 1984; refer to Section 2.6.2, *History of Right-of-Way Grants*). The 220,000 AFY limit under this alternative would be approximately 43 percent of the total annual maximum capacity volume under the proposed Project. This alternative was rejected for several reasons including the fact that reduced groundwater recharge at the Facility would result in greater environmental impacts related to a reduced capacity for the Facility to counteract ongoing groundwater overdraft in the Coachella Valley, potential inconsistency with CVWD's Water Management Plan targets for replenishment (CVWD 2010), and potential disproportionate impacts on environmental justice communities in the West Whitewater subbasin in the vicinity of the Facility due to increased water rates due to continuing overdraft (BLM 2021).

Alternatives from the 2002 Coachella Valley Water Management Plan and State Water Project Entitlement Transfer Program EIR and 2010 Coachella Valley Water Management Plan Update Subsequent Program EIR

Several alternatives for reducing potential groundwater quality impacts were considered and rejected during preparation of the 2002 Coachella Valley Water Management Plan and State Water Project Entitlement Transfer EIR and 2010 Water Management Plan Update Subsequent Program EIR that are still relevant to the proposed Project. These alternatives were reviewed during the preparation of the EIR and were determined to be economically infeasible and having similar or greater potential environmental impacts compared to the proposed Project. These alternatives are summarized below:

Direct Import of State Water Project Water

This alternative would allow SWP water to be delivered directly to the Facility; and it would require the construction of an aqueduct to connect the Coachella Valley to the SWP infrastructure described as a 200-foot-wide corridor, ranging in length from 60.7 (in San Bernardino) to 88.2 miles (in Perris). This alternative would have significant environmental impacts and significant costs increases in comparison to the proposed Project. Further, this alternative would require its own environmental review pursuant to CEQA and NEPA, involving multi-jurisdictional coordination and consultation.

The direct importation of SWP water to the Coachella Valley could reduce the impact of increased salt with use of Colorado River water. The closest point of connection to the SWP (East Branch) is the Devil Canyon Afterbay in the City of San Bernardino. Water from the East Branch of the SWP has an average TDS concentration of approximately 250 milligrams per liter (mg/L). In terms of TDS, the use of SWP water would provide a water quality benefit compared to the proposed Project. At the same time, trihalomethane (THM) precursor concentrations are substantially higher in SWP water than in Colorado River water. THMs are toxic byproducts created when water is disinfected using chlorination. Direct importation of SWP water, by extending a pipeline from the SWP into the Coachella Valley, was considered several times in the past and found to be economically infeasible. Given that the overall cost of construction typically increases with the cost of living and over time, it is concluded that this conceptual alternative is still cost and regulatory prohibitive. It is also unknown when this alternative could be operational, and any loss of imported water into the Coachella Valley would be a significant environmental impact.

The 2010 Water Management Plan Update Subsequent Program EIR concluded that construction of this conveyance would have substantial adverse environmental impacts along the conveyance alignment (based on the environmental constraints analysis performed for the feasibility study) associated with disturbance of up to 40 to 90 miles of roads or off-road corridors in a 200-foot-wide alignment, and undeveloped right-of-way during construction, construction of pumping stations and hydropower facilities, and from operation of the Facility. In particular, significant environmental impacts would include:

- Loss of more than half of Table A SWP water allocation amounts from DWR each year. Metropolitan would most likely discontinue the 100,000 acre-feet temporary transfer if the SWP were extended and the basin would continue to be overdrafted;
- Potential loss of sensitive plant and wildlife resources and habitats along pipeline routes and at pumping / power recovery sites;
- Potential loss of known significant cultural resources along pipeline route and at pumping / power recovery sites;
- Air quality impacts from construction equipment emissions and fugitive dust during construction; and
- Socioeconomic impacts to the Coachella Valley due to significantly increased water costs.

Desalination of Colorado River Water (Canal Water)

Desalination of all Colorado River water before recharge is also considered to be infeasible due to brine disposal impacts, permitting feasibility (especially for waste brine disposal), air quality and greenhouse gas (GHG) emission impacts associated with high energy demands, power requirements and consumption costs, highly variable delivery schedules and intermittent operation requirements, and high cost for new infrastructure. Further, additional environmental documentation would be required to analyze this alternative pursuant to CEQA and NEPA.

Desalination of Colorado River water at a new desalination plant (or plants) in the Coachella Valley could reduce the TDS concentrations of recharged imported water. The basic concept would involve desalination of some or all of the Colorado River water imported to the Coachella Valley for recharge, to be consistent with the average groundwater quality of about 300 mg/L of TDS or to meet the secondary (i.e., non-enforceable aesthetic/taste) recommended consumer acceptance contaminant level of 500 mg/L. There are several unknown implications of this conceptual alternative including identifying a location(s), capacity required, brine disposal methods, and cost.

The 2010 Water Management Plan Update Subsequent Program EIR identified the following potentially significant environmental impacts associated with the Colorado River water desalination alternative:

- Changes in water absorption rates, drainage patterns, and runoff at treatment plant sites and along pipeline alignments;
- Need for additional imported water to make up for water lost to brine production and evaporation;
- Potential loss of cultural resources along pipeline alignments;

- Potentially significant additional air quality and greenhouse gas emission impacts from increased energy demand for treatment and pumping;
- Net energy requirement of about 20 to 60 megawatts (MW) of electrical generation capacity for reverse osmosis treatment;
- Potential impacts on existing energy infrastructure for both pumping and recovered energy;
- Increased salt load to the Salton Sea if the brine is discharged to the sea; and
- Potential for adverse socioeconomic impacts in the Coachella Valley due to steep increases in water cost to offset capital outlays to construct and operated this alternative.

Alternatives from the 1983 Extension of Time for Utilizing Colorado River Water to Recharge the Upper Coachella Valley Groundwater Basins to Year 2035 EIR

This EIR evaluated the water source and activities associated with continuing operation of groundwater replenishment facilities within the basin necessary to augment groundwater supplies and the water table decline within the upper Coachella Valley. Numerous relevant alternatives were evaluated including the proposed Project identified in this EIR as well as various combinations of Colorado River water filtration, desalination, and hydro-electric generation. In addition, this EIR evaluated various combinations of SWP replenishment and pump, filtration, hydro-electric generation and delivery, and construction of a Coachella Valley Aqueduct. Some of these alternatives were identified as having beneficial effects including mitigating overdraft, mitigating groundwater salinity increase, the use of water supply with lower TDS, and energy recovery. However, each of these alternatives were determined to have potentially significant environmental effects requiring extensive additional analysis, construction, identification of land for Facility siting and miles of pipeline, energy, salt (brine) disposal problems, and expenditure of basic resources including land, materials, and energy.

3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section addresses the environmental issue areas identified in Appendix G of the 2021 California Environmental Quality Act (CEQA) Guidelines and describes the potential physical environmental impacts associated with the proposed right-of-way grant and continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility). The discussion of each environmental issue area is subdivided into the following subsections:

- *Environmental Setting*;
- *Regulatory Framework*; and
- *Impacts and Mitigation Measures.*

Environmental issue areas that would not be affected by the Project are discussed in Section 4.5, *Effects Found Not to be Significant*. For example, given that the proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the Bureau of Land Management [BLM]) that would facilitate the continued operation and maintenance of the existing Facility in compliance with the policies of the Coachella Valley Water Management Plan (2010), the proposed Project would have a negligible impact on aesthetics. Issues and concerns identified during the public scoping period (refer to the scoping comment summary provided in Table 1-1 and the complete scoping comments provided in Appendix A) are assessed in detail within this analysis.

Impact Assessment Guidelines and Impact Classification

CEQA requires an Environmental Impact Report (EIR) to "*identify and focus on the significant environmental effects of a proposed project*" (CEQA Guidelines Section 15126.2[a] and California Public Resources Code Section 21000[a]). The emphasis of the EIR should be placed on the potential *"physical"* adverse effects of a proposed project. CEQA Guidelines Section 15360 define *"environment"* as the physical conditions – natural or man-made – that exist within the area that would be affected by a project, including, but not limited to, land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The section further defines the *"area involved"* as the area in which significant effects would occur either directly or indirectly as a result of the proposed project.

CEQA Guidelines Section 15382 further clarifies the definition of a *"significant effect on the environment"* as a substantial, or potentially substantial, adverse change in any of the physical conditions within the environmental issue areas affected by the project. An economic or social change by itself shall not be considered a significant effect on the environment; however, an economic or social change that may have a physical impact should be considered in an EIR (*Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184*). Given that the proposed Project is generally limited to a real estate action, it would not result in any new uses that would result in physical deterioration of the

environment from economic or social changes. Therefore, economic effects are not analyzed in this EIR pursuant to CEQA.

In the environmental impact analysis, the first subsection identifies the methodologies used and the impact significance thresholds, which include the Coachella Valley Water District's (CVWD) Local CEQA Guidelines (2020) and those criteria identified in Appendix G of the 2021 CEQA Guidelines. The next subsection describes each impact of the proposed Project, identifies mitigation measures for any potentially significant environmental impacts, and states 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 CEQA Guidelines Section 15093.
- **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 CEQA Guidelines Section 15091.
- **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.

Mitigation Measures and Monitoring

Pursuant to CEQA Guidelines Section 15126.4, where potentially significant environmental impacts have been identified in the EIR, feasible mitigation measures that would avoid or minimize the severity of those impacts are also identified and described in each environmental resource topic within Section 3, *Environmental Impact Analysis*.

Pursuant to CEQA Guidelines Sections 15126.4 and 15364, feasible mitigation measures must be implemented for all significant impacts. In this context, feasible is defined as *"capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."* A lead agency must impose mitigation measures unless findings can be made that the mitigation measures are found to be infeasible or within the jurisdiction of another agency (*City of Marina v. Board of Trustees of the California State University [2006] 39 Cal.4th 341*). Mitigation measures must be fully enforceable and may involve various means of implementation.

CEQA requires that implementation of adopted mitigation measures or any revisions made to the project by the lead agency to mitigate or avoid significant environmental effects be

monitored for compliance. Accordingly, CEQA Guidelines Section 15097 require that a public agency adopt a Mitigation Monitoring and Reporting Program (MMRP) for adopted mitigation measures and project revisions. With respect to responsibility of MMRP implementation, the CEQA Guidelines provide that "*…until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the [MMRP].*" That is, the MMRP may include a range of type of mitigation measures and responsible parties, but CVWD is responsible for overseeing and implementing the MMRP (CEQA Guidelines Section 15097[b]). The MMRP will be complied and provided in Section 9, *Mitigation Monitoring and Reporting Program* following public review of the Draft EIR and preparation of the Final EIR for certification.

Cumulative Impacts

CEQA Guidelines Section 15130(a) states that an EIR shall "*discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable*." In this context, *"cumulatively considerable"* means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and/or the effects of probable future projects (as defined by CEQA Guidelines Section 15130). The CEQA Guidelines define cumulative impacts as *"two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts."* CEQA Guidelines Section 15355 further state that the individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects.

Section 3.9, *Cumulative Effects* evaluates and describes the impacts associated with the proposed Project in conjunction with other planned and pending groundwater replenishment and groundwater management activities as well as forecasted growth within the region.

3.1 AIR QUALITY

This section describes the existing air quality conditions in the Salton Sea Air Basin (Basin), which includes the Project site, and the potential environmental impacts on air quality associated with the proposed right-of-way grant and the continued operations and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility). Information for this section is based in part on data from the South Coast Air Quality Management District (SCAQMD) and California Air Resources Board (CARB).

3.1.1 Environmental Setting

Climate

The Project site is located within the Coachella Valley 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 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. These arid conditions result in low soil moisture, which is responsible for one of the primary air pollution problems in the region – fugitive dust (SCAQMD 2003).

Temperatures during the hottest months reach above 105 degrees Fahrenheit (°F) during the day and drop to the mid-70s in the morning; during the coldest months, temperatures reach approximately 70 °F during the day and drop to the mid-40s in the morning. Most of the rainfall in the Coachella Valley occurs from November through March. However, precipitation also falls in August through October when tropical storms move north from Mexico (National Oceanic and Atmospheric Administration [NOAA] 2010).

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 (Coachella Valley Water District [CVWD] 2017).

Air pollutants

The definitions of the six primary criteria air pollutants, including ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulates less than 10 and 2.5 microns in diameter (PM_{10} and $PM_{2.5}$), and lead (Pb) are provided below.

Ozone

O_3 is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides (NO_x) and reactive organic gases (ROGs). NO_x is formed during the combustion of fuels, while ROGs are formed during combustion and evaporation of organic solvents. O_3 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 O_3 include children, the elderly, persons with respiratory disorders, and people who exercise strenuously outdoors.

Carbon Monoxide

CO, a colorless, odorless, poisonous gas, is a local pollutant that is found in high concentrations only near a source of CO. The major source of CO is automobile traffic; therefore, elevated concentrations are usually only found near areas of high traffic volumes. However, at high concentrations, CO reduces the amount of oxygen in the blood, causing heart problems in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

Nitrogen Dioxide

NO_2 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 NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 is an acute irritant. It can also contribute to the formation of PM_{10} 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 concern are PM_{10} (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 PM_{10} 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.

Sulfur Dioxide

SO_2 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 Basin. 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.

Odors

Odors are not regulated under the Clean Air Act (CAA) or the California Clean Air Act (CCAA) (see Section 3.1.2, *Regulatory Framework*); however, they are considered nuisances under the California Environmental Quality Act (CEQA). Odors can potentially affect human health in several ways. Odorant compounds, including some volatile organic compounds (VOCs) can irritate the eye, nose, and throat, which can reduce respiratory volume. Unpleasant odors can also trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress. Common sources of odors and nuisance emissions include wastewater treatment plants, landfills, composting facilities, petroleum refineries, and chemical manufacturing facilities. As a large-scale groundwater replenishment facility, the Facility does not emit objectionable odors.

Regional Air Quality

Under the CAA, Federal air quality standards, known as the National Ambient Air Quality Standards (NAAQS), were established for the six criteria air pollutants described previously. Similarly, the CCAA establishes State air quality standards, known as the California Ambient Air Quality Standards (CAAQS), which are more stringent than the NAAQS. NAAQS and CAAQS for the six criteria air pollutants are shown in Table 3.1-1. Measurements of ambient concentrations of criteria air pollutants are used by the U.S. Environmental Protection Agency (USEPA) and the CARB to assess and classify the air quality of each air basin, county, or in some cases a specific developed area. The classification is determined by comparing monitoring data with the NAAQS and CAAQS. If the concentration of a criteria air pollutant in an area is lower than the air quality standards, the area is classified as being in *"attainment."* If concentrations of a pollutant exceed the air quality standards, the area is in marginal, moderate, serious, severe, or extreme *"nonattainment,"* depending on the magnitude of the exceedance. If there are not enough data available to determine whether the air quality standard is exceeded, the area is designated *"unclassified."*

As shown in Table 3.1-1, at the Federal level, the Coachella Valley region of the Basin is designated by the USEPA as a nonattainment area for the 2015 8-hour O_3 NAAQS of 0.070 parts per million (ppm), and for the former 2008 8-hour ozone NAAQS of 0.075 ppm and 1997 8-hour O_3 NAAQS of 0.08 ppm. The Coachella Valley is also designated as a nonattainment area for PM_{10}, due to windblown dust events that recur in the area, with a classification of *"serious."* The Coachella Valley is in attainment of Federal standards for all

other criteria air pollutants, including 1-hour O_3, CO, 24-hour PM_{10}, $PM_{2.5}$, SO_2, and NO_2, a subcategory of NO_x (USEPA 2019). At the State level, the Coachella Valley portion of the Basin is designated as a nonattainment area for O_3 and PM_{10} (CARB 2018).

Table 3.1-1. Coachella Valley - Salton Sea Air Basin Attainment Status for Criteria Air Pollutants

Criteria Air Pollutant	Averaging Period	California Standard	Federal Standard	Criteria Air Pollutant Attainment Level Summary	
				California	Federal
Ozone (O_3)	1-hour	0.09 ppm	-	Nonattainment	Attainment
	8-hour	0.07 ppm	0.07 ppm	Nonattainment	Severe 15 Nonattainment
Carbon Monoxide (CO)	1-hour	20 ppm	35 ppm	Attainment	Attainment
	8-hour	9 ppm	9 ppm		
Respirable Particulate Matter (PM_{10}) (1987)	24-hour	50 µg/m3	150 µg/m3	Nonattainment	Serious Nonattainment
	Annual	20 µg/m3	-		
Fine Particulate Matter ($PM_{2.5}$) (2006)	24-hour	-	35 µg/m3	Attainment	Attainment
	Annual	12 µg/m3	12 µg/m3		
Nitrogen Dioxide (NO_2)	1-hour	0.18 ppm	0.10 ppm	Attainment	Attainment
	Annual	0.03 ppm	0.053 ppm	-	-
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	0.075 ppm	Attainment	Attainment
	24-hour	0.04 ppm	0.14 ppm		
Lead (Pb) (2008)	3-month rolling average	-	0.15 µg/m3	-	Attainment
	30-day rolling average	1.5 µg/m3	-	Attainment	-

Notes: The Federal attainment status was updated by the USEPA in 2019. The most recent state attainment status available from the CARB are from 2018.
Sources: CARB 2016, 2019a; USEPA 2019.

Local Air Quality

Ambient Air Quality

To monitor the concentrations of air pollutants throughout the Basin, SCAQMD operates 37 permanent monitoring stations and four single-pollutant (Pb) source impact air monitoring sites in a portion of the Basin and the South Coast Air Basin. SCAQMD has divided the region into 38 source receptor areas (SRAs). The Facility is located within SRA 30, which covers the Coachella Valley. Ambient air pollutant concentrations within SRA 30 are monitored at three monitoring stations in Palm Springs, Indio, and Mecca. The nearest and most representative

monitoring station to the Project site is installed at the Palm Springs Fire Station located at 590 E. Racquet Club Avenue, which is approximately 3 miles southeast of the Facility. Criteria air pollutants monitored at this station include O_3, CO, PM_{10}, $PM_{2.5}$, and NO_2. Because this station does not monitor SO_2, data from the Rubidoux Riverside County monitoring station (SRA 23) located at 5888 Mission Boulevard was used for SO_2. The most recent data available from the SCAQMD for these monitoring stations are from years 2015 to 2018, as summarized in Table 3.1-2.

Since 2015, exceedances at this local air quality monitoring station have occurred for the State 1-hour O_3 standard, the Federal and State 8-hour O_3 standard, and the Federal 24-hr PM_{10} standard (see Table 3.1-2). The State standards for CO, NO_2, and SO_2, and the Federal and State standard for $PM_{2.5,}$ were not exceeded from 2015 through 2018.

Table 3.1-2. Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant/Standard	Number of Days Threshold Was Exceeded & Maximum Levels During Violations			
	2015	2016	2017	2018
Ozone				
State 1-Hour > 0.09 ppm	3 days	6 days	18 days	11 days
State 8-Hour > 0.07 ppm	51 days	48 days	63 days	58 days
Federal 8-Hour > 0.07 ppm	47 days	46 days	57 days	56 days
Max. 1-Hour Conc. (ppm)	0.102 ppm	0.103 ppm	0.113 ppm	0.111 ppm
Max. 8-Hour Conc. (ppm)	0.092 ppm	0.092 ppm	0.097 ppm	0.099 ppm
Carbon Monoxide (CO)				
State 8-Hour > 9.0 ppm	0 days	0 days	0 days	0 days
Federal 8-Hour > 9.0 ppm	0 days	0 days	0 days	0 days
Max. 1-Hour Conc. (ppm)	2.0 ppm	3.1 ppm	1.0 ppm	1.1 ppm
Max. 8-Hour Conc. (ppm)	0.7 ppm	1.5 ppm	0.5 ppm	0.8 ppm
Suspended Particulates (PM_{10})				
State 24-Hour > 50 µg/m^3	2 days	3 days	1 day	0 days
Federal 24-Hour > 150 µg/m^3	1 day	1 day	0 days	2 days
Max. 24-Hour Conc. (µg/m^3)	199.0 µg/m^3	447.2 µg/m^3	105.6 µg/m^3	422.3 µg/m^3
Annual Average (µg/m^3)	20.9 µg/m^3	23.1 µg/m^3	22.1 µg/m^3	22.9 µg/m^3
Fine Particulates ($PM_{2.5}$)				
Federal 24-Hour > 35 µg/m^3	0 days	0 days	0 days	0 days
Max. 24-Hour Conc. (µg/m^3)	22.7 µg/m^3	14.7 µg/m^3	14.5 µg/m^3	30.2 µg/m^3
Annual Average (µg/m^3)	N/A	5.4 µg/m^3	6.0 µg/m^3	6.0 µg/m^3
Nitrogen Dioxide (NO_2)				
State 1-Hour > 0.18 ppm	0 days	0 days	0 days	0 days
Federal 1-Hour>0.10 ppm	0 days	0 days	0 days	0 days
Max. 1-Hour Conc. (ppm)	0.042 ppm	0.043 ppm	0.043 ppm	0.043 ppm

Pollutant/Standard	Number of Days Threshold Was Exceeded & Maximum Levels During Violations			
	2015	2016	2017	2018
Sulfur Dioxide (SO_2)				
State 1-Hour>0.25 ppm	0 days	0 days	0 days	0 days
Max. 1-Hour Conc. (ppm)	0.002 ppm	0.006 ppm	0.003 ppm	0.002 ppm

Notes:
ppm = parts per million; µg/m^3 = micrograms per cubic meter; N/A = data not available/sufficient to determine the value.
Ambient concentrations were measured at the Palm Springs Fire Station Riverside County monitoring station for O_3, PM_{10}, $PM_{2.5}$, CO, and NO_2 and at the Rubidoux Riverside County monitoring station for SO_2.
The State standard for the annual average for $PM_{2.5}$ is 12 µg/m^3 and for PM_{10} is 20 µg/m^3. The Federal standard for the annual average of $PM_{2.5}$ is 15 µg/m^3 and there is no Federal standard for annual average for PM_{10}.
Sources: CARB 2019b; 2016; SCAQMD 2019.

Localized Significance Criteria

In addition to the NAAQS and CAAQS standards, the SCAQMD has developed Localized Significance Thresholds (LSTs) pursuant to the Governing Board's Environmental Justice Enhancement Initiative (1-4), to update the CEQA Air Quality Handbook (1993) in response to concerns regarding exposure of individuals to criteria air pollutants in local communities and have been developed for NO_x, CO, PM_{10}, and $PM_{2.5}$. The SCAQMD Environmental Justice Enhancement Initiative Program seeks to ensure that everyone has the right to equal protection from air pollution. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable NAAQS or CAAQS 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 5 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 2008). As such, LSTs are typically applied only to construction emissions as most operational emissions are associated with project-generated vehicle trips. As previously described, the proposed Project would not involve construction activities, as the proposed Project would continue existing CVWD operations at the Facility.

Given that the proposed Project would not include construction activities, the size of the disturbance area of maintenance activities being much greater than 5 acres, and the distance of the nearest sensitive receptors (i.e., more than 1,000 feet away), LSTs are not applicable to the proposed Project. However, in order to estimate the maximum concentration of criteria air pollutant emissions generated by existing and proposed continued maintenance activities on-site, the criteria air pollutant emissions associated with the Facility are discussed in relation to SCAQMD's LSTs in Section 3.1.3, *Impacts and Mitigation Measures* below.

Toxic Air Contaminants

In addition to criteria air pollutants, the SCAQMD periodically assesses levels of toxic air contaminants (TACs) in the Basin as part of its obligations pursuant to the California Health and Safety Code Section 41700 to control emissions of air contaminants and prevent

endangerment to public health. A TAC is defined by California Health and Safety Code Section 39655 as an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. Any substance listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the CAA (42 U.S. Code [USC] Section 7412[b]) is a TAC.

TACs include a diverse group of air pollutants including both organic and inorganic chemical substances that may be emitted from a variety of sources including gas stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different than the criteria air pollutants previously discussed in that air quality standards have not been established for TACs, largely because there are hundreds of air toxics and their chronic and acute adverse health effects tend to be local rather than regional. CARB has designated nearly 200 compounds as TACs; however, most of the estimated health risks from TACs can be attributed to relatively few compounds with the most important being particulate matter from diesel-fueled engines Additionally, CARB has implemented control measures for several compounds that pose high risks and show potential for effective control as a part of the TAC Control Program. Specific measures are identified in the Airborne Toxic Control Measures (ATCMs) for several source categories that are codified in the California Code of Regulations (CCR) (CARB 2020).

Potential sources of TACs, beyond diesel particulate matter (DPM) associated with traffic (i.e., on Interstate 10 [I-10]), within a project's vicinity are associated with specific types of facilities, such as gas stations, dry cleaners, and auto body repair shops. The CARB has made specific recommendations with respect to considering existing sensitive uses when siting new TAC-emitting facilities or with respect to TAC-emitting sources when siting sensitive receptors. The existing Facility itself does not place sensitive land uses (e.g., residences) within the CARB-mandated buffer zones and does not emit TACs as part of its ongoing operations. No construction of new facilities would occur under the proposed Project and the proposed Project would continue existing operations and maintenance of the Facility. Additionally, the nearest sensitive receptors are located more than 1,000 feet from the Project site, on the other side of State Route 111 (SR-111). Therefore, the proposed Project presents no potential for exposing sensitive land uses to TACs, and TACs are not discussed further in this EIR.

CO Hotspots

As previously described, passenger vehicles and trucks are the primary source of pollutants in the Project site vicinity. Localized areas where ambient concentrations exceed Federal and/or State standards for CO are termed *"CO hotspots."* The Federal 1-hour CO standard is 35 ppm and the State 1-hour CO standard is 20 ppm. The 8-hour Federal and State CO standard is 9.0 ppm. Section 9.14 of the SCAQMD's CEQA Air Quality Handbook (1993) identifies CO as a localized problem requiring additional analysis when a project is likely to subject sensitive receptors to CO hotspots. However, historic air quality data show that the

Coachella Valley area has not exceeded the Federal CO standards in nearly 30 years. Maximum CO levels in recent years are 3.1 ppm (maximum 1-hour concentration) and 1.5 ppm (maximum 8-hour concentration) compared to the CAAQS of 20 ppm (maximum 1-hour concentration) and 9.0 ppm (maximum 8-hour concentration). As such, the Coachella Valley portion of the Basin is currently designated as an attainment area for CO hotspots per both the CAAQS and NAAQS (refer to Tables 3.1-1 and 3.1-2).

The proposed Project involves the continued operation and maintenance of an existing Facility. The proposed Project would not generate any new vehicle trips; therefore, its implementation would not have an impact on intersections in the vicinity. Therefore, the proposed Project would result in no impacts related to CO hotspots and CO hotspots are not discussed further in this EIR.

Sensitive Receptors

Sensitive receptors are populations that are more susceptible to the effects of air pollution than the population at large. According to CARB, sensitive receptors include children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. While air quality standards are designed to protect public health, and are generally regarded as conservative for healthy adults, there is greater concern to protect adults who are ill or have long-term respiratory problems, and young children whose lungs are not fully developed. The SCAQMD CEQA Air Quality Handbook (1993) identifies the following as locations that may contain a high concentration of sensitive receptors: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds and parks with active recreational uses, childcare centers, and athletic facilities. The nearest sensitive receptors to the Project site are the single-family residences located approximately a quarter mile to the southwest, across and adjacent to the SR-111. No churches, schools, public parks, hospitals, or other sensitive receptors are located within 1 mile of the Project site.

Existing Facility Emissions

The Facility includes a 5-mile-long earthen channel, an intake/sluicing structure into the Facility, two intake structures, concrete and earthen conveyance channels, 19 replenishment ponds, and numerous spillways, dikes, and berms associated with the existing Facility. Operation and maintenance of these structures generate criteria air pollutant emissions associated with the structures' energy needs and vehicle trips generated by maintenance employees to the Project site. Annual operational air emissions associated with the existing Facility have been calculated utilizing the California Emissions Estimator Model (CalEEMod) Version 2016.3.2 as recommended by the SCAQMD and are shown in Table 3.1-3.

Routine, ongoing maintenance of the Facility includes operating the radial gates and water channels to ensure the structures are working properly. CVWD staff also regularly water soils that make up the berms to prevent soil erosion from strong winds. As described in Section 2, *Project Description*, road maintenance is conducted independently by Wintec Energy, which

operates the windmills on-site. General maintenance may also include occasional repairs to the electrical building and equipment that power the radial gates on-site. Other routine maintenance activities at the Facility include operation of one to two water trucks and one to two service trucks, which are operated by two to four staff (i.e., one worker per vehicle).

The radial gates allow CVWD to control the volume of water intake into the Facility's replenishment ponds.

Pond maintenance includes excavation of approximately 100,000 to 140,000 cubic yards (cy) of soil along the top layer of the pond bottoms, as well as ripping and tilling of the pond bottom soils, to ensure these soils do not become compacted and can facilitate percolation. Excavated soils are used to reinforce the pond walls which are eroded during water deliveries. The duration of pond maintenance activities ranges from 21 to 60 days and generally occurs once annually during February and March, when the Facility is not receiving any water deliveries. Pond maintenance primarily focuses on the most frequently used ponds, including Ponds 1, 2, 10, and 11. Ponds 3, 4, 13, and 14 are occasionally used as well and sometimes require maintenance; however, this occurs infrequently on an as-needed basis. Operational activities and associated emissions from maintenance of Ponds 3, 4, 13, and 14 are similar to those described for maintenance of Ponds 1, 2, 10, and 11.

During these activities, typical criteria air pollutant emissions (e.g., NO_x and PM_{10}) are generated by heavy-duty equipment on-site, vehicle trips associated with workers driving around the Facility, and vehicle trips generated from workers traveling to and from the Project site. Most fugitive dust emissions (i.e., PM_{10} and $PM_{2.5}$) result from excavation activities (i.e., pond maintenance). Operational emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, prevailing weather conditions. However, compliance with several existing SCAQMD rules substantially limits the generation of fugitive dust emissions (see Section 3.1.2, *Regulatory Framework*).

Table 3.1-3. Annual Operational Emissions for the Whitewater Groundwater Replenishment Facility

Operational Emissions	Air Pollutant Emissions (pounds/day)					
	CO	VOC	NO_x	SO_x	PM_{10}	$PM_{2.5}$
Day-to-Day Maintenance[1]	0.33	2.13	0.15	0.00	73.27	7.30
Pond Maintenance	22.63	3.62	35.85	0.07	150.15	17.50
Maximum Daily Total	**22.96**	**5.75**	**36.00**	**0.07**	**223.42**	**24.80**
Section 24 Work[2]	7.46	1.29	13.14	0.01	15.90	3.27
Total With Section 24 Work	**30.42**	**7.04**	**49.14**	**0.08**	**239.32**	**28.07**

Notes:
[1] The values presented above represent the typical maximum emissions during operational activities. Maximum daily emissions from individual operational activities do not sum to maximum daily total Project operational emissions.
[2] Section 24 work emissions estimates are separated from typical annual maintenance due its sporadic and unpredictable nature (i.e., has not been necessary in last 30 years).
Source: see Appendix B.

Berm #2 on Section 24 is temporarily moved before heavy storms to divert stormwater around the Facility and prevent sediment-laden stormwater from entering the Facility's ponds. One excavator and one bulldozer are used to move approximately 25,200 cy of soil, which is typically completed over a period of 1 day. Following heavy storms, Berm #2 is restored to its original orientation. Temporary relocation of Berm #2 occurs approximately five times per year. As this activity is conducted prior to and following heavy storm events, pond maintenance does not occur concurrently with Berm #2 operations for the safety of CVWD staff. Therefore, operations associated with temporary relocation of Berm #2 were modeled separately from pond maintenance operations in CalEEMod.

Maintenance activities have not been necessary in Section 23 in the last 30 years of operation. If maintenance activities are required in the future due to storm events, they would likely include sloping, shaping, and restoring the berm where it has been washed out or eroded by stormwater. If necessary, the type of maintenance activities and volume of associated criteria air pollutant emissions would be similar to those described for Berm #2 on Section 24 (refer to Table 3.1-3).

In addition, flowing large storm events, the occasional repair or replacement of the 1,000-foot-long low-flow dike and channel crossing is necessary; these activities only occur on an as-needed basis, approximately 1 day every 5 years. (The frequency of repair generally depends on degradation resulting from large storm events.) The types of vehicles and equipment that are utilized to conduct repair or replacement of the temporary berms are generally the same types of vehicles and equipment that are used to move Berm #2 on Section 24 and occasional maintenance of Berm #1 on Section 23. As such, criteria air pollutant emissions associated with maintenance of the low-flow dike and channel crossing are similar to those for Berm #2 on Section 24 (refer to Table 3.1-3).

3.1.2 Regulatory Framework

Federal

Clean Air Act of 1963

The CAA was passed in 1963 and amended in 1990 and was the first comprehensive Federal law to regulate air emissions from stationary and mobile sources. The law authorizes the USEPA to establish and enforce NAAQS for pollutants considered harmful to public health and the environment, including the six criteria air pollutants: O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$, SO_2, and Pb. NAAQS help to ensure basic health and environmental protection from air pollution and are currently in effect for each pollutant, as shown in Table 3.1-1.

USEPA

Pursuant to the CAA, the USEPA must designate areas as meeting (i.e., attainment) or not meeting (i.e., nonattainment) the Federal standards (i.e., NAAQS) for the six criteria air pollutants. As part of its enforcement responsibilities, the USEPA requires each State with Federal nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the Federal standards. The SIP must integrate Federal, State, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. These plans are developed by State and local air quality management agencies and submitted to the USEPA for approval.

State

State-level regulations relevant to air quality beyond those specific to assessing the significance of potential impacts to air quality listed here, which includes a summary of regulations including Air Toxics Hot Spots, off-road vehicle emissions, and diesel and particulate matter emissions.

California Clean Air Act

The CCAA was enacted in 1988 (California Health and Safety Code Section 39000 et seq.). California also has ambient air quality standards (i.e., CAAQS), which predate USEPA's formation in 1970 and the original NAAQS. In 1959, California enacted legislation requiring the California Department of Public Health to establish air quality standards and necessary controls for motor vehicle emissions. The CCAA requires all areas of the State to achieve and maintain the CAAQS by the earliest practicable date. California law continues to mandate CAAQS, although attainment of the NAAQS has precedence over attainment of the CAAQS. The CAAQS includes more stringent standards than the NAAQS.

Regional and Local

Local control in air quality management is provided by CARB through county-level or regional (multi-county) air pollution control districts (APCDs). The local APCD is responsible for enforcing standards and regulating stationary sources.

Air quality in the City of Palm Springs (City) is greatly affected by contaminant-emitting activities in surrounding communities and the South Coast Air Basin, which includes all of Orange County and the non-desert portions of Los Angeles, San Bernardino, and Riverside counties. Although the City is located east of the South Coast Air Basin in the Salton Sea Air Basin, the transport of ozone and other contaminants from the South Coast Air Basin is a major contributor to the City's air pollution. To address this regional issue, both the South Coast Air Basin and the Riverside County portion of the Basin are under the jurisdiction of the SCAQMD.

Air Quality Management Plan

Under State law, SCAQMD is required to prepare a plan for air quality improvement for pollutants for which the District, including the Coachella Valley, is in non-compliance which is then updated 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 current 2016 AQMP in March 2017, which is a comprehensive and integrated plan primarily focused on addressing ozone standards and incorporating 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 (SCAQMD 2017). The AQMP is a regional and multi-agency effort (SCAQMD, CARB, Southern California Association of Governments [SCAG], and USEPA). Federal and State planning requirements include developing control strategies, attainment demonstrations, reasonable further progress, and maintenance plans.

SCAQMD Coachella Valley PM_{10} State Implementation Plan

SCAQMD and Coachella Valley municipalities have adopted and implemented PM_{10} controls through SIPs, SCAQMD Rules 403 and 403.1, local dust control ordinances, and clean streets management programs. Nevertheless, the attainment date for serious nonattainment areas, such as the Coachella Valley, to meet the PM_{10} NAAQS was 2001 and it became apparent that the Coachella 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 PM_{10} attainment date to 2006. 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 nonattainment area for PM_{10}.

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 (SCAQMD 2003) must be used (SCAQMD Rule 403[d][2]).
- For any operation, vehicle track-out (e.g., 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]).
- Control vehicle speeds to no more than 15 miles per hour on unpaved roads through worker notifications, signage, or any other necessary means (SCAQMD Rule 403 Table 2, *Dust Control Measures for Large Operations*).
- 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]).
- The proposed Project area 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]).

Coachella Valley Fugitive Dust Control Handbook

The Coachella Valley Fugitive Dust Control Handbook is intended to help local jurisdictions achieve ambient levels of particulate matter that meet Federal and State clean air standards through reducing the amount of fugitive dust that is re-entrained into the atmosphere from unpaved areas, parking lots, and construction sites. The Coachella Valley Fugitive Dust Control Handbook provides several suggested policies and strategies related to controlling fugitive dust emissions and encourages coordination between local, regional, State, and Federal jurisdictions to better control fugitive dust from stationary, mobile, and area sources.

3.1.3 Impacts and Mitigation Measures

Methodology for Analysis

The analysis of the air quality impacts associated with the proposed Project follows the guidance and methodologies recommended in Appendix G of the 2021 CEQA Guidelines.

Operational emissions typically include mobile source emissions, emissions associated with energy consumption, and area source emissions. Operations associated with the Facility would include continued daily maintenance and inspection activities, which primarily consist of vehicle trips around the Facility to ensure berm structures are maintained and radial gates are operating properly as described in Section 2.6.5, *Proposed Project Operations and Maintenance*.

As described in Section 3.1.1, *Environmental Setting*, CalEEMod version 2016.3.2 was used to estimate operational emissions from off-road equipment and fugitive dust generated during these operational activities associated with the use of off-road equipment, on-road worker commute, and operation of electrical equipment. Fugitive dust emissions are

quantified for grading, excavation activities, and vehicle trips on paved and unpaved surfaces. The program calculates fugitive dust associated with on-site earthwork, including on-site grading and excavation activities, based on the heavy equipment used (e.g., excavators, dozers, articulating rock trucks, water trucks), hours of use, and the estimated area of disturbance calculated for each piece of equipment.

Pond maintenance and operation of Berm #2 on Section 24 were modeled as construction activities to account for the duration and frequency of activities, heavy equipment used, and number of workers on-site during these operational activities. A disturbance area of 112.07 acres is assumed for pond maintenance, which includes the area of Ponds 1, 2, 10, and 11. The disturbance area used for operation of Berm #2 is 0.128 acres, which accounts for twice the area of the temporary berm, since it is moved two times per storm event. It was assumed the proposed Project would comply with all applicable regulatory standards, including SCAQMD Rule 403, which requires watering of disturbed ground surfaces two times per day to maintain soils in a damp condition during earth-moving activities and limiting vehicle speeds to 15 miles per hour on unpaved roads.

Daily maintenance activities and operation of the electrical building on-site are modeled as operational activities in CalEEMod. The Facility would continue to use electricity supplied by Southern California Edison (SCE) to operate the radial gates. Refer to Section 3.6, *Greenhouse Gas Emissions*, for a discussion of potential GHG emissions associated with the consumption of electricity required for the Facility.)

The electrical building distributes electricity (supplied by SCE) used to operate the Facility's radial gates.

Since the proposed Project would allow for the continued operation of the Facility and would not result in any net changes in operations.

Significance Criteria

Pursuant to Appendix G of the CEQA Guidelines, a project would have a significant impact on air quality if it would:

a) Conflict with or obstruct implementation of an applicable air quality plan;
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under the applicable Federal or State ambient air quality standard;
c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people.

The CEQA Guidelines further state that significance criteria established by the applicable air quality management agency or APCD can make the determinations above.

SCAQMD Regional Significance Thresholds

The SCAQMD, the air pollution control agency in the Basin, has developed specific regional and local significance thresholds for air quality, and recommends that projects in the Basin be evaluated in terms of these thresholds. Because the proposed Project does not include construction activities, but only the continuation of existing operations at the Facility, the criteria air emissions associated with the proposed Project are compared to SCAQMD's operational thresholds. The SCAQMD's thresholds recommend that projects with operational emissions that exceed any of the following regional (mass daily) emissions should be considered potentially significant.

- 550 pounds per day of CO
- 55 pounds per day of NO_x
- 150 pounds per day of SO_x
- 55 pounds per day of VOC
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$
- 3 pounds per day of Pb

SCAQMD Localized Significance Thresholds

In addition to regional significance thresholds, the SCAQMD developed LSTs for emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at new development sites (off-site mobile source emissions are not included in the LST analysis protocol). As described in Section 3.1.1, *Environmental Setting*, LSTs are based on the ambient concentrations of that pollutant within the appropriate SRA as demarcated by the SCAQMD, the area of disturbance, and the distance to the nearest sensitive receptor.

The SCAQMD has produced Mass Rate LST Look-Up Tables for projects that disturb 1, 2, and 5 acres. Given the size of the disturbance area of maintenance activities under the proposed Project is much greater than 5 acres, LSTs are not applicable to the proposed Project. However, while the existing Facility spans hundreds of acres, individual maintenance activities generally do not disturb this much land on a daily basis. The maximum daily disturbed-acreage during maintenance activities proposed at the existing Facility was calculated based on the total number of acres disturbed and the number of days for each maintenance activity. As shown in Table 3.1-4, up to 1.93 acres daily could be disturbed during

maintenance activities at the Facility. Thus, the LST threshold values for a 2-acre site were sourced from the Mass Rate LST Look-Up Tables.

Table 3.1-4. Ground Disturbance Rates at the Replenishment Facility under the Proposed Project

Maintenance Activity	Total Acres Graded/Disturbed	Number of Maintenance Days for Activity	Acres Graded/Disturbed per 8-Hour Day
Section 24 Operation	0.128	2	0.064
Pond Maintenance Excavation	112.07	60	1.868
Maximum Total Acres Disturbed Per Day			**1.93**

The nearest sensitive receptors are residences in the existing residential neighborhood located to the southwest of the Facility, across North Palm Canyon Drive at a distance of approximately 1,300 feet (396 meters) from the existing replenishment ponds. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. When the downwind distance to sensitive receptors is between two of the established distances listed above for which LSTs are provided, SCAQMD recommends linearly interpolating to estimate the appropriate LST for the distance to sensitive receptors. Because the residences across North Palm Canyon Drive are 396 meters away from the boundary of the Facility, the analysis interpolated LST thresholds for a 2-acre site in SRA 30, with sensitive receptors located 396 meters from the Facility (see Table 3.1-6). Maintenance activities at the Facility would only span 3 months annually, yet because such activities are proposed to occur annually, LSTs for routine "operations" are conservatively used in this analysis.

Table 3.1-5. Local Significance Thresholds for Sensitive Receptors at a Distance of 396 Meters

Project Size	Distance to Sensitive Receptors	Air Pollutant Emissions Threshold (pounds/day) for Operations			
		CO	NO_x	PM_{10}	$PM_{2.5}$
2 acres	396 meters	19,612.16	649.75	75.85	20.07

Source: SCAQMD 2009; see Appendix B.

Impact Analysis

Would the Project conflict with or obstruct implementation of an applicable air quality plan?

Impact AQ-1. Continued operation and maintenance of the Facility under the proposed Project would contribute to Basin-wide criteria air pollutant emissions. However, criteria air pollutant emissions associated with the Facility would not increase the severity of or cause air quality violations and would not exceed the forecasts of the Air Quality Management Plan (AQMP). Therefore, the proposed Project would not conflict with the AQMP. (Less than Significant.)

The proposed Project would conflict with or potentially obstruct implementation of the SCAQMD's adopted 2016 AQMP if it would: 1) contribute to population growth that would exceed current population growth forecasts; or 2) increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations. The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The requested right-of-way grant would allow for the continued operation of the existing Facility. No physical changes to the environment would occur. No additional employees would be required. As described in Section 4.5, *Effects Found Not to be Significant*, the proposed Project would not have the potential to result in significant impacts associated with population and housing. The proposed Project would not include any new residential development or commercial uses that would directly generate growth within the City of Palm Springs, Riverside County, or the greater Coachella Valley. The proposed Project would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP. Further, the proposed Project would not indirectly generate population growth as it would not affect the existing capacity of the 19 replenishment ponds or the overall rate of annual groundwater replenishment.

As described under Section 3.1.1, *Environmental Setting*, the Coachella Valley portion of the Basin is designated as a nonattainment area for O_3 and PM_{10} and is in attainment for all other criteria air pollutants. Therefore, the proposed Project would conflict with or potentially obstruct implementation of the SCAQMD's adopted 2016 AQMP if it would increase the frequency or severity of O_3 or PM_{10} concentrations in the Basin, or if it would cause or contribute to new air quality violations. Given that the proposed Project would allow for the continued operation and maintenance of the Facility with no physical or operational changes, the proposed Project would result in a net zero increase in the existing criteria air pollutant emissions described in Section 3.1.1, *Environmental Setting* (see Impact AQ-2 below). Further, the proposed Project would not result in, cause, or contribute to air quality violations and would not interfere with a State's plans to attain and maintain Federal or State standards for air quality.

In order to further reduce emissions, the proposed Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 403.1. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD

Rule 403.1 is a supplemental rule to Rule 403 and is applicable to manmade sources of fugitive dust in the Coachella Valley, which encompasses the Facility. The purpose of this rule is to reduce fugitive dust and resulting PM_{10} emissions from manmade sources in the Coachella Valley. SCAQMD Rule 403.1 requires a Fugitive Dust Control Plan approved by SCAQMD, or an authorized local government agency, prior to the initiation of any construction/earth-moving activity. These requirements are only applicable to earth-moving projects with 5,000 or more square feet of surface area disturbance. During maintenance activities, the CVWD complies with all of these SCAQMD rules and requirements and would continue to do so with the proposed Project. However, it should be noted that SCAQMD Rule 403.1 make an exception for controlling fugitive dust when habitat for federally listed species such as Coachella Valley fringe-toed lizard (*Uma inornata*) and Coachella Valley milk vetch (*Astragalus lentiginosus* var. *coachellae*). The proposed Project would not conflict with the 2016 AQMP. Impacts would be less than significant and no mitigation measures would be required.

Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under the applicable Federal or State ambient air quality standard?

Would the Project expose sensitive receptors to substantial pollutant concentrations?

Impact AQ-2. The Coachella Valley portion of the Salton Sea Air Basin is designated as a nonattainment area for O_3 and PM_{10} under Federal and/or State ambient air quality standards. Operational emissions of CO, NO_x, SO_x, PM_{10}, $PM_{2.5}$, and VOCs associated with the proposed Project would not exceed South Coast Air Quality Management District (SCAQMD) regional thresholds or expose sensitive receptors to substantial pollutant concentrations. Additionally, on-site operational emissions of CO, NO_x, PM_{10}, and $PM_{2.5}$ would not exceed SCAQMD localized significance thresholds (LSTs) at sensitive receptors. (Less than Significant.)

Regional Emissions

The existing emissions associated with the operation of the Facility are described in Table 3.1-3. As described in Section 2, *Project Description*, the proposed Project would allow for the continued operation and maintenance of the Facility with no physical or operational changes. Therefore, the proposed Project would continue to generate daily operational emissions as described above in Section 3.1.1, *Environmental Setting*. Since the requested right-of-way grant associated with the proposed Project would allow for continued operations and maintenance of the Facility and would not result in *changes* to operations and maintenance, criteria air pollutant emissions presented in Table 3.1-3 represent both the existing emissions as well as the emissions that would occur under the proposed Project. Given that the proposed

Project would allow for the continued operation and maintenance of the Facility with no physical or operational changes, the proposed Project would result in a net zero increase in criteria air pollutant emissions.

Localized Emissions

In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends comparing localized on-site emissions to the SCAMQD's LSTs. The SCAQMD provided the Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized project-specific impacts.

As previously described, the nearest sensitive receptors are the residences located approximately 1,300 feet (396 meters) from the existing replenishment ponds, across North Palm Canyon Drive. Given that the residences across North Palm Canyon Drive are 396 meters away from the boundary of the Facility, the LST thresholds for 396 meters were interpolated from the SCAQMD's Mass Rate LST Look-Up Tables (see Appendix B). The SCAQMD's methodology clearly states that *"off-site mobile emissions from a project should not be included in the emissions compared to LSTs."* Therefore, for purposes of the LST analysis, only the on-site emissions calculated in the CalEEMod were considered. Table 3.1-6 presents the results of localized emissions.

Table 3.1-6. Localized Maintenance-Related Emissions Compared to LSTs for a 2-acre Site with Sensitive Receptors at a Distance of 396 Meters

Activity	Air Pollutant Emissions (pounds/day)			
	CO	NO_x	PM_{10}	$PM_{2.5}$
Proposed Project Maintenance Activities	57.50	99.40	24.46	13.40
SCAQMD LST*	19,612.16	649.75	75.85	20.07
Exceed SCAQMD LST?	**No**	**No**	**No**	**No**

Notes: *These LSTs were interpolated from the SCAQMD's Mass Rate LST Look-Up Tables for a 2-acre site in SRA 30 located 396 meters from sensitive receptors. Since maintenance activities are proposed to occur annually, LSTs for "operations" are used.
Source: ECORP 2020; see Appendix B.

Table 3.1-6 shows that the emissions of these pollutants on the peak day of maintenance at the Facility would not result in significant concentrations of pollutants at nearby sensitive receptors during maintenance activities associated with the proposed Project. Therefore, significant impacts would not occur concerning LSTs during any maintenance activities.

Airborne Toxic Constituents

As part of the field sampling program to analyze potential effects to aquifer water quality (see Section 3.7, *Hydrology and Water Quality*), sediment sampling was conducted in March 2020 (ECORP 2020; see Appendix I). The sediment sampling included samples from six replenishment ponds (i.e., Ponds 1, 2, 5, 12, 14, and 19), sediment placement piles, and from

a background location to the east of the Facility. Methods of sample collection and analysis are provided in Appendix I. Testing for heavy metals and diesel range organics in the sediment placement piles and a background sample was also conducted (see Table 3.1-7 and Appendix I). These analyses would also reveal any contribution to airborne toxics from the project.

The results of the sediment sampling concluded that the concentrations of aluminum, chromium, copper, and iron are lower in the sediment piles than the background sample. Barium, cobalt, manganese, nickel, and vanadium are the same or statistically very similar in both the sediment piles and background sample. Lead was reported at 2.2 milligrams per kilogram (mg/kg) in the background sample and not detected in the sediment placement pile; however, the reporting limit for lead is 2.0 mg/kg and these results would be considered statistically similar. Nine metals and the diesel range organics were not detected in both the background sample and sediment placement piles. The metals that typically have the highest toxicity (i.e., arsenic, beryllium, mercury, and thallium) were not detected in both samples. On an exposure or risk basis, there is no substantial difference between the two samples.

Table 3.1-7. Sediment Sample Analytical Results

Analyte	Units	Reporting Limits	Background Sample	Sediment Placement Sample
Total Organic Carbon	percent	0.20	ND	ND
Metals and Metaloids				
Aluminum	mg/kg	10	7,100	6,400
Antimony	mg/kg	1.0	ND	ND
Arsenic	mg/kg	1.0	ND	ND
Barium	mg/kg	1.0	44	44
Beryllium	mg/kg	1.0	ND	ND
Cadmium	mg/kg	1.0	ND	ND
Total Chromium	mg/kg	1.0	9.2	8.3
Cobalt	mg/kg	1.0	4.3	3.7
Copper	mg/kg	1.0	8.2	6.7
Iron	mg/kg	20	14,000	11,000
Lead	mg/kg	2.0	2.2	ND
Manganese	mg/kg	10	10	180
Mercury	mg/kg	0.050	ND	ND
Molybdenum	mg/kg	5.0	ND	ND
Nickel	mg/kg	1.0	5.6	5.2
Selenium	mg/kg	5.0	ND	ND
Silver	mg/kg	1.0	ND	ND
Thallium	mg/kg	1.0	ND	ND

Analyte	Units	Reporting Limits	Background Sample	Sediment Placement Sample
Vanadium	mg/kg	1.0	23	20
Zinc	mg/kg	1.0	32	34
Diesel Range Organics				
DRO (C10-C28)	mg/kg	10	ND	ND
ORO (C29-C44)	mg/kg	10	ND	ND
Gasoline Range Organics	mg/kg	5.0	ND	ND

Notes: DRO = diesel range organics; mg/kg = milligrams per kilogram; ND = not detected; ORO = oil range organics.
Source: ECORP 2020; see Appendix I.

Slight differences in composition between the sediment placement piles and the background samples are likely because the sediment piles represent finer-grained material that washes in from the Whitewater River when water is diverted from the Colorado River Aqueduct. The background area represents sediment that was deposited from both the Whitewater River and upstream areas to the west in Banning Pass.

This testing identified heavy metals in the sediment piles at a lower or statistically similar magnitude than background sediment samples from areas outside of the replenishment ponds collected during the same sampling effort. Thus, the heavy metal content in the sediment piles, representative of an airborne contribution from the project, is not greater than that occurring naturally. Additionally, the practice of using the extracted sediment for sediment transport enhancement would not be expected to expose receptors to greater levels of heavy metals beyond those existing in the naturally occurring soils. Therefore, the proposed Project would not result in a potentially significant contribution of air toxic concentrations or result in a significant contribution to the adverse health impacts associated with those pollutants.

Best Management Practices

As described in the Program EIR for the Coachella Valley Water Management Plan 2010 Update, CVWD would continue to comply with all relevant SCAQMD rules – including Rule 403 (Fugitive Dust) Table 1 — Best Available Control Measures, Table 2 — Dust Control Measures for Large Operations, and Table 3 — Contingency Control Measures for Large Operations as well as Rule 403.1 Supplemental Fugitive Dust Control Requirements for Coachella Valley Sources. The continued implementation of these SCAQMD rules would substantially limit criteria air pollutant emissions as well as the generation of fugitive dust related to continued operations and maintenance under the Facility (refer to Section 3.1.2, *Regulatory Framework*). Further, CVWD is currently meeting and would continue to meet the requirements of the CARB In-Use On-Road Heavy-Duty Diesel Vehicle Regulation by complying with the schedule to retrofit its on-road diesel fleet with Diesel Particulate Filters. CVWD is also compliant with the Off-Road Diesel Regulations by reporting its off-road fleet and attaching CARB Equipment Identification Numbers to each piece of equipment. CVWD

also has a written idling policy limiting idling times to 5 minutes for its on-road and off-road fleet. Therefore, impacts to air quality associated with the proposed Project – including impacts to sensitive receptors located over 1,000 feet from the Project site – would be less than significant and no mitigation measures would be required.

Would the Project result in other emissions (e.g., those leading to odors) adversely affecting a substantial number of people?

Impact AQ-3. The proposed Project would not emit objectionable odors. (No Impact.)

According to the SCAQMD CEQA Air Quality Handbook (1993), objectionable odors are typically associated with industrial uses such as agricultural facilities (e.g., farms and dairies), refineries, wastewater treatment facilities, and landfills. As previously described, the operation of the Facility does not result in objectionable odors. Further, the nearest sensitive receptors are located more than 1,000 feet from the Project site. As such, any potential odors associated with the Facility (e.g., exhaust from heavy equipment) would dissipate before reaching these areas. Therefore, the continued operation of the Facility under the proposed Project would not have the potential to result objectionable odors adversely affecting a substantial number of people. There would be no impact and no mitigation measures would be required.

3.2 BIOLOGICAL RESOURCES

This section identifies the existing biological resources located on the Project site and assesses the potential biological impacts that could result from the issuance of the proposed right-of-way grant from the BLM for the continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility). The discussion of biological resources provided in this section summarizes previous consultation with the U.S. Fish and Wildlife Service (USFWS) during the issuance of the original right-of-way grant in 1984 and incorporates the findings and conclusions of the Biological Resources Technical Report (BRTR) completed for the proposed Project in February 2021 by ECORP Consulting, Inc. (ECORP) (see Appendix C).

The dominant vegetation types and plants on the Project site consist primarily of native upland land cover types associated with the southern Mojave Desert.

As a part of the BRTR, ECORP biologists conducted a literature review – including a review of the USFWS Information for Planning, and Consultation (IPaC) System, California Natural Diversity Database (CNDDB), California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, and the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) modeled habitat – to identify the special status species and/or their habitats that have been previously recorded or have the potential to occur within and within the vicinity of the Project site (ECORP 2019; see Appendix C). Additionally, a total of four biological field surveys were completed in January and February 2018 (January 15, January 24, January 30, and February 28, 2018) to characterize the existing habitat within the Project site and to determine the likelihood for special status species to occur.

3.2.1 Environmental Setting

As described in Section 1, *Introduction* the Project site includes:

- The "renewal area," covers the existing Facility itself, the low-flow dike and channel crossing, conveyance channels, and intake and sluicing structures. BLM-administered lands within the renewal area include portions of Ponds 6 through 19, the concrete-line and earthen conveyance channels, Intake Structure 2, and the low-flow dike and channel crossing. With the exception of a small portion of public

land administered by the California State Lands Commission (CSLC) crossed by the concrete-lined conveyance channel, the remainder of the renewal area comprises land owned and administered by CVWD, including the Windy Point Intake/sluicing structure, portions of the earthen and concrete-lined conveyance channels, all of Ponds 1 through 5, and portions of Ponds 6 through 19 (refer to Figure 3 in Section 2, *Project Description*). The "renewal area" consists of two individual areas:

  - 509.7 acres that includes a portion the 19 replenishment ponds as well as the concrete-lined and earthen conveyance channels (right-of-way grant LA 052742); and
  - 2.2 acres that includes the low-flow dike and channel crossing (right-of-way grant CA 19150).

- The "amendment area" covers public land administered by the BLM that is used to access the Facility and for conveyance of natural flows and imported Colorado River water within the Whitewater River Stormwater Channel (WRSC), including portions of Sections 23 and 24 of Township 3 South, Range 3 East (refer to Figure 3). As described in Section 2.6.4, *Proposed Right-of-Way Grant,* this area was not included in either of the previous right-of-way grants issued by the BLM; however, CVWD currently accesses this area to maintain existing flood control berms. This area was evaluated in the Environmental Assessment (EA) prepared by the BLM for the original development of the Facility and included in the original Biological Opinion (BO) issued for the Facility by the USFWS in 1984 (see Section 3.2.2, *Regulatory Framework*).

The Project site – including the renewal area and the amendment area – is located within the floodplain of the Whitewater River and includes the confluence of the WRSC and Snow Creek (see Section 3.7, *Hydrology and Water Quality*). The Project site is generally bounded by I-10 and the Union Pacific Railroad to the north, Indian Canyon Drive to the east, and SR-111 on to the west and south and is characterized by existing infrastructure associated with the Facility, including a series of dikes, levies, spillways, and 19 replenishment ponds as well as the low-flow dike and channel crossing (approximately 2.2 acres).

The Project site is located within the CVMSHCP Plan Area. As described further in Section 3.2.2, *Regulatory Framework*, the CVMSHCP 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 CVMSHCP contains several areas designated by a Conservation Area Reserve system, which is designed to include representative native plants, wildlife, and natural communities across their modeled natural ranges of variation in the Coachella Valley. The types and extent of conservation requirements

for covered species, natural communities, and landscapes within these reserves are defined by specific goals and objectives that are intended to support several guiding ecologically based principles. Portions of the Project site (excluding the public lands administered by the BLM) are located within the Whitewater Floodplain Conservation Area, which provides habitat for several key sensitive species addressed in the CVMSHCP[1]:

- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)
- Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*)
- Coachella Valley fringe-toed lizard (*Uma inornata*)
- Palm Springs round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*)
- Palm Springs pocket mouse (*Perognathus longimembris bangsi*)

There is also CVMSHCP-modeled habitat for the Coachella Valley Jerusalem cricket (*Stenopelmatus cahuilaensis*) as well as some land designated as Other Conserved Habitat (i.e., non-core habitat) for the triple-ribbed milk-vetch (*Astragalus tricarinatus*), desert tortoise (*Gopherus agassizii*), flat-tailed horned lizard (*Phyrnosoma mccallii*), LeConte's thrasher (*Toxostoma lecontei*), and burrowing owl (*Athene cunicularia*).

CVWD adheres to the avoidance and minimization measures required by the CVMSHCP as implemented in accordance with CVWD's Operations & Maintenance (O&M) Manual ,which incorporates several best management practices and other measures to reduce impacts to biological resources. Avoidance and minimization measures described within CVWD's O&M Manual include measures tailored to the following sensitive species: Coachella Valley milk-vetch, Coachella Valley giant sand-treader cricket, flat-tailed horned lizard, Coachella Valley fringe-toed lizard, LeConte's thrasher, burrowing owl, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse.

The following discussion characterizes the existing biological resources located on the Project site. For additional detailed description of existing biological resources located within the vicinity of the Project site – including a comprehensive list of plants and wildlife observed during the biological surveys conducted by ECORP (see Appendix C).

Physical Conditions

As described in Section 2.6, *Description of the Proposed Project*, the Facility has existed in its current physical configuration, including existing ground disturbance associated with the channels and replenishment ponds, since the 1980s.

The Facility, including the renewal area and the amendment area, is located on relatively flat topography on the Coachella Valley floor (see Section 3.5, *Geology and Soils*).

As described in the Biological Technical Resources Report (see Appendix C), sand transport within the Coachella Valley occurs via eolian (i.e., wind-driven) and fluvial (i.e., water-driven)

[1] It should be noted that the BLM is not a party to the CVMSHCP.

movement. As described below, continued availability of sand is a key ecological process for maintenance of certain habitats that support sensitive species within the Coachella Valley. Currently, development, such as roadways and the Facility, throughout the western end of the Coachella Valley hinders natural transport of sand via eolian means. Specific to the Facility, the replenishment ponds may entrap eolian material (i.e., sand and smaller grained) when that material falls into the ponds when recharge activities are occurring and water is present. In this case, sand material is deposited within replenishment ponds until such time that CVWD conducts maintenance activities to clean out the ponds and then deposit sand removed from the ponds in fluvial and eolian transport areas such that downwind habitats continue to receive appreciable inputs of eolian material.

Vegetation

The CVMSHCP provides a science-based modeling of vegetation and habitat areas for covered species. The modeled habitat developed as a part of the CVMSHCP was derived from species distribution information, natural community mapping, results of biological surveys, and data regarding species richness, natural communities' richness, habitat heterogeneity, and habitat fragmentation (ECORP 2019; see Appendix C).

Modeled habitat for the renewal area and amendment area include ephemeral sand fields, Sonoran creosote bush scrub, Sonoran mixed woody and succulent scrub, reservoirs (replenishment ponds), stabilized desert sand fields, and stabilized shielded sand fields (see Table 3.2-1).

Table 3.2-1. CVMSHCP-Modeled Habitat within the Renewal Area and Amendment Area

Modeled Habitat	Area (acres)
Amendment Area	
Ephemeral Sand Fields	28.72
Sonoran Creosote Bush Scrub	149.71
Sonoran Mixed Woody and Succulent Scrub	0.40
Renewal Area	
Ephemeral Sand Fields	103.80
Stabilized Desert Sand Fields	3.74
Stabilized Shielded Sand Fields	128.58
Reservoir (Replenishment Ponds)	273.58

Modeled Habitat	Area (acres)
Sonoran Creosote Bush Scrub	2.2

Source: ECORP 2019; see Appendix C.

In order to more accurately describe the vegetation within the Project site and assess its potential to support special status species, ECORP built upon the CVMSHCP modeling by conducting focused surveys on January 24, 2018 (LeConte's thrasher survey #1) and February 28, 2018 (Coachella Valley milk-vetch survey, Coachella Valley giant sand-treader cricket survey #2, and LeConte's thrasher survey #2). There surveys covered the entire Project site, including both the amendment area and renewal areas. In addition to the focused surveys, biologists also conducted incidental surveys of various access roads used by CVWD personnel (ECORP 2019; see Appendix C).

Ephemeral Sand Fields

Ephemeral sand fields are part of the eolian sand communities of the Coachella Valley floor that lack dune formations. Ephemeral sand fields occur with an eolian sand depth of 0 to 2 meters (approximately 0 to 6.6 feet), a base substrate of gravel and rocks, and support a moderate shrub cover. Conditions that form the community include very high sand movement through wind action and a moderate precipitation gradient. Plant species within the community include creosote bush, indigo bush (*Psorothamnus schottii*), desert willow (*Chilopsis linearis*), and California croton (*Croton californicus*).

Stabilized Desert Sand Fields

This community is very similar to the Ephemeral Sand Fields community, with the primary difference being that the fields are stabilized from eolian sand transport. The community typically occurs as isolated patches within Sonoran Creosote Bush Scrub communities. Plant species are primarily creosote at very low densities. Stabilized Desert Sand Fields are located north of the replenishment ponds within the renewal area.

Stabilized Shielded Sand Fields

This community is very similar to the Stabilized Desert Sand Fields community, with the primary difference being that the fields are shielded from eolian processes of sand deposition by a physical barrier or other interruption. In this case, the replenishment ponds act as an interruption to eolian sand movement downwind. This community occurs with an eolian sand depth of 0 to 2 meters (approximately 0 to 6.6 feet), upon a substrate of silt and cemented sands, with a moderate shrub density of creosote. These areas support a moderate sand movement rate, due to winds being partially blocked. Within the Facility, Pond 19 is modeled as partially stabilized sand fields. The community continues east of the Facility.

Sonoran Creosote Bush Scrub

This vegetation community is part of the creosote bush scrub alliance characterized by the dominance of creosote bush with occasional co-dominance of burrobush (*Ambrosia dumosa*) and little to no herbaceous species or sub-shrubs in the understory. The community is the most widely distributed vegetation type within the Colorado Desert, occurring throughout the Coachella Valley. It can be found evenly distributed through amendment area, occurring on upper south-trending slopes and deep-soil terraces adjacent to floodplains. Within the renewal area, this community is more restricted to the perimeter of the Facility, outside of the infiltration pond array. In addition, the Low-Flow Dike and Channel Crossing portion of the renewal area is mapped as Sonoran creosote bush scrub.

Sonoran Mixed Woody and Succulent Scrub

As the name implies, this vegetation community is dominated by both succulent shrub species and woody shrub species alike. The main succulents are various cacti, including silver cholla (*Opuntia echinocarpa*), pencil cholla (*Opuntia ramosissima*), beavertail cactus (*Opuntia basilaris*), and ocotillo (*Fouquieria splendens*). Woody shrub species in the community include creosote, burrobush, and a wider variety of other shrubs and subshrubs depending upon elevation and soil factors. The community tends to be quire diverse and is largely restricted to rockier areas and some alluvial fans and slopes. A very small portion of this community is mapped within the amendment area.

Reservoir (Replenishment Ponds)

The Reservoir designation consists of open water areas and within the Facility include the replenishment ponds.

Overall, the extent of vegetation, which is primarily limited to non-native weed cover, is low due to regular disturbance and removal as a part of ongoing operations and maintenance of the Facility. These operation and maintenance activities are identified as *"Covered Activities,"* within the CVMSHCP, which specifically include *"the Spreading Area for Colorado River Aqueduct, O&M (operation and maintenance)"* (ECORP 2019; see Appendix C).

Renewal Area

The renewal area covers a portion the existing Facility, including portions of Ponds 6 through 19, the concrete-lined and earthen conveyance channels, and Intake Structure 2. Native vegetation within this area is minimal due to operation and maintenance of the Facility. The tops of the berms between the replenishment ponds are cleared of vegetation and used as access roads by CVWD personnel as well as the wind tower operators. The slopes of the ponds are characterized by a combination of disturbed, native herbaceous species and upland shrubs, such as four-wing salt bush (*Atriplex canescens*) and goldenbush (*Ericameria* sp.). Several non-native species are also present, including common Mediterranean grass (*Schismus barbatus*), Russian thistle (*Salsola tragus*), crimson fountain grass (*Pennisetum*

setaceum), tree tobacco (*Nicotiana glauca*), short-pod mustard (*Hirschfeldia incana*), cheat grass (*Bromus tectorum*), red brome (*Bromus madritensis*), Sahara mustard (*Brassica tournefortii*), and wild oats (*Avena* sp.). Within the pond bottoms, small areas of scattered shrubs and other vegetation develop due to frequent inundation. Scattered tamarisk (*Tamarix* sp.), creosote bush (*Larrea tridentata*), four-wing saltbush (*Atriplex canescens*), goldenbush, and mule fat (*Baccharis salicifolia*) were observed during the biological surveys. Non-native species including Russian thistle (*Kali tragus*) were present as well.

The low-flow dike and channel crossing is characterized by upland species including creosote bush.

The low-flow dike and channel crossing contains a dike and unpaved road and is surrounded by upland land cover types dominated by creosote bush (ECORP 2019; see Appendix C).

Amendment Area

The amendment area is primarily characterized by Sonoran creosote bush scrub and ephemeral sand fields. Sonoran creosote bush scrub is generally located on upper south-trending slopes and deep-soil terraces adjacent to floodplains. Ephemeral sand fields are part of the aeolian sand communities of the Coachella Valley floor.[2] Ephemeral sand fields occur with an aeolian sand depth of approximately 0 to 6 feet, a base substrate of gravel and rocks, a moderate shrub, very high sand movement, and a moderate precipitation gradient.

The dominant vegetation within the amendment area is creosote bush; however, the bottoms of stream channels and former alluvial portions of the WRSC, are characterized by desert willow (*Chilopsis linearis*). Within the understory of most of the vegetation communities, a sparse cover of non-native grasses is present. The primary non-native grass species is common Mediterranean grass along with a few patches of fountain grass. Other species of smaller cover within the amendment area include tree tobacco, short-pod mustard (*Hirschfeldia incana*), cheat grass (*Bromus tectorum*), red brome (*Bromus madritensis* ssp. *rubens*), Sahara mustard, and wild oats (ECORP 2019; see Appendix C).

[2] *"Aeolian"* refers to formation through the action of wind, and certain aeolian communities have specific characteristics.

Common Wildlife

Renewal Area

Given the presence of Ponds 6 through 19, the concrete-lined and earthen conveyance channels, and Intake Structure 2, the renewal area is largely characterized by disturbance-adapted species. Mallards (*Anas platyrhinchos*) and American coots (*Fulica Americana*) were observed within inundated ponds during the biological surveys. White-faced ibis (*Plegadis chihi*) were also observed in the renewal area. Along the sides of the ponds, some lizard species were observed such as zebra-tailed lizard (*Callisaurus draconoides*) and side-blotched lizard (*Uta stanisburiana*). There were also several common insect species observed, such as various bees, ants, and hoverflies (ECORP 2019; see Appendix C).

Amendment Area

Typical wildlife species found in the amendment area consist of desert invertebrates, birds, reptiles, and mammals. Invertebrates include various species of beetles, spiders, ants, flies, bees, scarabs, grasshoppers, crickets, moths, and butterflies. Bird species include smaller passerine species, such as the verdin (*Auriparus flaviceps*), and transient raptors, such as the red-tailed hawk (*Buteo jamaicensis*). Common reptile species include the western fence lizard (*Sceloporus occidentalis*) and zebra-tailed lizard. Mammals, such as coyote (*Canis latrans*) are also present along with smaller wildlife such as the black-tailed jackrabbit (*Lepus californicus*) (ECORP 2019; see Appendix C).

Migratory and Nesting Bird Habitat

Potential nesting habitat for migratory birds is present within both the renewal area and the amendment area, including desert willow, creosote bush, and cholla cactus (*Opuntia* sp.) as well as within various rock outcrops and structures associated with the Facility and/or wind towers. Trees are mostly absent within the Project site and those that are present are too small to support large raptors. However, the USWFS IPaC System identifies four migratory Birds of Conservation Concern (BCC) that have the potential to occur at the Project site including the burrowing owl (*Athene cunicularia*), Costa's hummingbird (*Calypte costae*), golden eagle (*Aquila chrysaetos*), and Lawrence's goldfinch (*Carduelis lawrencei*). While the Project site does not support nesting for these species, the area could be used for hunting (ECORP 2019; see Appendix C).

Special Status Vegetation or Habitat Communities

The following wildlife species listed as endangered, threatened, or candidate species pursuant to the Federal Endangered Species Act were included in the official species list that ECORP generated using the USFWS IPaC System:

- Coachella Valley milk-vetch
- Triple-ribbed milk-vetch

- Arroyo toad (*Anaxyrus californicus*)
- Coachella Valley fringe-toed lizard
- Desert tortoise
- Least Bell's vireo
- Southwestern willow flycatcher (*Empidonax traillii extimus*)
- Peninsular bighorn sheep

Based on the biological surveys conducted at the Project site, there is no potential habitat for the arroyo toad or southwestern willow flycatcher (ECORP 2019; see Appendix C). Therefore, these species have been eliminated from further discussion and consideration.

Coachella Valley Milk-Vetch

Coachella Valley milk-vetch is a federally endangered and BLM-sensitive species that is endemic to the Coachella Valley in the western Sonoran Desert. Coachella Valley milk-vetch is strongly affiliated with active, stabilized, and shielded sandy substrates derived from loose aeolian (i.e., wind transported) or alluvial (i.e., water transported) sands. The leaves and stems of Coachella Valley milk-vetch are densely covered with short, white hairs with the pink-purple flowers. Seeds germinate in fall to early winter, with flowering occurring as early as December and continuing into April. However, the timing is highly dependent on rainfall patterns during a given year.

Coachella valley milk-vetch was observed within the amendment area near the confluence of Snow Creek and the WRSC.

Coachella Valley milk-vetch was historically uncommon in Coachella Valley. Most of the known occurrences in the Coachella Valley are in and around the Snow Creek, Whitewater River, Mission and Morongo Creeks, Willow Hole, The Big Dune, and the Thousand Palms Reserve areas. CVMSHCP-modeled habitat for Coachella Valley milk-vetch encompasses the northern and eastern edge of the renewal area as well as the eastern edge of the amendment area (ECORP 2019; see Appendix C).

Both the renewal area and the amendment area are located within federally designated critical habitat, which includes the area along the Snow Creek and the entire Whitewater River floodplain. The Primary Constituent Elements (PCEs) of federally designated critical habitat for Coachella Valley milk-vetch are active sand dunes, stabilized or partially stabilized sand dunes, active or stabilized sand fields, shielded sand fields, active washes, and ephemeral

non-sandy areas within the sand transport zone. Several areas that are identified as federally designated critical habitat within the Project site do not support viable habitat for Coachella Valley milk-vetch because they do not contain the necessary PCEs for occurrence or survival (ECORP 2019; see Appendix C). The biological surveys for the proposed Project only identified suitable habitat for the Coachella Valley milk-vetch in the amendment area. These areas include the replenishment ponds, developed zones, the flowpath of the WRSC, appurtenant structures for the facility, wind towers, and other small, disturbed areas.

ECORP observed several Coachella Valley milk-vetch individuals within the amendment area near the confluence of Snow Creek and the WRSC, in sandy dune and alluvial sandy habitat areas. No individuals were observed within the renewal area (ECORP 2019; see Appendix C).

Triple-Ribbed Milk-Vetch

Triple-ribbed milk-vetch is a federally endangered and BLM-sensitive species that occurs within Joshua tree woodlands and Sonoran Desert scrub at elevations between 1,300 to 4,000 above mean sea level (MSL). This plant species grows in clumps just under 1 foot in height. Its leaves are made up of silvery-green hairy leaflets and its pods (i.e., the case that holds its seeds) are curved with three distinct ribs.

Triple-ribbed milk-vetch was known by historical occurrences from eight areas in the southeastern San Bernardino Mountains and western Little San Bernardino Mountains in Riverside County as well as the Orocopia Mountains and Santa Rosa Mountains in Riverside County. Since its listing, four additional occurrences have been found with some numbering more than 300 plants.

The nearest known occurrences are within Whitewater Canyon north of I-10 over 10 miles north. However, CVMSHCP-modeled habitat for this species occurs within portions of the renewal area and the amendment area. While this species was not observed during the biological surveys conducted on the Project site, it is still considered to be present (ECORP 2021; see Appendix C).

Special Status Wildlife Species

Coachella Valley Fringe-Toed Lizard

The Coachella Valley fringe-toed lizard is a federally endangered and BLM-sensitive species, with federally designated critical habitat concentrated near Thousand Palms approximately 20 miles to the east in the Indio Hills region.

The Coachella Valley fringe-toed lizard is a medium-sized lizard with a whitish back and belly and light eye-like markings that extend to the shoulders. The Coachella Valley fringe-toed lizard is closely related to the Colorado Desert fringe-toed lizard (*Uma notata*) and the Mojave fringe-toed lizard (*Uma scoparia*). However, this species is restricted to aeolian and fluvial sand deposits (i.e., dunes) on the floor of the Coachella Valley in Riverside County, California. The home range size for the Coachella Valley fringe-toed lizard is less than 1 acre,

allowing individuals to inhabit very small and discrete sand sites. They are omnivorous eating both plants and invertebrates primarily, and breeding occurs in the spring following a winter dormancy period.

CVMSHCP-modeled habitat for Coachella Valley fringe-toed lizard occurs within the northern and eastern edge of the renewal area as well as the eastern edge of the amendment area.

Habitat for the Coachella Valley fringe-toed lizard was estimated at approximately 170,000 acres prior to human settlement of the Coachella Valley. More recent estimates by Coachella Valley Association of Governments (CVAG) identify the habitat available at closer to 27,000 acres (16 percent of the historic amount). Within the Whitewater Floodplain Conservation Area of the CVMSHCP, there is an estimated 5,617 acres of habitat with 5,309 acres targeted for conservation. Currently approximately half of the total targeted acreage for conservation have been conserved. The adjacent Snow Creek/Windy Point Conservation Area supports an additional 1,374 acres of habitat for the Coachella Valley fringe-toed lizard. CVMSHCP-modeled habitat for the Coachella Valley fringe-toed lizard occurs within the northern and eastern edge of the renewal area as well as the eastern edge of the amendment area. Therefore, while this species was not observed during the biological surveys conducted on the Project site, it is still considered to be present (ECORP 2019; see Appendix C).

Flat-Tailed Horned Lizard

The flat-tailed horned lizard is a BLM-sensitive species and a California Department of Fish and Wildlife (CDFW) Species of Special Concern. This species of horned lizard is typically found in desert flatlands with sparse vegetation but can also be found in low hills or alkali flats (NatureServe 2019). Flat-tailed horned lizards require fine sand for cover as it burrows just beneath the surface to avoid extreme temperatures. They also use mammal burrows to seek refuge (Stebbins 2003).

Flat-tailed horned lizards have a unique middorsal stripe that can be used to identify this species.

Flat-tailed horned lizards have a distinguishing middorsal stripe that is unique to this species of horned lizard. Flat-tailed horned lizards primarily feed on native species of ants. Adults are reported to be obligatory hibernators; individuals begin hibernation as early as October and emerge as late as March. Courtship and breeding are believed to take place in early spring after emergence from winter hibernation. Flat-tailed horned lizards are oviparous (i.e., egg-laying), early maturing, and may produce multiple clutches within a breeding season; however, they produce relatively small egg clutches compared to most other horned lizards (NatureServe 2019). The first clutch hatches in early July and the second clutch, if laid, hatches in late August and early September.

CVMSHCP-modeled habitat for the flat-tailed horned lizard is located within the Project site. Therefore, while this species was not observed during the biological surveys conducted on the Project site, it is still considered to be present (ECORP 2019; see Appendix C).

Desert Tortoise

Desert tortoise is a federally threatened species and State-listed endangered species. Critical habitat has been designated for the desert tortoise by the USFWS; however, federally designated critical habitat does not occur within the immediate vicinity of the Project site.

There have been infrequent incidental sightings of desert tortoises within the Whitewater area, but these sightings are poorly documented and not generally substantiated enough to identify a consistent use pattern. Nevertheless, due to the presence of CVMSHCP-modeled habitat, this species is considered to be present within the Project site.

Desert tortoises are primarily associated with Mojave creosote bush scrub but have also been found in succulent scrub, cheesebush (*Ambrosia salsola*) scrub, blackbush (*Coleogyne ramosissima*) scrub, hopsage scrub, shadscale (*Atriplex confertifolia*) scrub, microphyll woodland, and Mojave atriplex-allscale (*Atriplex* spp.) vegetation communities. This species typically inhabits flats, gently sloping terrain, valleys and bajadas, washes, rocky hillsides, and open flat desert areas with sandy to sandy-gravel soils that offer suitable substrates for burrowing and nesting. Desert tortoises are typically found at an elevation range of approximately 1,970 to 3,300 feet MSL but have been found higher than 3,940 feet MSL. Desert tortoises are known to occupy a range of approximately 0.75 square miles and travel long distances for resource use.

Desert tortoise activity patterns are controlled primarily by ambient temperature and precipitation. In the western Mojave Desert, desert tortoises are generally most active between April and June, and September and October, which is when the herbaceous vegetation they prefer (i.e., grasses and flowers of annual plants) is most abundant. Desert

tortoises have also been known to eat other items including insects and lizards; however, these items make up a small proportion of their diets. In periods of harsh or unusually dry conditions, desert tortoises can retreat to burrows where they lower their metabolism and loss of water and consume very little food. During inactive periods desert tortoises hibernate or rest in subterranean burrows spending approximately 98 percent of their time in these cover sites. During active periods, they usually spend nights and the hotter part of the day in their burrow or resting under shrubs.

The desert tortoise has historically inhabited the Mojave and Sonoran Deserts in California including Inyo, Imperial, eastern Kern, Los Angeles, San Bernardino, Riverside, and San Diego counties. Desert tortoise sightings on the Coachella Valley floor are rare, as the species is primarily known from Whitewater Hills, Stubbe and Cottonwood Canyons, Mission Creek, and the Little San Bernardino Mountains. There have also been recent new populations found as far east as the Santa Rosa Mountains. Habitat occurs within Whitewater Canyon, but it is north of I-10 within the designated Whitewater Canyon Conservation Area of the CVMSHCP.

According to ECORP (2019) and the CNDDB, there have been infrequent incidental sightings of desert tortoises within the Whitewater area, but these sightings are poorly documented and not generally substantiated enough to identify a consistent use pattern. Nevertheless, CVMSHCP-modeled habitat for desert tortoise occurs within the Project site, so it is assumed that desert tortoises are present (ECORP 2019; see Appendix C).

Peninsular Bighorn Sheep

The peninsular bighorn sheep is a federally endangered species with federally designated critical habitat south of SR-111. This species occurs on rocky desert slopes to the west of the Project site, with the full range of the population extending from the San Jacinto Mountains south to the U.S.-Mexico border. Peninsular bighorn sheep inhabit mountainous areas with a variety of different slopes and slope aspects, preferring protected rocky slopes, cliffs, canyons, washes, and alluvial fans. They eat plants primarily, including cacti, and their seasonal distribution varies based on availability of water sources. They are a herd animal, with females forming groups with their offspring and using smaller home ranges than the males. Lambing season is the spring when desert plants are most abundant.

CVMSHCP-modeled habitat is not located within the renewal area or the amendment area; however, it is located in close proximity to the Project site south of SR-111. Therefore, given the large range of the peninsular bighorn sheep, it is assumed this species is present within the Project site (ECORP 2019; see Appendix C).

Palm Springs Pocket Mouse

The Palm Springs pocket mouse is a BLM-sensitive species and a CDFW Species of Special Concern. The Palm Springs pocket mouse is a small pocket mouse characterized by large hind feet and external cheek pouches used for temporary seed storage.

Habitats associated with the Palm Springs pocket mouse include sparsely vegetated creosote bush scrub, desert scrub, and grassland communities containing loose, sandy soils. These habitats are almost always flat or contain gentle slopes less than 15 percent in grade. Palm Springs pocket mouse are also associated with creosote bush, brittlebush (*Encelia farinosa*), burro bush (*Ambrosia dumosa*), and Mormon tea (*Ephedra californica*) (Brylski 1998). The historic range of the Palm Springs pocket mouse was from San Gorgonio Pass east to the south of Joshua Tree National Park, south to Borrego Springs and the east end of San Felipe Narrows (Brylski 1998). The current range of this species is not well known, with pockets of known populations scattered throughout the Coachella Valley in native desert habitat. This species appears to be extirpated from Palm Springs to the Salton Sea in areas that have been developed for urban and agricultural purposes. The estimated amount of suitable habitat present for this species is approximately 142,000 acres; however, it is unknown if all suitable habitat is occupied (CVAG 2007).

CVMSHCP-modeled habitat for the Palm Springs pocket mouse is located within the Project site. Therefore, while this species was not observed during the biological surveys conducted on the Project site, it is still considered to be present (ECORP 2019; see Appendix C).

Palm Springs Round-Tailed Ground Squirrel

The Palm Springs round-tailed ground squirrel is a BLM-sensitive species and a CDFW Species of Special Concern characterized by a distinct fur color, which lacks striping, and ranges in color from drab gray to pale cinnamon brown or pinkish cinnamon (USFWS 2009). Additionally, its tail is not bushy and relatively long compared to other squirrels in the same genus. The alarm and social calls of this species are very high-pitched and sound like a short "peep" or a shrill whistle.

This diurnal squirrel species is found in climates characterized by high temperatures and low humidity. Suitable habitat includes creosote bush scrub and desert saltbush scrub with sandy to gravelly soils that support herbaceous vegetation, typically in the Lower Sonoran Life Zone. Mesquite, desert sink scrub, and desert wash habitats have also been associated with the Palm Springs round-tailed ground squirrel. The range of the Palm Springs round-tailed ground squirrel was originally thought to be restricted to the area between the Salton Sea in the southeast and the San Gorgonio Pass to the northwest; however, there is evidence that the range is larger than previously thought including areas near Dagget and perhaps as far north as Death Valley (USFWS 2009).

Palm Springs round-tailed ground squirrel is active during late winter through late summer. Adults emerge from their burrows during January and February, with emergence time and reproductive readiness being highly dependent on the amount of rainfall during the prior months of December and January (Ernest and Mares 1987). While this species is generally inactive during the months between September and January, Palm Springs round-tailed ground squirrel has been observed above ground on warm winter days. The Palm Springs

round-tailed ground squirrel is able to survive through this period of inactivity on their stored body fats until the winter rains come and restore the vegetation.

Composition of the squirrel's diet varies with season, amount of winter rainfall, and available forage. However, green vegetation and seeds always constitute the majority of the squirrel's diet. Round-tailed ground squirrels inhabiting areas adjacent to agricultural areas have been known to consume alfalfa and dates. Round-tailed ground squirrels obtain the necessary amount of water in their diet through the food items they consume.

Burrows are typically constructed in the mounds of sand accumulated at the base of larger shrubs, such as creosote bush and mesquite (*Prosopis* spp.) (CVAG 2007), or Palm Springs round-tailed ground squirrel modifies other small mammal burrows, including those made by kangaroo rats (*Dipodomys* spp.) (Ernest and Mares 1987). There are often two separate entrances to these burrows with some containing up to four entrances, and the entrances of active burrows are usually plugged at approximately 17 inches. Palm Springs round-tailed ground squirrels utilize their burrows for shelter, reproduction, and periods of inactivity; however, it does not appear that they food in their burrows, unlike many other desert rodent species.

CVMSHCP-modeled habitat for the Palm Springs round-tailed ground squirrel is located within the Project site. Therefore, while this species was not observed during the biological surveys conducted on the Project site, it is still considered to be present (ECORP 2019; see Appendix C).

Least Bell's Vireo

Least Bell's vireo is a federally endangered species and State-listed endangered species, with federally designated critical habitat. Additionally, least Bell's vireo is a BLM-sensitive species.

Least Bell's vireos are small insectivorous birds that forage by gleaning small insects from vegetation within a few feet of the ground under protective canopies of willows, cottonwoods, and other riparian shrubs and trees. Prey items include caterpillars, beetles, grasshoppers, and moths. Least Bell's vireos typically occupy riparian areas with low shrubs in the vicinity of water or in dry parts of washes and canyon bottoms containing willows, mule fat, and wild blackberry (*Rubus ursinus*). They have also been associated with valley oaks (*Quercus lobata*), wild grape (*Vitis californica*), poison oak (*Toxicodendron diversilobum*), and sumac (*Rhus* sp.) along margins of water courses. In desert areas, mesquite (*Prosopis* sp.) and arrowweed (*Pluchea sericea*) may be occupied. There have also been observations of vireos utilizing catclaw (*Acacia greggii*), tree tobacco, and, to a much lesser extent, tamarisk (*Tamarix* sp.) stands in Baja California and the Colorado River.

Least Bell's vireos were historically common in lowland riparian habitats, ranging from Southern California (San Diego County) to Red Bluff (Tehama County). Populations also occurred on both sides of the Sierra Nevada and Coast Ranges, in Owens Valley, Death Valley,

and the Mojave Desert. The species also had a wide elevation tolerance, from -175 feet in Death Valley to 4,100 feet at Bishop, in Inyo County.

Habitat occurs within Whitewater Canyon but is north of I-10 within the designated Whitewater Canyon Conservation Area of the CVMSHCP, outside of both the renewal area and amendment area. The nearest CVMSHCP-modeled habitat for least Bell's vireos occurs within the upper tributaries of Snow Creek, in the mountains well outside of the Project site to the south. If least Bell's vireo were to occur within the Project site, it would only be during migration as a transient species.

CVMSHCP-modeled habitat for least Bell's vireo does not occur within either the renewal area or the amendment area, and therefore this species is not considered to be present within the Project site (ECORP 2019; see Appendix C).

Invasive Species

According to the California Invasive Plant Council (Cal-IPC), over 100 plant species considered exotic/invasive occur in the region (i.e., the entire Coachella Valley from the San Gorgonio Pass area southward through the Salton Sea area). Invasive plant species on this list that were observed during the biological survey included salt cedar (*Tamarix* sp.), common Mediterranean grass, Russian thistle, crimson fountain grass, tree tobacco, short-pod mustard, cheat grass, red brome, Sahara mustard, and wild oats. Most of the nonnative plant species concentration were observed either along the WRSC or within the replenishment ponds. For instance, large patches of crimson fountain grass were present in the Amendment Area where the diversion gate and manmade diversion channel are located. The presence and density of non-native grasses such as crimson fountain grass constitutes a wildfire concern in the Whitewater River floodplain. Non-native grasses were also scattered among various native shrub communities, although these were in very low densities.

The Renewal and Amendment Areas were evaluated using the Cal-IPC invasive rating for non-native plant species. The ratings fall into three categories: high, moderate, and limited. Plants rated as high include cheat grass, red brome, salt cedar, and Sahara mustard. Plants rated as moderate include crimson fountain grass, tree tobacco, shortpod mustard, and wild oats. Plants rated as limited included the common Mediterranean grass and Russian thistle.

Within both the renewal area and amendment area, the current baseline level of non-native weed cover is considered to be low density overall, although there are scattered patches of crimson fountain grass that are of higher density near the sluice gate and patches of Sahara mustard near the Low-Flow Dike and Channel Crossing that are of moderate density. The vegetation for these two areas is regularly disturbed and removed as part of operations, maintenance, and repair activities at the Facility, resulting in soil disturbance that can encourage these species. Even though the patch of crimson fountain grass observed near the sluice gate is approximately 50 feet long by 10 feet wide, crimson fountain grass patches of similar density are absent within the majority of the amendment area. Estimates of non-native species cover for all non-native species range at less than 10 percent absolute cover

within any given patch. For individual species, the species with the highest apparent level of absolute cover is common Mediterranean grass while the species with the lowest apparent cover (i.e., least common) is tree tobacco.

Non-native wildlife species were generally not common in the vicinity of the Facility. Species that may occur could include non-native invertebrate species including earwigs (*Dermaptera* sp.) and silverfish (*Thysanura* sp.), or bird species such as Eurasian collared-dove (*Streptopelia decaocto*). The extreme climatic conditions and dominant native desert environment limit most wildlife species that occur to those adapted for these conditions.

Wildlife Corridors

Within the Coachella Valley, wildlife moves along linkages between large blocks of habitat that allow for safe movement with access to food and water. Riparian and riverine corridors are ideal as movement or wildlife corridors. The exact definition of a corridor varies, as do the composition of these specific environments, but corridors can include any river system, urban greenbelts, culverts, alluvial fan systems, linear transportation corridors such as dirt roads, underpasses, etc. Wildlife movement corridors are critical for the survival of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. Naturally, the nature of corridor use and wildlife movement patterns varies greatly among species.

The area surrounding the Project site provides wildlife movement opportunities because it consists of open and relatively unfragmented land. The Whitewater River and replenishment ponds likely result in some use by local and transient wildlife. Additionally, this area could also present a potential stop-over along the Pacific Flyway (refer to the discussion of Migratory and Nesting Bird Habitat). However, the Project site is also mostly surrounded by additional open unfragmented land, functioning as a single contiguous block of habitat rather than a corridor. Although, the dirt roads and desert washes located within the Project site are likely utilized by wildlife moving through the area, these features would not be considered necessary linkages between conserved natural habitat areas or critical for wildlife movement. Further, the Project site is not identified as a Biological Corridor or Linkage in the CVMSHCP (ECORP 2019; see Appendix C).

3.2.2 Regulatory Framework

The following is a summary of the regulatory context under which biological resources are managed at the Federal, State, and local level.

Federal

U.S. Fish and Wildlife Service

The USFWS implements the Endangered Species Act (16 USC Section 153 et seq.) as well as the Migratory Bird Treaty Act (16 USC Sections 703 – 711) and the Bald and Golden Eagle Protection Act (16 USC Section 668). Activities 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 Endangered Species Act, depending on the involvement by the Federal government in permitting and/or funding of the activity. The permitting process is used to determine if an activity would jeopardize the continued existence of a federally 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. Candidate species and species proposed for listing do not have the full protection of Endangered Species Act; however, the USFWS advise project applicants that they could be elevated to listed status at any time.

In conjunction with the approvals for right-of-way grant LA052742 in 1984, the USFWS issued a BO at the conclusion of Section 7 consultation pursuant to the Endangered Species Act. The conclusion of the BO was that *"destruction of approximately 236 acres of CVFTL [Coachella Valley fringe-toed lizard] habitat on 1,450 acres of public lands would jeopardize the continued existence of the CVFTL and would hinder the recovery efforts for the lizard."* Compensatory mitigation for the Coachella Valley fringe-toed lizard required a three-party agreement among CVWD, BLM, and USFWS for 1,218 acres of land east of North Indian Canyon Drive to be conserved and managed for the Coachella Valley fringe-toed lizard for the life of the right-of-way grant.[3] Required commitments include management of conserved habitat for the Coachella Valley fringe-toed lizard, review and approval by the USFWS of any proposed wind-energy facility for the area, and placement of a flood-control dike along the east margin of the conserved habitat area.

Among the further recommendations within the BO is the following:

> *"As the project is constructed, some habitat suitable for the CVFTL or the CVMV may re-establish on the lee edges of dikes or elsewhere. BLM should enter into discussion with the CVWD to ascertain the possibility of CVWD conducting their regular facilities maintenance work in such a manner that any re-establishing habitat not be disturbed or at least be disturbed as little as possible."*

[3] In the time since the BO was adopted, the 1,218 acres are prescribed in the CVMSHCP to be permanently conserved under the Habitat Conservation Plan for Coachella Valley Flat Tailed Horned Lizard (see Section 6.6.1, *Obligations of the Local Permitees* of the CVMSHCP [CVAG 2007]).

Potential damage to small patches of suitable habitat that occurs during water delivery to a pond that contains these habitats is minimized and mitigated for under CVWD's Operations and Maintenance (O&M) Manual (see Appendix D) and the 1,218 acres of land that was previously conserved.

Bureau of Land Management

The BLM's Threatened and Endangered Species Program leads the conservation and recovery of federally listed species and Bureau Sensitive species that are at-risk of being listed. The BLM is required under the Endangered Species Act to protect and restore the habitats upon which listed species depend and to take actions that will foster recovery of listed species. The program's priority is to recover federally-listed species so that protection under the Endangered Species Act is no longer required and to implement conservation efforts for bureau sensitive plants and federal candidate species to preclude the need for listing.

The BLM works cooperatively with Federal and State agencies, conservation organizations, private landowners, and industry for the conservation of federally-listed and BLM-sensitive species on public lands. This includes using an ecosystem management approach to protect essential habitats on BLM lands and developing species-specific strategies with partners achieve conservation objectives across the range of the species. The BLM participates in developing recovery plans with the USFWS, and provides technical, financial, and in-kind services for conservation. Collaboration with partners is essential for building relationships and improving efficiency by combining efforts to address the management needs of the species such that populations are stable and unlikely to become threatened again in the foreseeable future.

State

California Department of Fish and Wildlife

CDFW derives its authority from the California Fish and Game Code. California Fish and Game Code Section 2050 et. seq. – the California Endangered Species Act – prohibits take of State-listed threatened, endangered, or fully protected species. Take under the California Endangered Species Act 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 California Fish and Game 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 California Fish and Game Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs.

The Species of Special Concern category is used by the CDFW for species that are indicators of regional habitat changes or are considered to be potential future protected species. These

species do not have any special legal status except that which may be afforded by the California Fish and Game Code. The Species of Special Concern category is intended by the CDFW for use as a management tool to include these species into special consideration when making decisions concerning the development of natural lands.

The CDFW also administers the Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.). The Native Plant Protection Act 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 Native Plant Protection Act, 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.

Regional

Coachella Valley Multiple Species Habitat Conservation Plan

The CVMSHCP 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 CVMSHCP is to maintain and enhance biological diversity and ecosystem processes within the region while allowing for future economic growth.

The CVMSHCP covers 27 sensitive plant and wildlife species as well as 27 natural communities. Covered species include both listed and non-listed species that are adequately conserved by the CVMSHCP. 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 CVMSHCP and execution of the Implementing Agreement (IA) allows signatories of the IA to issue *"take"* authorizations for all species covered by the CVMSHCP, including federally listed species and State-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 CVMSHCP, full mitigation in compliance with CEQA and NEPA as well as the California Endangered Species Act and Federal Endangered Species Act is granted.

During the plan development process, CVWD played an important role as one of the region's key public service entities and as manager of the Whitewater Groundwater Replenishment Facility and several other facilities. The use of the Whitewater River Groundwater Replenishment Facility, including the replenishment ponds on BLM lands and the Colorado River Aqueduct turnout and recharge channel, is considered a *"covered activity."* Covered

activities are those which receive approval under the IA under the CVMSHCP. The covered facility is identified as the "Spreading Area for Colorado River Aqueduct water, O&M" and avoidance and minimization measures are required for sediment removal and placement in deposition area (ECORP 2019; see Appendix C). Covered activities are solely related to Facility lands located within the area covered by the CVMSHCP.

Local

City of Palm Springs General Plan

The Safety Element of the City of Palm Springs General Plan provides the following policies applicable to the proposed Project:

Policy SA3.15 – In conjunction with the Coachella Valley Water District and the Riverside County Flood Control District, assure that design opportunities for enhanced open space and recreation amenities, including habitat enhancement, hiking, and equestrian trails, are fully explored, and incorporated when designing and constructing channels, debris and detention basins, and other major drainage facilities, to the greatest extent practical.

3.2.3 Impacts and Mitigation Measures

Methodology for Analysis

As previously described, this impact analysis incorporates the findings and conclusions of the BRTR completed for the proposed Project in February 2021 by ECORP (see Appendix C). The BRTR provides a comprehensive overview of previously consultation efforts associated with the existing Facility as well as an overview of the potential sensitive species that could occur within the renewal area and the amendment area. The BRTR also provides an overview of the applicable Federal and State laws and regulations as well as the applicability of the CVMSHCP and the associated mitigation obligations.

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on state or federally protected wetlands (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.

Areas of No Project Impact

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Implementation of the proposed Project would involve the issuance of a right-of-way grant by the BLM for the continued operation of the existing Facility, which would include continued maintenance and repair activities with the existing ponds and manmade channels. For example, annual maintenance that occurs in the ponds includes ripping (i.e., tilling) the bottom of the pond during dry periods to maintain replenishment rates. Other maintenance includes armoring and repairing dikes and maintaining service roads around the ponds (refer to Section 2.6.5, *Proposed Project Operations and Maintainance*). These activities have been ongoing since the original establishment of the Facility in 1984 and no new maintenance activities are proposed or would be required. The proposed Project would not involve any new areas of dredge and fill within jurisdictional features.

f) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

As described in Section 3.2.2, *Regulatory Framework*, the use of the Facility, is considered a *"covered activity."* Covered activities are those which receive approval under the IA under the CVMSHCP. The covered facility is identified as the "Spreading Area for Colorado River Aqueduct water, O&M" and avoidance and minimization measures are required for sediment removal and placement in deposition area. Therefore, continued operation and maintenance of this Facility, would not conflict with the CVMSHCP or any other local policies or ordinances, such as the City of Palm Springs Safety Element (ECORP 2019; see Appendix C).

Impact Analysis

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Impact BIO-1. The Project site contains federally designated critical habitat Coachella Valley milk-vetch and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)-modeled habitat for a variety of special status species. However, the proposed Project, including continued operation, maintenance, and repair of the existing Facility, are covered activities under the CVMSHCP and would not substantially impact special status species or their habitats due to existing management practices and existing mitigation obligations associated with the existing Facility. (Less than Significant.)

Sensitive Natural Communities

Under the proposed Project existing maintenance and repair operations within the renewal area would continue in a scale and approach comparable to existing conditions to ensure effective and efficient use of the Facility. The amendment area would continue to be used for access to the replenishment facilities and for conveyance of natural flows and Colorado River water, similar to existing conditions. Project maintenance and repair activities at the Facility, including sloping, shaping, and restoring of berms; excavation of material buildup in dikes and channels; and tilling in the replenishment ponds would continue without alteration under the proposed Project. The proposed Project would not involve any new excavation, grading, or ground clearing. The provided Project would continue to implement and comply with best management practices (e.g., CVWD's O&M Manual [see Appendix D]). As Part of CVWD's obligations in the CVMSHCP, CVWD developed the O&M Manual for covered activities occurring in Conservation Areas. The Coachella Valley Conservation Commission (CVCC; consisting of the BLM, USFWS, and CDFW partnering agencies) approved the manual in 2015. Therefore, with the continued implementation of CVWD's O&M Manual, no new impacts to riparian habitat or other sensitive natural communities would occur. Impacts would be less than significant and no mitigation measures would be required.

Special Status Species

As described in Section 3.2.1, *Existing Setting* and Appendix C, ECORP reviewed the USFWS IPaC System, CNDDB, CNPS Inventory of Rare and Endangered Plants of California, and the CVMSHCP-modeled habitat to identify the special status species or their habitats that have been previously recorded and/or have the potential to occur within and within the vicinity of

the Project site (ECORP 2019; see Appendix C). Additionally, four biological surveys were completed to characterize the existing habitat within the Project site and to determine the likelihood for special status species to occur.

Table 3.2-2. CVMSHCP-Managed Species with Potential to Occur within the Vicinity of the Project Site

Species Name	Scientific Name	Federal Status	State Status	CVMSHCP-Modeled Habitat in the Project Site?
Plants				
Coachella Valley Milk-Vetch	*Astragalus lentiginosus* var. *coachellae*	FE	-	X
Triple-Ribbed Milk-Vetch	*Astragalus tricarinatus*	FE	-	X
Reptiles				
Coachella Valley Fringe-Toed Lizard	*Uma inornata*	FT	SE	X
Desert Tortoise	*Gopherus agassizii*	FT	ST	X
Flat-Tailed Horned Lizard	*Phrynosoma mcallii*	BLM S	CDFW SSC	X
Insects				
Coachella Giant Sand-Treader Cricket	*Macrobaenetes valgum*	-	-	X
Coachella Valley Jerusalem Cricket	*Stenopelmatus cahuilaensis*	-	-	X
Birds				
LeConte's Thrasher	*Toxostoma lecontei*	BLM S	CDFW SSC	X
Least Bell's Vireo	*Vireo bellii pusillus*	FE	SE	-
Summer Tanager	*Piranga rubra*	-	CDFW SSC	-
Yellow-Breasted Chat	*Icteria virens*	-	CDFW SSC	-

Species Name	Scientific Name	Federal Status	State Status	CVMSHCP-Modeled Habitat in the Project Site?
Yellow Warbler	*Setophaga petechia*	-	CDFW SSC	-
Mammals				
Palm Springs Pocket Mouse	*Perognathus longimembris bangsi*	BLM S	CDFW SSC	X
Palm Springs Round-Tailed Ground Squirrel	*Xerospermophilus tereticaudus chlorus*	BLM S	CDFW SSC	X
Peninsular Bighorn Sheep	*Ovis canadensis nelsoni*	FE	ST CDFW FP	-
Southern Yellow Bat	*Lasiurus ega*	-	-	-

Notes:

X = indicates CVMSHCP-modeled habitat occurs for the species at the Project site

Federal Status
FT = Federally Threatened
FE = Federally Endangered
BLM S = Bureau of Land Management Sensitive Species

State Status
ST = State Threatened
SE = State Endangered
CDFW FP = California Department of Fish and Wildlife Fully Protected Species
CDFW SSC = California Department of Fish and Wildlife Species of Special Concern

Source: ECORP 2019; see Appendix C.

As described in Table 3.2-2, CVMSHCP-managed species (i.e., species for which management protocols are established in the CVMSHCP) that did not have CVMSHCP-modeled habitat within the Project site include least Bell's vireo, southern yellow bat, summer tanager, yellow-breasted chat, and yellow warbler. Although peninsular bighorn sheep habitat was not modeled within the Project site, given the proximity of modeled habitat south of SR-111 and the range of the Peninsular bighorn sheep, this species was assumed to be present within the Project site.

The majority of the CVMSHCP-modeled habitat, which was originally modeled in 2008 during the development of the CVMSHCP, within the replenishment ponds was considered disturbed, including those areas mapped as native habitat under the modeling protocol. However, the CVMSHCP-modeled habitat was originally modeled 2008 during the

development of the CVMSHCP. The four biological surveys conducted in 2018 reflect the disturbed conditions at the Project site, with minor revisions to mapped habitat in the easternmost three replenishment ponds (ECORP 2019; see Appendix C). Implementation of the proposed Project would not result in the direct removal of sensitive natural communities or other habitats not already within the disturbance footprint associated with the existing Facility. The biological surveys completed for the proposed Project did not identify any suitable habitat for special status species, with the exception of the Coachella Valley milk-vetch, which was identified in the amendment area, and the Coachella Valley giant sand-treader cricket which may occur within the Snow Creek area (ECORP 2019; see Appendix C).

Because CVMSHCP-modeled habitat for several federally listed species – including the federally endangered Coachella Valley milk-vetch and triple-ribbed milk-vetch as well as the federally threatened Coachella Valley fringe-toed lizard and desert tortoise – occurs within the Project site, these areas are considered to be occupied (refer to Table 3.2-2). BLM-sensitive species including the flat-tailed horned lizard, Palm Springs round-tailed ground squirrel, and Palm Springs pocket mouse also have CVMSHCP-modeled habitat in the Project site, which is also considered to be occupied. Additional non-listed species, that are managed under the CVMSHCP, such as the Coachella Valley giant sand-treader cricket, Coachella Jerusalem cricket, and LeConte's thrasher, also have CVMSHCP-modeled habitat in the Project site, which is also considered to be occupied. However, the implementation of the proposed Project would not result in direct removal of habitat not already disturbed or otherwise within the footprint of the existing Facility, the operational of which is a covered activity under the CVMSHCP. Therefore, impacts to special status species would be less than significant and no mitigation measures would be required.

Covered Activities under CVMSHCP

Use of the proposed Project site is considered a covered activity by CVMSHCP for continued operation and maintenance of the site. CVWD must continue to cooperate with the CVCC on the conservation of lands and establishment and enhancement of habitat areas for sensitive species. CVWD contributed $3,583,400 toward the Endowment Fund for the Monitoring Program, the Management Program, and Adaptive Management of CVCC, so CVWD has met its monetary contribution obligation.

Additionally, CVWD has previously conserved approximately 1,218 acres of land to the east of the amendment area between Indian Canyon Drive and Gene Autry Trail as part of a mitigation established in 1984 under the existing right-of-way grant's BO for protection of the Coachella Valley fringe-toed lizard, which determined CVWD's operation and maintenance may cause *"destruction of approximately 236 acres of CVFTL habitat on 1,450 acres of public lands would jeopardize the continued existence of CVFTL and hinder the recovery efforts for the lizard."* The acreage was preserved for the life of the right-of-way grant; therefore, under the proposed Project CVWD would continue implementation of the following to comply with their existing agreement with CVMSHCP:

- Of the approximately 7,000 acres of CVWD owned lands in Conservation Areas, CVWD shall continue to cooperate with CVCC toward the conservation of the lands through continued conservation of the currently conserved approximately 1,218 acres of the Whitewater Floodplain Conservation Area.
    - The approximately 1,218 acres would be permanently committed to conservation under the CVMSHCP.
- Lands that CVWD has Take Authorization for Operation and Management of facilities (this includes the entire Project site) which are covered activities, the areas would continue to be conserved to only the extent compatible to the operation and management of the facilities.

Best Management Practices

In order to ensure Coachella Valley milk-vetch, Coachella Valley fringe-toed lizard, and other specially status species are protected during site operation and routine maintenance, CVWD would continue to comply with and adhere to the avoidance and minimization measures required by the CVMSHCP for operations and maintenance activities, including, but not limited to:

- Worker education
- Pre-activity surveys
- Avoidance of sensitive plant and wildlife species including Coachella Valley milk-vetch
- Avoidance of herbicide and pesticide use in habitat occupied by sensitive plant and wildlife species including Coachella Valley milk-vetch
- Avoidance of fueling and maintaining vehicles in sensitive areas
- Buffer setting for nesting birds

Additionally, subject to consultation requirements under the Endangered Species Act, under the proposed Project CVWD would continue to:

- Deposit sand removed from the groundwater recharge basis during maintenance operations in the fluvial and aeolian sand transport area on CVWD lands in a location previously suggested by key personnel including Dr. Monica Swartz of CVWD.
- Place materials in a manner that downwind and downstream habitat would receive appreciable inputs of fluvial and aeolian sand deposits, as determined in consultation with the Reserve Management Oversight Committee.
    - CVWD has a sediment relocation adaptive management pilot project in place, the results of which were provided during discussed during a site visit on July

24, 2018, which included Danielle Ortiz (BLM), Cameron Barrows (UCR), Brett Daniels (CVWD), and Scott Taylor (ECORP).

- Comply with applicable avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5.

Therefore, as the proposed Project consist of solely operation and maintenance of existing areas on the site, impacts to special status species would be less than significant and no mitigation measures would be required.

Would the Project 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?

Impact BIO-2. The proposed Project would not substantially interfere with the movement of any native or migratory fish or wildlife species, nor would it impede the use of wildlife corridors or nursery sites. (Less than Significant.)

The Project site – including the renewal area and the amendment area – provides wildlife movement opportunities because it consists of open and relatively unfragmented land. The Whitewater River and water within the replenishment ponds likely results in some use of these features by local and transient wildlife. Additionally, this area could also present a potential stop-over along the Pacific Flyway. However, the Project site is also mostly surrounded by additional open unfragmented land, functioning as a single contiguous block of habitat rather than a corridor. Although, the dirt roads and desert washes located within the Project site are likely utilized by wildlife moving through the area, these features would not be considered necessary linkages between conserved natural habitat areas or critical for wildlife movement. Further, the Project site is not identified as a Biological Corridor or Linkage in the CVMSHCP (ECORP 2019; see Appendix C). The implementation of the proposed Project would not result in direct removal of habitat or additional disturbance within the footprint of the existing Facility. With continued compliance with all applicable provisions of the CVMSHCP impacts would be less than significant and no mitigation measures would be required.

Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Impact BIO-3. The proposed 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.)

Whitewater Floodplain Conservation Area

The Project site is located within the Whitewater Floodplain Conservation Area, which was designated as such by the USFWS under the CVMSHCP. The Whitewater Floodplain Conservation Area encompasses portions of the Whitewater River floodplain south of I-10 eastward to the existing Whitewater Floodplain Preserve, established by the Coachella Valley fringe-toed lizard Habitat Conservation Plan (HCP). The Conservation Area includes additional habitat east and southeast of the existing Whitewater Floodplain Preserve on the west and east sides of Gene Autry Trail, south and east of CVWD's Whitewater groundwater recharge basins, the Garnet Hill area north of the existing preserve, the Biological Corridor and sand transport areas south of I-10 along Mission Creek, and Willow washes, which connect this area to the Willow Hole Conservation Area north of I-10. To the northwest of this Conservation Area is the Whitewater Canyon Conservation Area. To the west is the SR-111/I-10 Conservation Area. The Whitewater Floodplain Conservation Area connects to the Snow Creek/Windy Point Conservation Area near Windy Point, where the San Gorgonio River joins the Whitewater River. The Whitewater Floodplain Conservation Area contains a total of approximately 7,400 acres.

Ownership of the Whitewater Floodplain Conservation Area includes CVWD fee land, private land and BLM lands. The BLM lands are located in two large parcels east of the replenishment ponds (i.e., the renewal area), the amendment area, and several small parcels north of the amendment area. The entire replenishment pond area within the existing Whitewater Groundwater Replenishment Facility was excluded from the conservation designation.

Within CVMSHCP conservation areas, the following goals apply:

1. Represent native ecosystem types or natural communities across their natural range of variation in a system of conserved areas.
2. Maintain or restore self-sustaining populations or metapopulations of the species included in the CVMSHCP to ensure permanent conservation so that take authorization can be obtained for currently listed species (wildlife species) and non-listed species can be covered in case they are listed in the future.

3. Sustain ecological and evolutionary processes necessary to maintain the functionality of the conserved natural communities and habitats for the species included in the CVMSHCP.
4. Maximize connectivity among populations and avoid habitat fragmentation within Conservation Areas to conserve biological diversity, ecological balance, and connected populations of Covered Species.
5. Minimize adverse impacts from off-highway vehicle off-highway vehicle (OHV) use, illegal dumping, edge effects, exotic species, and other disturbances in accordance with the Management and Monitoring Programs.
6. Manage the Conservation Areas adaptively to be responsive to short-term and long-term environmental change and new science.

There are acreage goals for conservation to be met within the Conservation Area. In addition to these goals, the following three measures expressed in the CVMSHCP regarding the Conservation Area apply specifically to the proposed Project:

- CVWD will deposit sand removed from the groundwater recharge basins during maintenance operations in the fluvial and aeolian sand transport area on CVWD lands in a location previously suggested by Dr. Monica Swartz (CVWD), Mark Fisher and Al Muth (University of California, Riverside / Deep Canyon Natural Reserve System), Cameron Barrows (Director, Coachella Valley Preserve, Center for Natural Lands Management / University of California, Riverside Center for Conservation Biology), Peter Griffiths (USGS Water Resources Division, Tucson, AZ) and Robert Webb (USGS Water Resources Division, Tucson, AZ). Materials were placed in a manner that downwind and downstream habitat would receive appreciable inputs of fluvial and aeolian sand from the deposits, as determined in consultation with the Reserve Management Oversight Committee.
- The Permittees shall comply with applicable avoidance, minimization, and mitigation measures described in Section 4.4 and the Land Use Adjacency Guidelines as described in Section 4.5.
- Develop and comply with the CVWD O&M Manual for covered facilities within Conservation Areas (see Appendix D).

Covered Activities

As described in Impact BIO-1, based on the CVMSHCP mapping and descriptions of covered activities, the use of the Whitewater River Groundwater Replenishment Facility and the Colorado River Aqueduct turnout and recharge channel, is considered a *"covered activity."* Covered activities are those which receive approval under the IA under the CVMSHCP. The

Facility is identified in the CVMSHCP as the "*Spreading Area for Colorado River Aqueduct water, O&M"* and avoidance and minimization measures are required for this facility for the following activities: sediment removal and placement in deposition area.

CVWD Mitigation Obligations

Under the CVMSHCP, CVWD has a commitment to turn over undeveloped CVWD lands within conservation areas by the end of year 50 (2058) of the 75-year permit which is approximately 7, 000 acres. CVWD also has obligations for cooperation with CVCC toward conservation of lands, and establishment/enhancement of habitat areas for various sensitive species.

CVWD has contributed $3,583,400 toward the Endowment Fund for the Monitoring Program, the Management Program, and Adaptive Management. Currently, CVWD is actively working toward wildlife agency approval of created habitat project work plans.

Two key measures noted in the CVMSHCP apply specifically to the proposed Project:

- Of the approximately 7,000 acres that CVWD owns in the Conservation Areas, CVWD shall cooperate with CVCC toward the conservation of those lands, as follows: Approximately 1,200 acres of the 7,000 acres are in the Whitewater Floodplain Conservation Area and are currently conserved pursuant to the Coachella Valley fringe-toed lizard HCP. These lands will be permanently committed to conservation under the CVMSHCP.[4]
- Lands on which CVWD has Take Authorization for O&M of facilities that are Covered Activities, will be conserved only to the extent compatible with the O&M of the facilities.

Therefore, the proposed Project would not result in a conflict with any provisions of a habitat conservation plan, a natural community conservation plan, or the CVMSHCP. Impacts would be less than significant and no mitigation measures would be required.

[4] The lands required to be conserved under the CVMSHCP were those already set aside for mitigation for construction of the existing replenishment Facility as a result of the original BO for the right-of-way grant

3.3 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

This section describes existing conditions and regulatory setting for cultural resources and tribal cultural resources in the vicinity of the Project site and assesses potential environmental impacts that could result from implementation of the proposed Project. This section is based on the *Class III Cultural Resource Survey for the Whitewater River Groundwater Replenishment Facility* (Applied Earthworks, Inc. 2017). Additionally, this section summarizes tribal cultural resources consultation conducted in accordance with Assembly Bill (AB) 52.

3.3.1 Environmental Setting

The study area for cultural resources is the area of potential effect (APE) including the renewal area and the amendment areas (refer to Section 2.6.4, *Proposed Right-of-Way Grant*); whereas the study area for tribal cultural resources also includes the cultural landscapes of the Coachella Valley in the vicinity of the Whitewater River Groundwater Replenishment Facility (Facility).

Cultural Resources

Prehistoric Context

While it is not yet determined when people first entered and began to occupy the Colorado Desert, it is estimated humans first arrived in Southeastern California over 130 centuries ago (Applied Earthworks, Inc. 2017; see Appendix E). The prehistoric chronology for Southern California, as summarized in the Class III Cultural Resource Survey, is divided into the following periods:

- Early Paleoindian Period (pre-11,300 B.C.) is characterized as an undefined Pre-Clovis period.
- Middle Paleoindian Period (circa [ca]. 11,300 – 10,800 B.C.) is characterized by the Clovis cultural tradition with early manifestations of the Western Stemmed Point Tradition.
- Late Paleoindian Period (ca. 10,800 – 6,500 B.C.) coincides with the Western Pluvial Lakes Tradition in the interior of Southern California.
- Early Archaic Period (ca. 6,500 – 2,500 B.C.) is synonymous with the Pinto period seen elsewhere in the Southeastern California desert.
- Late Archaic Period (ca. 2,500 B.C. – A.D. 700) coincides with the Gypsum, Newberry, and Amargosa periods.
- Late Prehistoric Period (ca. A.D. 700 – 1800) is characterized by various local cultural manifestations. The Patayan I-III phases are assigned to this period.

The Late Prehistoric Period in the vicinity of the Coachella Valley – defined as the Patayan Pattern – is characterized by the introduction of ceramics and the use of Salton Buff Ware from the Lake Cahuilla shoreline along with floodplain horticulture along the Colorado River. Lake Cahuilla held a substantial volume of water for decades. Sustainable populations of freshwater fish and shoreline vegetation resulted in a settlement strategy of longer-term occupation of shoreline residential sites. Settlements along the Colorado River included large villages and dispersed seasonal settlements. Dispersed villages were also present at the base of the Peninsular Range, situated at the mouths of canyons with perennial streams, at the base of alluvial fans near springs, or where wells could be dug.

Ethnographic Overview

The Project site is located within the territory of the Cahuilla (see Appendix E and Appendix F), which extended through the San Jacinto and Santa Rosa mountains as well as the Hemet and Perris regions, San Gorgonio Pass, and Coachella Valley. The total population of the three Cahuilla groups, the Mountain, Pass, and Desert groups, is estimated at 6,000 to 10,000 people at time of Spanish contact (late eighteenth century).

The Cahuilla Valley floor oasis settlements were cultivating agricultural crops (e.g., maize, beans, squash) via irrigation by 1824, when the Romero expedition occurred. By the 1850s, the oasis gardens in Coachella Valley were cultivated as major contributors of food (see Appendix E). Plant resources 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. 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. Food was consumed from woven and carved wood vessels, and pottery vessels that were made by the Cahuilla and also traded from the Yuman-speaking groups across the Colorado River and to the south (Bean 1978). The introduction of European plants such as barley and other grain crops suggest an interaction with the missions or local Mexican rancheros.

Historic Setting

The Historic Period occurred between approximately 1540 to 1850 A.D.; however, the initial date for this period varies between localities, depending on when contact of Native Americans and outsiders began (Applied Earthworks, Inc. 2017; see Appendix E). The limited quantity of water in the majority of the Colorado Desert discouraged farming, so agricultural development flourished only when water was imported in significant quantities. However, the relatively high water table in Coachella Valley resulted in agricultural development prior to water importation through use of drilling artesian wells. The subsequent farming and development led to a drop in groundwater levels, and development occurring regionally was influencing plans to export Coachella Valley groundwater to Banning to the north and Imperial Valley to south. In an effort to support stable water resources in the Coachella Valley,

the CVWD was established in 1918 (refer to Section 2.5, *Overview of Water Supply*). CVWD acquired the water rights of the Whitewater River Stormwater Channel (WRSC) and later established the Coachella Branch of the All American Canal to supplement natural water sources supplying the valley.

Until the Taylor Grazing Act of 1934, no control was present of the California desert land. Due to the aridity of the area and lack of grazing land, the Taylor Grazing Act had little impact until the Bureau of Land Management (BLM) assumed control of the area in 1946. Since 1946, the BLM has evaluated the lands for various uses and classified the land for various forms of management. The first imported water to the Coachella Valley occurred in 1949 following the development of the CVWD and Imperial Irrigation District's All-American Canal and Coachella Valley Extension to harness waters of the Colorado River.

Cultural Resources Records Search

Applied EarthWorks, Inc. conducted a search of cultural resource literature and records at the Eastern Information Center (EIC) of the California Historical Resources Information System on March 24, 2017, prior to the Class III Cultural Resources Survey. The search was conducted to identify all previous cultural resources studies and previously recorded cultural resources within 1-mile radius of the APE.

The results of the search indicate no fewer than 71 prior cultural resources studies have been conducted within a 1-mile radius of the APE. Of these studies, 13 involved a portion of, or an immediately adjacent parcel to, the APE. Approximately 40 percent of the APE has been previously surveyed. A total of 8 of 54 cultural resources have been recorded within a 1-mile radius of the APE, five of these resources have been previously recorded within the APE as built-environment resources (see Table 3.3-1). There are no listed historic properties, historical resources, or historic landmarks on or in the vicinity of the APE.

Sacred Lands File Search

A search of the Native American Heritage Commission (NAHC) Sacred Lands File occurred on February 9, 2017. The Sacred Lands File search was negative, indicating no tribal heritage resources have been previously recorded in the APE vicinity. However, as noted by NAHC, this does not preclude the potential for previously unknown tribal heritage resources within the Project site or the surrounding vicinity.

Class III Cultural Resource Survey

A Class III Cultural Resource Survey was conducted for the 940-acre APE by Applied EarthWorks, Inc. between April 13, 2020 to April 17, 2020. The survey confirmed the locations of the five previously recorded cultural resources identified through the cultural resources records search. Additionally, the Class III Cultural Resource Survey identified eight new cultural resources: two transmission lines, an asphalt road, a water conveyance feature,

a prehistoric habitation site, a prehistoric artifact scatter, and two prehistoric isolated finds (i.e., prehistoric artifacts found by themselves, not associated with other prehistoric artifacts).

All cultural resources within the APE – including nine historic-period cultural resources (six archaeological sites and three built-environment resources), two prehistoric archaeological sites, and two isolated finds – were evaluated for historical significance by Applied EarthWorks Inc., which identified a segment of a stone-lined ditch known as McCallum's ditch (CA-RIV-4873H/P-33-004873) and two prehistoric sites (CA-RIV-12631/P-33-026895 and CA-RIV-12632/P-33-026896) as the only known historic properties and historical resources that are recommended as eligible for inclusion on the California Register of Historical Resources (CRHR) and National Register of Historic Places (NRHP). The following table lists the five previously recorded resources, which were reevaluated during the survey as well as the eight newly identified resources located within the APE (see Table 3.3-1).

Table 3.3-1. Summary of Cultural Resources in within the APE

Primary/Trinomial	Record Search/ Survey	Description	CRHR Eligibility	NRHP Eligibility
P-33-004873[1] CA-RIV-4873H	**Record**	**Water conveyance**	**Recommended eligible under Criteria 1 and 2**	**Recommended eligible under Criteria A and B**
P-33-009496 CA-RIV-6379H	Record	Water conveyance	Recommended ineligible	Recommended ineligible
P-33-009497 CA-RIV-6380H	Record	Water conveyance	Recommended ineligible	Recommended ineligible
P-33-009498 CA-RIV-6381H	Record	Southern Pacific/ Union Pacific Railroad	Recommended ineligible	Recommended ineligible
P-33-01890 CA-RIV-9292H	Record	Cobble-lined trail	Recommended ineligible	Recommended ineligible
P-33-026891 CA-RIV-12627H	Survey	Transmission line	Recommended ineligible	Recommended ineligible
P-33-026892 CA-RIV-12628H	Survey	Asphalt paved road	Recommended ineligible	Recommended ineligible
P-33-026893	Survey	Water conveyance	Recommended ineligible	Recommended ineligible

Primary/Trinomial	Record Search/ Survey	Description	CRHR Eligibility	NRHP Eligibility
CA-RIV-12629H				
P-33-026894 CA-RIV-12630H	Survey	Transmission line	Recommended ineligible	Recommended ineligible
P-33-026895 CA-RIV-12631	**Survey**	**Prehistoric habitation site**	**Recommended eligible under Criterion 4**	**Recommended eligible under Criterion D**
P-33-026896 CA-RIV-12632	**Survey**	**Prehistoric ceramic scatter**	**Recommended eligible under Criterion 4**	**Recommended eligible under Criterion D**
P-33-026897	Survey	Isolated Find-Two prehistoric flakes	Recommended ineligible	Recommended ineligible
P-33-026898	Survey	Isolated Find-Two prehistoric ceramic sherds	Recommended ineligible	Recommended ineligible

Tribal Cultural Resources

A summary of government-to-government consultation pursuant to AB 52 is provided in Section 3.3.2, *Regulatory Framework* and Impact CR-3. Further discussion of tribal cultural resources specifically regarding hydrology and groundwater quality as well as land use and planning concerns raise by the Agua Caliente Band of Cahuilla Indians are addressed in Section 3.7, *Hydrology and Water Quality* and Section 3.8, *Land Use and Planning*.

3.3.2 Regulatory Framework

Federal

National Register of Historic Places

The NRHP was established by the National Historic Preservation Act (NHPA) to help identify and protect properties that are significant cultural resources at the Federal, State, and/or local levels. Four criteria have been established to determine if a resource is significant to American history, architecture, archaeology, engineering, or culture and should be listed in the NRHP. These criteria include:

1. It is associated with events that have made a significant contribution to the broad patterns of our history;
2. It is associated with the lives of persons significant in our past;
3. It embodies the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; and
4. It yields, or may be likely to yield, information important in prehistory or history.

Districts, sites, buildings, structures, and objects of potential significance that are at least 50 years in age must meet one or more of the above criteria to be eligible for listing in the NRHP.

National Historic Preservation Act

The NHPA establishes a program for the preservation of historical properties to provide vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits across the US. Key elements of the NHPA include:

- Sets the Federal policy for preserving our nation's heritage;
- Establishes a Federal-State and Federal-tribal partnership;
- Establishes the NRHP and National Historic Landmarks Programs;
- Mandates the selection of qualified State Historic Preservation Officers (SHPOs);
- Establishes the Advisory Council on Historic Preservation;
- Charges Federal Agencies with responsible stewardship; and
- Establishes the role of Certified Local Governments within the States.

Section 106 regulations – codified at 36 Code of Federal Regulations (CFR) Part 800 – require that Federal agencies account for the effects of projects on historic properties via consultation with agency officials and parties of interest. Section 106 requires gathering of information on historic properties at the project and in the vicinity through examination of existing surveys, identification of any new information, and consult with any applicable tribal organization to identify potential properties. Following the identification of historic properties, evaluation for potential historic significance of properties that are not listed under the NRHP shall occur.

Archaeological Resource Protection Act

The Archaeological Resources Protection Act (ARPA) was established to provide more effective law enforcement capability to protect public archaeological sites. ARPA Section 4 describes the requirements that must be met prior to approval of Federal permits for excavation or removal of any archaeological resources on Federal or Native American lands. Section 6 identifies the list of prohibited activities, including damage or defacement as well

as unpermitted excavation or removal. Additionally, ARPA requires information concerning the nature and location of any known archaeological resource remain confidential and requires prior approval to receive information access.

State

California Environmental Quality Act

CEQA includes regulations that address historical resources. Specifically, according to California Public Resources Code Section 5020.1(j), *"historical resources," include, but are not limited to, "any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California*." Resources included in a local register of historical resources (pursuant to California Public Resources Code Section 5020.1[k]) or identified as significant in an historical resources survey (meeting the criteria in California Public Resources Code Section 5024.1[g]), also are considered "historical resources" for the purposes of CEQA. The fact that a resource is not listed in, or determined to be eligible for listing in the CRHR, not included in a local register of historical resources, or identified in an historical resources survey, does not preclude a lead agency from determining that the resource may be an historical resource as defined in California Public Resources Code Sections 5020.1(j) or 5024.1.

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 (California Public Resources Code Section 21083.2[a], [b], and [c]). California 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;
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.

California Register of Historical Resources

The CRHR is a guide to cultural resources that must be considered when a lead agency undertakes a discretionary action subject to CEQA. The CRHR was established under California Public Resources Code 5024.1(a) as an authoritative guide in California to be used

by State and local agencies, private groups, and citizens to identify the State's historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change. The CRHR is administered through the California State Office of Historic Preservation (OHP), which is part of the California State Parks system. A cultural resource is evaluated under four CRHR criteria to determine its historical significance. A resource must be significant at the, State, or local level in accordance with one or more of the following criteria set forth in CEQA Guidelines 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 Environmental Impact Analysis Cultural, Tribal Cultural, and Paleontological Resources Draft Environmental Impact Report 111; 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 these criteria, the CRHR 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 CRHR 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 qualify as "historical resources"* (CEQA Guidelines Section 15064.5[c][1]).

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 significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value.

Codes Governing Human Remains

The disposition of human remains is governed by California Health and Safety Code Section 7050.5 as well as Public Resources Code Sections 5097.94 and 5097.98 and falls within the jurisdiction of the NAHC. If human remains are discovered, the County Coroner must be notified immediately and there should be no further disturbance to the site where the remains were found. If the remains are determined by the coroner to be Native American, the coroner

is responsible for contacting the NAHC within 24 hours. The NAHC, pursuant to Public Resources Code Section 5097.98, will immediately notify the Most Likely Descendant (MLD) from the deceased Native American(s) so they can inspect the burial site and make recommendations for treatment or disposal. CEQA Guidelines Section 15064.5 also assigns special importance to human remains and specifies procedures to be used when Native American human remains are discovered.

Assembly Bill 52

AB 52 was enacted on July 1, 2015 and expands CEQA by defining a new resource category, *"tribal cultural resources."* AB 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"* (California 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 (California Public Resources Code Section 21084.3).

California 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 CRHR, 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. Pursuant to the California Public Resources Code Section 21080.3.1.(b), the AB 52 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.

California Public Resources Code Section 5097.5

California Public Resources Code Section 5097.5 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. In this case, *"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 California Public Resources Code Section 5097.5 for their own activities, including construction and maintenance, as well as for permit actions (e.g., encroachment permits) undertaken by others.

Local

City of Palm Springs General Plan

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 resources:

Policy 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.

Policy 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.

Policy 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.

Policy 9.4 – Protected Sites. Require sites with significant cultural resources to be protected.

Policy 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 9.7 – 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.

3.3.3 Impacts and Mitigation Measures

Methodology for Analysis

Potential environmental impacts to cultural resources have been analyzed based on the potential for the proposed Project to either directly or indirectly impact the cultural resources identified in the Class III Cultural Resource Survey conducted for the proposed Project (Applied EarthWorks, Inc. 2017; see Appendix E). The proposed Project is generally limited to real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation the existing Facility in compliance with the policies of the Coachella Valley Water Management Plan (WMP) (2010). Therefore, this analysis identifies the potential impacts associated with the continued operation and maintenance activities associated with the proposed Project.

Potential environmental impacts on tribal cultural resources have been analyzed based on the potential for the proposed Project to impact any tribal cultural resources during the continued operation and maintenance activities associated with the proposed Project. The significance of a tribal cultural resource 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.

Significance Criteria

Cultural Resources

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on cultural resources if it would:

a) Cause a substantial change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines;
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines; or
c) Disturb any human remains, including those interred outside of dedicated cemeteries.

Tribal Cultural Resources

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on tribal cultural resources if it would cause a substantial adverse change in the significance of a tribal cultural resource, defined in California 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, object with cultural value to a California Native American tribe, and that is:

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 the 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.)

Impact Analysis

Would the Project cause a substantial change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines?

Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines?

Impact CR-1. Operations and maintenance activities associated with the proposed Project would involve continued ground disturbance at the Facility, which has the potential to unearth or otherwise adversely impact archaeological resources. (Less than Significant with Mitigation Incorporated.)

Under the proposed Project existing maintenance and repair operations within the renewal area would continue in a scale and approach comparable to existing conditions to ensure effective and efficient use of the groundwater replenishment facility. The amendment area would continue to be used for access to the replenishment facilities and for conveyance of natural flows and Colorado River water, similar to existing conditions. Project maintenance and repair activities at the Facility, including sloping, shaping, and restoring of berms; excavation of material buildup in dikes and channels; and tilling in the replenishment ponds would continue without alteration under the proposed Project. The proposed Project would not involve any new excavation, grading, or ground clearing.

The Class III Cultural Resource Survey identified three potentially significant archaeological resources within the APE that are recommended eligible for the CRHR and the NRHP; and which are: CA-RIV-4873H/P-33-004873, CA-RIV-12631/P-33-026895, and CA-RIV-12632/P-33-026896, located in the amendment area of the Project site.

CA-RIV-4873H/P-33-004873 is located along the SR-111 alignment but is not located within the WRSC or in any of the locations where maintenance operations typically occur.

CA-RIV-12631/P-33-026895 and CA-RIV-12632/P-33-026896 are located in the vicinity of storm water flows from the low flow dike and channel, located on the alluvial terrace to the north of the WRSC by more than 100 feet and may continue to experience existing flood conditions both naturally and during import of Colorado River water.

The amendment area is currently utilized by CVWD for vehicular and personnel access to the existing replenishment ponds as well as the existing flood control berms, which pass flood water flows following storm surges. Activities in the amendment area would remain consistent with existing operations and would not involve the Project-related inundation of areas within a 0.25-mile radius of the three documented archaeological resources. Additionally, the continued operation and maintenance of the Facility under the proposed Project would comply with all applicable Federal and State laws including the ARPA and California Public Resources Code Section 5097.5, which require the preservation of all potential archaeological resources.

While not anticipated, in the event of discovery of previously unknown archaeological resource during operations and maintenance activities at the Facility, CVWD would comply with MM-CR-1.

This measure would prevent, or limit, any physical damage or alteration of cultural resources within areas of the Facility where ground-disturbing activities may occur. Implementation of these measures during operations and maintenance activities at the Facility would ensure that no substantial adverse changes to any historical or archaeological resources would occur as a result of the continued operation of the Facility. Therefore, impacts to historical and archaeological resources would be considered less than significant with mitigation incorporated.

Mitigation Measures

MM-CR-1. Inadvertent Discoveries. If any previously unknown archaeological resource is discovered during operation and maintenance activities, all activity in the immediate vicinity of the find shall cease until it can be evaluated by a Qualified Archaeologist. If the find is determined to be potentially significant, the Qualified Archaeologist, in consultation with appropriate Native American tribe(s) (if the find is a prehistoric or Native American resource), shall develop a treatment plan. All work in the immediate vicinity of the unanticipated discovery shall cease until the Qualified Archaeologist has evaluated the discovery, or the treatment plan has been implemented. If the Qualified Archaeologist determines that data recovery is necessary, CVWD shall prepare a Phase III Archaeological Data Recovery Plan to mitigate potential impacts and shall be responsible for curating the find in a facility meeting the standards described in 36 CFR Part 79.

Residual Impacts

With the implementation of MM CR-1, the potential for impacts to archaeological resources would be less than significant. In the event of an unanticipated discovery there would be a clear Treatment Plan and any required testing or data recovery would be completed, as necessary.

Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Impact CR-2. Operations and maintenance activities associated with the proposed Project would involve continued ground disturbance at the Facility. While unlikely, these activities have the potential to inadvertently uncover and adversely impact previously unidentified human remains. (Less than Significant.)

Though unanticipated and highly unlikely given the long-term use of the Facility, if human remains are discovered, California Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County of Riverside has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. CVWD would first contact a local coroner, and if the remains are determined to be of Native American descent, the coroner would notify the NAHC within 24 hours. The NAHC would determine and notify an MLD, who would complete an inspection of the remains within 48 hours of notification and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Compliance with these existing potential impacts to human remains would be less than significant and no mitigation measures would be required.

Would the Project 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, or 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:

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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Impact CR-3. Operations and maintenance associated with the proposed Project would involve continued ground disturbance at the Facility, which has the potential to impact previously unidentified tribal cultural resources. (Less than Significant.)

In February 2020, CVWD distributed AB 52 consultation letters for the proposed Project, including a brief description of the proposed Project, map of the APE, and a contact person.

The list below identifies the Native American tribes that previously requested to consult on CVWD projects:

- Agua Caliente Band of Cahuilla Indians;
- Augustine Band of Cahuilla Mission Indians;
- Cabazon Band of Mission Indians;
- La Posta Band of Mission Indians;
- Morongo Band of Mission Indians;
- Soboba Band of Luiseno Indians;
- Torres Martinez Desert Cahuilla Indians; and
- Twenty-Nine Palms Band of Mission Indians.

The Agua Caliente Band of Cahuilla Indians responded to the AB 52 letter and requested formal government-to-government consultation under AB 52. Additionally, the Agua Caliente Band of Cahuilla Indians requested Geographic Information System (GIS) files for the APE. In April 2020, CVWD requested to schedule a teleconference to initiate information sharing regarding the proposed Project. Given the lack of response from the tribe CVWD sent a second request in June 2020. The Agua Caliente Band of Cahuilla Indians did not respond to either of these requests and CVWD sent a letter on July 13, 2020 concluding the AB 52 consultation effort.

On July 17, 2020 the Agua Caliente Band of Cahuilla Indians sent a letter to CVWD describing that the Project site is located within the Tribe's Traditional Use Area and noted that the Haviñavitcum Village is located within the vicinity of the Project site. For this reason, the tribe requested:

- Formal government-to-government consultation under AB 52.
- Copies of any cultural resource documentation (report and site records) generated in connection with the proposed Project.
- The presence of an approved Agua Caliente Native American Cultural Resource Monitor(s) during any ground disturbing activities (including archaeological testing and surveys). Should buried cultural deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a Qualified Archaeologist (Secretary of the Interior's Standards and Guidelines) to investigate and, if necessary, prepare a mitigation plan for submission to the SHPO and the Agua Caliente Tribal Historic Preservation Office.
- Notification of any testing or data recovery work.
- Notification of any ground disturbing maintenance activity.

However, following the government-to-government consultation with the Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Officer on July 28, 2020, and the

explanation of the proposed Project as a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Whitewater River Groundwater Replenishment Facility, the Tribe has since withdrawn its request for monitoring and additional notification. The AB 52 consultation correspondence is included in Appendix F. Therefore, because the proposed Project would not alter or expand the operation of the existing Facility and in light of closure of the AB 52 process with the Agua Caliente Band of Cahuilla Indians Tribal Historic Preservation Officer, impacts to tribal cultural resources would be less than significant and no mitigation measures would be required.

3.4 ENERGY

This section describes the energy use associated with the existing Whitewater River Groundwater Replenishment Facility (Facility) and assesses the potential for the requested right-of-way grant to increase or reduce energy demand.

3.4.1 Environmental Setting

The Facility is generally passive from an energy use perspective and largely uses gravity to drive water flows from the Whitewater River Channel to the 19 replenishment ponds. However, the Facility requires electricity, supplied by Southern California Edison (SCE), to operate radial gates at intake points. Additionally, CVWD work vehicles and equipment would utilize gasoline and diesel fuel during day-to-day operations associated with the Facility, as described in Section 2.6.5, *Proposed Project Operations and Maintenance Activities*. Fuel consumption calculations are provided in Section 3.4.3, *Impacts and Mitigation Measures,* for maintenance equipment and vehicle trips. As described in further detail in Section 3.1, *Air Quality* and Section 3.6, *Greenhouse Gas Emissions*, CalEEMod is an air emissions model used to estimate the emissions of criteria air pollutant and greenhouse gas (GHG) emissions by the Facility. CalEEMod also includes factors for estimating electricity use associated with a given land use. In the case of the existing Facility, electricity required to operate the radial gates is expected to be approximately 340 kilowatt hours per year (see Appendix G). In comparison, the average American single-family residence utilizes approximately 11,000 kilowatt hours per year (Energy Information Administration 2019). Additionally, the Facility requires heavy construction equipment and truck trips for operations and maintenance activities. Total fuel consumption for the Project is 15,475.56 gallons (see Table 3.4-1).

Table 3.4-1 Project Fuel Consumption

	Fuel Consumption (Gallons)
Maintenance and Operation Equipment	12,923.04
Vehicle Trips	2,552.52
Total Fuel Consumption	**15,475.56**

Note: Fuel consumption is provided in gallons

3.4.2 Regulatory Framework

Federal

California Desert Conservation Area Plan and the Desert Renewable Energy Conservation Plan

The California Desert Conservation Area Plan, as amended in September 2016, includes the Desert Renewable Energy Conservation Plan which establishes an interagency goal to implement a streamline process for the development of utility-scale renewable energy generation and transmission consistent with Federal and State renewable energy targets and policies while also providing for the conservation and management of sensitive resources. While the Facility is not located on lands subject to the Desert Renewable Energy Conservation Plan, the BLM has determined that the proposed Project is compatible with the Desert Renewable Energy Conservation Plan.

For additional Federal regulations that have a nexus with greenhouse gas emissions, see Section 3.6, *Greenhouse Gas Emissions*.

State

Executive Orders S-14-08 and S-21-09

In 2008, Executive Order S-14-08 increased the State's Renewable Portfolio Standard goal to 33 percent renewable power by 2020. In 2009, Executive Order S-21-09 directed the CARB, under its authority pursuant to AB 32 to enact regulations to help the State meet the 2020 goal of 33 percent renewable energy. The 33 percent by 2020 Renewable Portfolio Standard was codified with the passage of Senate Bill (SB) X1-2. This new goal applied to all electricity retailers in the State, including publicly owned utilities, investor-owned utilities, electricity service providers, and community choice aggregators.

Senate Bill 350

SB 350 increases California's renewable electricity procurement goal from 33 percent by 2020 to 50 percent by 2030. This objective will increase the use of eligible resources, including solar, wind, biomass, geothermal, and others. SB 350 also requires the State to double statewide energy efficiency savings in electricity and natural gas end uses by 2030.

Senate Bill 100

SB 100 established that 100 percent of all electricity in California must be obtained from renewable and zero-carbon energy resources by the end of 2045. SB 100 also creates new standards for the State's Renewable Portfolio Standard, increasing required energy from renewable sources for both investor-owned utilities and publicly owned utilities from 50 percent to 60 percent by the end of 2030. Incrementally, these energy providers must also

have a renewable energy supply of 44 percent by the end of 2024, and 52 percent by the end of 2027.

Local

City of Palm Springs Energy Action Plan

In 2013, the City completed an Energy Action Plan that identifies actions that are essential to meet the City's future energy needs and provides a detailed breakdown of municipal and community energy use currently in the City. The Energy Action Plan establishes energy standards and policies to guide the City in achieving its long-term objectives with regard to energy efficiency, renewable energy, and carbon emission reductions. It describes a range of strategies to reduce energy demand, improve efficiency, and transition to renewable energy sources at all City-owned and/or operated facilities.

3.4.3 Impacts and Mitigation Measures

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on energy if it would:

a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or
b) Conflict with or obstruct a State or local plan for renewable energy or energy efficiency.

Methodology for Analysis

With respect to energy use, potential impacts are assessed by comparing existing energy usage and fuel consumption with expected energy usage and fuel consumption under the proposed Project along with a brief comparison to relevant State and local plans. Fuel usage was assessed by assessing total fuel consumption for all maintenance and operation equipment as well as vehicle trips (see Appendix G).

Impact Analysis

Would the Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Would the Project Conflict with or obstruct a State or local plan for renewable energy or energy efficiency?

Impact ENG-1. Operations and maintenance activities associated with the proposed Project would continue to use energy associated with the operation of radial gates and vehicle trips. However, energy use associated with the proposed Project would result in a no increase over existing conditions. Therefore, the

proposed Project would neither create a wasteful use of energy resources nor would it conflict with relevant State or local plans for renewable energy or energy efficiency. (Less than Significant.)

The proposed Project would allow for continued, and unchanged, operations at the Facility. Existing electricity usage for operation of the radial gates at intake points would be identical to those described under existing conditions. Therefore, the proposed Project would not result in any change in energy use from the existing conditions and would not create a conflict with any of the State Executive Orders or legislation dictating renewable energy use or the City's Energy Action Plan. Fuel usage would be required for excavation and grading equipment (e.g., for pond maintenance) as well as vehicle trips. However, as with energy use, the proposed Project would not result in any change in fuel consumption from the existing conditions. As such, the proposed Project would have a less than significant impact and no mitigation measures would be required.

3.5 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

This section describes geology, soils, and seismicity conditions in the vicinity of the proposed Project at the Whitewater River Groundwater Replenishment Facility (Facility), and assesses the potential for risks associated with identified geologic and seismic hazards. This section is based on information gathered from sources such as the U.S Geological Survey (USGS), California Geological Survey, Riverside County hazards mapping, the U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey, and other technical reports relevant to groundwater management in the Coachella Valley (i.e., Woodward & Curran and Todd Groundwater [WCTG] 2020).

3.5.1 Environmental Setting

3.5.1.1 Regional Geologic Setting

The study area for geology, soils, and paleontological resources is focused on the northwestern portion of the Coachella Valley in the City of Palm Springs. The study area also includes nearby fault zones that have the potential to generate seismic events.

The WRSC (foreground) and San Jacinto Mountains in the distance with intervening alluvial plain and fans.

The Coachella Valley, which is surrounded on three sides by the Little San Bernardino, Santa Rosa, and San Jacinto Mountains, is located within the Salton Trough and the larger Colorado Desert Geomorphic Province of Southern California. The Salton Trough represents the northward extension of the Gulf of California, a structural depression resulting from large-scale regional faulting between the North American and Pacific plates. The Colorado Desert Geomorphic Province is bound 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 floor of the Coachella Valley ranges from approximately 1,600 feet above mean sea level (MSL) in the northwest to approximately 230 feet below MSL at the Salton Sea in the southeast. The Province is a seismically active region characterized by elevated erosion surfaces, alluvial basins, and northwest-trending mountain ranges bounded by northwest-trending strike-slip faults. The most prominent nearby fault zones are the San Andreas and San Jacinto fault zones, both of which have been active during

the Quaternary Period (the most recent 2.6 million years of Earth's history) (County of Riverside 2018).

3.5.1.2 Project Site Geologic Setting

The Project site is located in the central Coachella Valley, within the USGS Whitewater and Desert Hot Springs 7.5-minute topographic quadrangle and adjacent to the Whitewater River Stormwater Channel (WRSC) (refer to Figure 2).

The Coachella Valley is underlain by several thousand feet of sediments, including alluvial and eolian material deposited by the WRSC and strong prevailing winds, respectively. The surficial geologic units anticipated within the proposed Project area include Late Holocene-aged alluvial wash deposits (Qw) and young alluvial valley deposits (Qya) as mapped by Lancaster et al. (2012). Alluvial wash deposits (Qw) cover the WRSC and adjacent areas including most of the Project site and the 19 replenishment ponds. Young alluvial valley deposits (Qya) are mapped along, and immediately adjacent to, the State Route 111 (SR-111) alignment including a portion of the replenishment ponds.

3.5.1.3 Seismic Hazards

Active Faults

The USGS defines active faults as those that have had surface displacement within approximately the last 11,000 years, or within the Holocene era. Evidence of surface displacement can be recognized by examining geologic indicators including 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 within the last 1.6 million years, or during the Quaternary Period. 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 (County of Riverside 2018). Earthquake risk is very high in the Coachella Valley due to the presence of the San Andreas and San Jacinto faults, which are two of California's most active fault lines (County of Riverside 2018). According to the State mapping of fault zones, pursuant to the Alquist-Priolo Earthquake Fault Zoning Act of 1972 (California Public Resources Code Sections 2621-2630), the City of Palm Springs is not located in an active fault zone. However, the San Andreas, San Jacinto, and Elsinore Faults border the region on three sides and each of these has the potential for generating a significant earthquake which would impact Palm Springs and the surrounding area, including the Project site (City of Palm Springs 2007). The Project site is located approximately 3 miles west of the San Andreas Fault zone.

San Andreas Fault

The 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 offshore northern California southward to Cajon Pass near San Bernardino where it turns to the southeast and continues to the Gulf of California. Recent studies of the San Andreas Fault segment located near San Gorgonio Pass reveal that this area is more advanced in the cycle of strain accumulation than the western area at the Cajon Pass. An increase in scientific research has occurred in recent years due to earthquake activity around the Southern San Andreas, including the June 1992 Landers-Big Bear earthquakes (County of Riverside 2018).

San Jacinto Fault

The San Jacinto Fault has generated a higher level of moderate-to-large earthquakes during the past 50 to 100 years. Geodetic data indicates there is an *"appreciable"* strain accumulation across faults in the area, implying that one or more may be primed for release. Some of the larger and more active segments of the San Jacinto Fault include the Casa Loma Fault, which runs from near Perris Reservoir to just north of Anza, and the Clark Fault, which runs from near Hemet to approximately 9 miles southwest of the shore of the Salton Sea. Historically, the San Jacinto Fault shows activity on average every 14 years, with the longest known interval between events being 19 years.

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 Department of Conservation, Division of Mines and Geology. This planning scenario states that magnitude 7.0 event on the San Bernardino Valley Segment of the San Jacinto Fault Zone is a significant hazard to lives and property in western Riverside County (County of Riverside 2018).

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 (County of Riverside 2018).

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 slowly in the form of fault creep or suddenly during an

earthquake. Sudden displacements are more damaging to structures because they can quickly 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 discussed above, the proposed Project site is not located within an earthquake fault zone, and the potential for fault rupture at the site 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 epicenter, soil conditions, and depth to groundwater. The Project 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 strong, earthquake-induced ground shaking. 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. The Project site, which is located along the WRSC, contains shallow groundwater susceptible sediments and generally has a low to moderate susceptibility for liquefaction (County of Riverside 2015).

Lateral Spreading

Lateral spreading refers to landslides that commonly form on gentle slopes and that cause rapid fluidlike flow movement. 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 (County of Riverside 2018). 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. The Project site, which is located along the WRSC, is relatively flat and is considered to have a low potential for seismically induced slope failure and landslides.

Subsidence

Land subsidence (i.e., the lowering of the land surface due to extraction of groundwater such that aquifer pore spaces are no longer supported by fluid and then collapse), has been investigated by CVWD and the USGS since the 1990s. Within the Whitewater River Subbasin, up to 2 feet of subsidence occurred in the vicinity of Palm Desert, Indian Wells, and La Quinta between 1995 to 2010. However, in areas near the Facility such as Palm Springs the land surface has undergone up to 1 inch of uplift between 2011 and 2019 in response to groundwater replenishment activities at the Facility upgradient from this area (WCTG 2020).

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 Project site.

A seiche is a periodic oscillation or *"sloshing"* of water in an enclosed basin (e.g., lake or reservoir) caused by an earthquake. The existing replenishment ponds have never experienced a reported seiche and are likely not large enough to facilitate a seiche in the case of a strong seismic event. Further, given the location of the replenishment ponds more than 0.25 miles from the nearest development south of SR-111 and north of the Union Pacific Railroad, the potential destructive impacts of a seiche would be negligible on the surrounding community.

3.5.1.4 Soils

As mapped by the NRCS Web Soil Survey, the predominant soil type of the replenishment ponds site is Carsitas gravelly sand, cobbly sand, and fine sand soil map units (CdC, ChC, and CkB map units); whereas the WRSC is characterized by Carrizo stony sands (CcC) (NRCS 2020; Appendix H).

Problematic soils, including those that are expansive or highly susceptible to wind erosion, 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

Linear Extensibility (%)	Soil Expansion Potential
<3	Low
3-6	Moderate
6-9	High
>9	Very High

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. The NRCS uses linear extensibility percentage as a proxy for expansive soils (NRCS 2019). All soils in the Project site vicinity exhibit Low Expansion Potential (NRCS 2020; Appendix H).

The susceptibility of a soil to wind erosion may be expressed using the NRCS's Wind Erodibility Group expressed as values between 1 to 8 with Group 1 most susceptible to wind erosion and 8 least susceptible. Additionally, the NRCS's Wind Erodibility Index is an estimate of the amount of soil lost to wind erosion per year expressed tons per acre. All of the soil units within the Project site are assigned to Wind Erodibility Group 1 and have a Wind Erodibility Index of 220 with the potential to lose 220 tons of soil per acre per year (NRCS 2020; Appendix H).

Table 3.5-1. Soil Units Within Facility and Whitewater River Stormwater Channel

Soil Unit	Unit Name	Expansion Potential	Wind Erodibility Group	Wind Erodibility Index (tons per acre per year)
Replenishment Ponds				
CdC	Carsitas gravelly sand	Low	1	220
ChC	Carsitas cobbly sand	Low	1	220
CkB	Carsitas find sand	Low	1	220
Whitewater River Stormwater Channel				
CcC	Carrizo stony sand	Low	1	220

3.5.1.5 Paleontological Resources

Paleontological resources are fossils and fossiliferous deposits including identifiable vertebrate fossils, large or small; uncommon invertebrate, plant, and trace fossils, and other data that provide information regarding the preservation, biochronology, and paleoecology of past life on Earth (Society of Vertebrate Paleontology 2010). Assessments of paleontological resources are based on the geologic units likely to be affected by a project given the correlation between a mapped geologic unit and array of fossil resources known to be contained within that

unit based on previous work and research. The Project site is located in an area that has been mapped as underlain by alluvial wash deposits (Qw) and young alluvial valley deposits (Qya; Lancaster et al. 2012). These specific geologic units are described below.

Alluvial Wash Deposits (Qw)

Late Holocene-aged alluvial wash deposits (Qw) cover the majority of the Project site, including the WRSC where ongoing operations and maintenance activities occur. This geologic unit is characterized by unconsolidated sandy and gravelly sediments deposited in recently active channels of streams and rivers and may contain loose to moderately loose sand and silty sand (Lancaster et al. 2012). Given the very young age of these deposits and active erosion and deposition within the WRSC, the potential for ground-disturbing activities – including ongoing operations and maintenance activities for flood control berms and stormwater channel – to impact undiscovered significant paleontological resources is low.

Young Alluvial Fan Deposits (Qya)

Holocene to Late Pleistocene-aged young alluvial valley deposits (Qya) are present in the southern portion of the Project site along and immediately adjacent to the SR-111 alignment. This geologic unit is characterized by unconsolidated, undissected to slightly dissected clay, silt, sand, and gravel along stream valleys and alluvial flats of larger (Lancaster et al. 2012). Given the relatively young age of these deposits, the potential for ground-disturbing activities, in this area – including pond maintenance – to impact undiscovered significant paleontological resources is low.

Fossil Record

A review of the online paleontology locality database maintained by the University of California Museum of Paleontology was conducted on July 1, 2020 to determine the likelihood for paleontological resources to occur in the vicinity of the Project site (University of California Museum of Paleontology 2020). However, database searches for unnamed geologic units (i.e., Qw and Qya) are not immediately responsive relative to searches for named geologic units. The search recorded a total of 211 fossil localities including: 69 invertebrate localities, 17 invertebrate/microfossil localities, 1 microfossil-only locality, 20 microfossil/plant localities, 29 plant-only localities, and 75 vertebrate localities. Of the vertebrate fossil localities, 17 were recovered from Pleistocene-aged sediments closest in age to the geologic units at the Project site, but likely still older than the oldest geologic unit in the vicinity of the Project site (Qya).

3.5.2 Regulatory Framework

Federal

Paleontological Resource Preservation Act

The Paleontological Resources Preservation Act preserves paleontological resources on Federal lands (e.g., BLM-managed lands) including fossils. Any paleontological resource and any data and records associated with a known paleontological resource collected under the Act's required permits will be deposited in an approved repository. Additionally, the Act establishes prohibited actions during activities on Federal lands (e.g., excavate, remove, or damage paleontological resources) unless the activity is conducted in accordance with the Act and with proper permits.

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 (California Public Resources Code Sections 690 – 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 ground shaking, 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 ground-shaking, 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 to the Seismic Hazard Zone Maps, the Project site is not located within areas designated as Seismic Hazard Zones.

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.

3.5.3 Impacts and Mitigation Measures

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact related to geology, soils, and paleontological resources if it would:

a) Directly or indirectly cause 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 (refer to Division of Mines and Geology Special Publication 42);
    ii. Strong seismic ground 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 direct or indirect risks to life or property;
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

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, geologic hazard maps, and soil maps were reviewed to identify geologic conditions and hazards in the study area

that, because of their proximity to the Facility, could affect and/or be affected by the proposed Project.

Areas of No Project Impact

The following significance criterion is not discussed further in this analysis:

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The proposed Project is generally limited to real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Facility in compliance with the policies of the Coachella Valley WMP (2010). The proposed Project would not require or lead to the construction of any septic tanks or other alternative wastewater disposal systems. The Facility does not generate any wastewater that would require disposal via septic tank, alternative system, or sewer. Therefore, no impact would occur as a result of the proposed Project involving the continued operation and maintenance of the Facility.

Impact Analysis

Would the Project directly or indirectly cause 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 (refer to Division of Mines and Geology Special Publication 42);*
ii. *Strong seismic ground shaking;*
iii. *Seismic-related ground failure, including liquefaction; or*
iv. *Landslides?*

Impact GEO-1. The existing Whitewater River Groundwater Replenishment Facility is not located within a designated Alquist-Priolo Fault Zone. However, the Facility is located in a seismically active area and seismically induced ground shaking could destroy or damage the ponds or associated infrastructure, resulting in the loss of property or risk to human safety. Nevertheless, continued compliance with all applicable provisions of Federal, State, and local construction and design standards would limit potential hazards associated with the proposed Project and impacts would be less than significant. (Less than Significant.)

Fault Rupture

Based on the Whitewater and Desert Hot Springs Quadrangle Seismic Hazard Zone Maps, no known fault traces cross beneath the Project site or its immediate vicinity. Additionally, the Project site is not mapped within an Alquist-Priolo Fault Zone (California Department of Conservation 2020a). As described in Section 3.4.2.3, *Seismic Hazards*, the mapped faults located nearest to the Project site are the Garnet Hill and San Andreas faults, located approximately 1.4 and 2.8 miles north of the Project site, respectively. Therefore, the risk of fault rupture in the immediate vicinity of or directly beneath the Project site is very low. Impacts related to fault rupture would be less than significant and no mitigation measures would be required.

Ground Shaking

The Project site is located within the seismically active region of Southern California. During an earthquake on any of the nearby faults, strong seismic ground shaking has the potential to affect the structural stability of existing structures, with associated human health risks. However, CVWD would continue to comply with the relevant State and local standards relevant to the operation and maintenance of the existing Facility.

For example, as described in Section 3.4.2, *Regulatory Framework*, CVWD has adopted the 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. Additionally, no new habitable structures are proposed as part of the requested issuance of a right-of-way grant, thus no risk to human health from the structural integrity of buildings during seismic shaking would result. Therefore, impacts from strong seismic ground shaking would be less than significant and no mitigation measures would be required.

Liquefaction

The Project site is not located within the State of California Seismic Hazards Map designated liquefiable area and no liquefaction risk zones occur within the region, and is therefore not subject to substantial potential for liquefaction (California Department of Conservation 2020b, 2020c). The City's Seismic Hazards Map identifies the Project site's risk for liquefaction as low, which took into consideration historical and ongoing use of the Facility for groundwater storage (City of Palm Springs 2007). Because the Facility is located in an area with low risk for liquefaction, and the proposed Project would not result in additional physical development of the Project site or the surrounding vicinity, impacts from liquefaction would be less than significant and no mitigation measures would be required.

Landslides and Other Land Movement

The Project site is not located in a designated area by the California Geologic Survey Seismic Hazard Maps for Earthquake-Induced Landslides (California Department of Conservation

2020c). 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 Project site is low due to the flat topography. No documented areas of subsidence have been identified on or near the Project site. Continued operation and maintenance of the Facility under the proposed Project would involve ground-disturbing activities only as needed to repair or relocate berms in the Facility or within the WRSC. Additionally, structures would not be exposed to seismic ground failure because no habitable structures are proposed and would not increase or otherwise affect 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 subsidence, and expansion would be less than significant and no mitigation measures would be required.

Would the Project result in substantial erosion or the loss of topsoil?

Impact GEO-2. The requested issuance of a right-of-way agreement would allow for the continued operation and maintenance of the Whitewater River Groundwater Replenishment Facility, but would not result in substantial soil erosion or the loss of topsoil. While the proposed Project would involve ground disturbance and excavation of soils for maintenance purposes, continued compliance with all applicable provisions of Federal, State, and local construction and design standards would render impacts less than significant for the life of the proposed Project. (Less than Significant.)

Grading and excavation at the Project site would result in disturbance to surficial soil units including Carsitas and Carrizo units described above in Section 3.5.2.3, *Soils*. However, the renewal area and the amendment area are developed with existing CVWD water and access infrastructure (e.g., groundwater replenishment ponds, berms, dikes, roads, etc.) and have been highly altered from their original, natural state – particularly within the replenishment ponds where the natural wind erosive soils are frequently covered with water preventing wind erosion. Further, continued enforcement of the existing limits on construction, operations, and maintenance activities when wind speeds exceed 25 miles per hour would prevent ground-disturbing activities during periods where wind erosion of soils is most likely. Consequently, no substantial loss of topsoil due to ground-disturbing activities during operations and maintenance of the Facility would be expected.

Potential water erosion of soils may result from grading, excavation, and channel maintenance, and other ground disturbance during operations would be controlled with implementation of erosion control measures included in the 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). Best management practices 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 3.7, *Hydrology and Water Quality*, for further explanation of SWPPP requirements). The SWPPP would include best management practices 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. Therefore, potential impacts to soil resources would be less than significant and no mitigation measures would be required.

Would the Project 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?

Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Impact GEO-3. The Project site is not located on a geologic unit that is unstable, or that would become unstable as a result of the proposed 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 continued operation and maintenance of the groundwater recharge facilities under the proposed Project would not alter the topography such that an increased likelihood of landslides would result. The potential for lateral spreading at the Project site is low due to the flat topography. No documented areas of subsidence have been identified on or near the Project site. All soils in the vicinity of the Project site exhibit low expansion potential. Continued operation and maintenance of the Facility would involve routine repair to berms in the earthen channels and basins within the WRSC. As described in Section 3.5.2.2, *Project Site Geologic Setting*, past groundwater recharge activities at the Facility are linked to land surface rebound (i.e., reversal of past subsidence) in the vicinity of the Facility. It is expected the continued groundwater recharge activities under the proposed Project would contribute to further land surface rebound and would not cause additional subsidence in the vicinity of the Facility or within the greater Coachella Valley. Therefore, potential impacts associated with the characteristics of geologic units and potential for landslides, lateral spreading, and expansion would be less than significant and no mitigation measures would be required.

Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Impact GEO-4. Proposed soil disturbance and excavation associated with maintenance activities of the Project site has the potential to encounter unique paleontological resources in the subsurface. Continued compliance with all applicable provisions of State and local construction and design standards would render impacts less than significant for the life of the proposed Project. (Less than Significant.)

Surficial geologic units (Qw and Qya) within the WRSC and at the Facility have a low potential for containing paleontological resources and would continue to be disturbed by operations and maintenance activities associated with the Facility under the proposed Project. These activities (e.g., pond maintenance, berm repair or relocation, etc.) would have a low potential for encountering paleontological resources due to the comparatively young age of the geologic units. Older, potentially fossiliferous sediments may underlie the surficial units at an unknown depth but given that the proposed Project does not include new excavations or other ground-disturbing activities it is unlikely that any older fossiliferous units would be disturbed. Additionally, the Facility is constructed in an alluvial fan, common to the edges of the Coachella Valley, and no unique geological features are present. Therefore, because Project-related ground-disturbing activities would occur in young geologic units that have a low potential for containing paleontological resources and no unique geologic features are present at the Project site, potential impacts on paleontological resources would be less than significant and no mitigation measures would be required.

3.6 GREENHOUSE GAS EMISSIONS

This section analyzes the potential environmental impacts of the proposed Project related to GHG emissions. GHG emissions would be generated during the continued operation and maintenance of the Facility under the proposed Project including: grading for berm and road maintenance; energy demands for power within buildings and other infrastructure; and generation of Project-related vehicle trips. As described further in Section 3.6.3, *Impacts and Mitigation Measures*, Project-related GHG emissions have been estimated using CalEEMod Version 2016.3.2.

There are several challenges to analyzing GHG emissions and global climate change under CEQA. The approach to analysis of GHG emissions under CEQA is fundamentally different from the approach to analysis of criteria air pollutant emissions (refer to Section 3.1, *Air Quality*). As air quality is linked to conditions in a particular air basin, it is appropriate to consider the creation of new emissions in that air basin to be an environmental impact, regardless of whether the emissions are truly *"new"* emissions regionally or globally. Within the global context of climate change, it is important to consider whether GHG emissions are truly new emissions or are merely replacing existing emissions or being moved from one place to another. Impact analyses typically address local development projects or long-term land use plans that may have local or regional impacts. In contrast, climate change presents the considerable challenge of analyzing the relationship between local projects and the potential for global environmental impacts, if any. For instance, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of a development project on global climate change. This makes an accurate analysis of GHG emissions substantially different from criteria pollutant emissions, where the *"addition"* of redistributed emissions to a new locale have the potential to result in a substantial difference to overall air quality.

3.6.1 Environmental Setting

The Project site is located in the City of Palm Springs in Riverside County, within the Salton Sea Air Basin (Basin). The Basin includes Imperial County and most of the low desert areas of central Riverside County. As described in Section 3.1, *Air Quality*, the Basin 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 regional climate within the Basin is considered arid continental, and is characterized by hot, dry summers, moderate to cool winters, gusty high winds, and large diurnal variations in temperature. Climate change within the Basin is influenced by a wide range of emission sources, such as utility usage, vehicular traffic, and industry.

Overview of Global Climate Change

Climate change is defined as *"any significant change in the measures of climate lasting for an extended period of time"* including major changes in temperature, precipitation, or wind

patterns, among other conditions, that occur over several decades or longer. These changes are caused by several natural factors, including oceanic processes, variations in solar radiation received by Earth, plate tectonics and volcanic eruptions, as well as anthropogenic (i.e., human-related) activities.

The Earth's natural warming process is known as the *"greenhouse effect."* The Earth's atmosphere consists of a variety of gases that regulate the Earth's temperature by trapping solar energy; these gases are cumulatively referred to as GHGs because they trap heat like glass of a greenhouse. GHG emissions are the primary anthropogenic driver of climate change. Relying on decades of research, the overwhelming majority of the scientific community agrees that human activities, which include the burning of fossil fuels to produce energy and deforestation, have contributed to elevated concentration of GHGs in the atmosphere since the Industrial Revolution (Intergovernmental Panel on Climate Change [IPCC] 2014a). The human production and release of GHGs to the atmosphere has caused an increase in the average global temperature. While the increase in global temperature is known as *"global warming,"* the resulting change in weather patterns is known as *"global climate change."*

The effects of global climate change have global consequences as adverse effects from climate change are distributed across the globe including sea level rise, flooding, increased weather variability and intensified storm events, reduced reliability of water supplies, reduced quality of water supplies, and increased stress on ecosystems that reduce biodiversity. Climate change may have impacts to human health due to heat waves and extreme weather events, reduced air quality, and increased climate-sensitive diseases, including food-borne, water-borne, and animal-borne diseases (World Health Organization 2018).

Greenhouse Gases

GHGs consist of a variety of gases that have the potential to trap heat, mainly water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), O_3, and chlorofluorocarbons (CFCs). Methodologies and regulations approved by the IPCC, USEPA, and CARB focus on CO_2, CH_4, N_2O, and CFCs. CFCs have been banned and have no natural source, so these GHGs are not included in this analysis. The following provides a brief description of each of the relevant GHGs and their sources:

CO_2 The natural production and absorption of CO_2 occurs through the burning of fossil fuels (e.g., oil, natural gas, and coal), solid waste, trees and wood products, and as a result of other chemical reactions, such as those required to manufacture cement. Globally, the largest source of CO_2 emissions is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, and industrial facilities. CO_2 is sequestered (i.e., removed from the atmosphere) when it is absorbed by plants as part of the carbon cycle.

CH_4 CH_4 is emitted from a variety of both human-related and natural sources. Anthropogenic sources include the production and transport of coal, natural gas, and

oil, from livestock and other agricultural practices, and from the decay of organic waste in municipal solid waste landfills. It is estimated that up to 65 percent of global CH_4 emissions are related to human activities. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and wildfires (USEPA 2019).

N_2O Concentrations of N_2O also began to rise at the beginning of the Industrial Revolution, reaching 314 parts per billion (ppb) by 1998. Microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen, produce nitrous oxide. In addition to agricultural sources, some industrial processes (e.g., fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to the atmospheric load of N_2O (USEPA 2019).

"Global warming potential" is a simplified index – based upon radiative properties of individual GHGs – that can be used to estimate the potential future impacts of emissions of different gases upon the climate system. The common metric of carbon dioxide equivalent (CO_2e) is used to report a combined impact from all GHGs. This metric scales the global warming potential of each GHG to that of CO_2. GHG emissions are typically expressed in metric tons (MT CO_2e), millions of metric tons (Tg CO_2e), or billions of metric tons (Gt CO_2e) (USEPA 2017).

Existing GHG Emissions from Human Activity

The burning of fossil fuels (e.g., coal, oil, gasoline, diesel, etc.) especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO_2 emissions (and thus substantial increases in atmospheric concentrations). In 2019, atmospheric CO_2 concentrations were 412 ppm, which represented an increase of nearly 50 percent above the pre-industrial concentrations that were present prior to 1750 (National Aeronautics and Space Administration [NASA] 2019).

Global GHG Emissions

The IPCC's Fifth Assessment Report, which was published in 2014 reported that global GHG emissions were estimated at 49 Gt CO_2e per year, with CO_2 making up 76 percent of the total anthropogenic GHG emissions. This is an overall increase in GHG emissions of 71 percent from the 28.7 Gt CO_2e of emissions in 1970 (IPCC 2014a). Annual anthropogenic GHG emissions have increased by 10 Gt CO_2e between 2000 and 2010, with this increase directly coming from energy supply (47 percent), industry (30 percent), transport (11 percent), and buildings (30 percent) sectors. About half of cumulative anthropogenic CO_2 emissions between 1750 and 2010 have occurred in the last 40 years. In 1970, cumulative CO_2 emissions from fossil fuel combustion, cement production, and flaring since 1750 were 420 Gt CO_2e, since 1970 to 2010, that cumulative total tripled to 1,300 Gt CO_2e (IPCC 2014b).

U.S. GHG Emissions

The U.S. emitted 6.46 billion tons of CO_2e in 2017. Total U.S. emissions have increased by 1.3 percent from 1990 to 2017 but decreased by nearly 7 percent from 2010 to 2017. Fossil fuel combustion accounted for 93 percent of CO_2 emissions and approximately 75 percent of total U.S. GHG emissions in 2017. In 2017, total GHG emissions by sector were 28 percent for the electric power industry, 29 percent for transportation, 22 percent for industry, 9 percent for agriculture, 6 percent for commercial, and 5 percent for residential (USEPA 2020).

State of California GHG Emissions

In 2017, California generated approximately 424.1 Tg CO_2e, or approximately 7 percent of total U.S. emissions. This is due primarily to the high population and size of California compared to other states. Despite a population increase of 6.2 percent between 2000 and 2018, the State's gross per capita emissions were reduced 24 percent from the 14.1 MT CO_2e per person in 2001 to 10.7 MT CO_2e per person (CARB 2018; U.S. Census Bureau 2019). Transportation is the source of approximately 40 percent of the State's GHG emissions, followed by industrial sources at 21 percent, and electricity generation – both in-State and out-of-State – at 15 percent. Residential and commercial sources account for 10 percent, respectively, while agriculture accounts for 8 percent (CARB 2018).

City of Palm Springs Emissions

In 2010 (i.e., the most recent GHG inventory), the City of Palm Springs emitted 431,594 metric tons (or tonnes) CO_2e, slightly below the 1990 level. To be compliant with AB 32, the City of Palm Springs needs to maintain its emissions at no more than 432,136 metric tons, the 1990 level. In 2010, the largest percentage of emissions – over 41 percent – came from the electricity used to power homes in the City. This was followed by natural gas use (approximately 28 percent) and transportation fuel (approximately 20 percent).

Project Site Emissions

The Project site is located within the City of Pam Springs, south of the communities of Whitewater and North Palm Springs and north of The Cove subdivision in unincorporated Riverside County (refer to Section 2.2, *Project Location* and Figure 2). The Project site is currently developed as the Whitewater Groundwater Replenishment Facility, which generates operational GHG emissions associated with the minor building energy and water use needs, passenger vehicle trips generated by CVWD employees to the Project site, and heavy construction equipment associated with maintenance of berms. As described in Section 3.6.3, *Impacts and Mitigation Measures*, existing Project site operational GHG emissions were modeled using CalEEMod based on the existing operations onsite. The Project site currently contributes 203.59 MT CO_2e per year (see Table 3.6-1).

3.6.2 Regulatory Framework

Global climate change is addressed through the efforts of various Federal, State, regional, and local government agencies, as well as national and international scientific and governmental conventions and programs. These agencies work jointly and individually to understand and regulate the effects of GHG emissions and resulting climate change through legislation, regulations, planning, policymaking, education, and a variety of additional programs. The primary agencies, conventions, and programs focused on global climate change are discussed below.

Federal

Executive Order No. 13514 Federal Leadership in Environmental, Energy, and Economic Performance

From the White House, Executive Order No. 13514 Federal Leadership in Environmental, Energy, and Economic Performance expands national efforts to reduce GHG emissions and environmental performance requirements for federal agencies identified in Executive Order No. 13423 Federal Leadership in Environmental, Energy, and Economic Performance. Executive Order No. 13514 integrates a strategy for sustainability into the federal government and makes reduction of GHG emissions a priority for federal agencies.

Title 40 Code of Federal Regulations, Part 98 – Greenhouse Gases Mandatory Reporting Program

Under this rule, suppliers of fossil fuels or industrial GHG, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the USEPA. Facilities classified as general stationary fuel combustion sources, including electricity services must report emissions if annual rates equal or exceed 25,000 metric tons of GHG.

Executive Order No. 14008 Tackling the Climate Crisis at Home and Abroad

From the White House, Executive Order No. 14008 Tackling the Climate Crisis at Home and Abroad includes requirements that Federal permitting decisions consider the effects of GHG emissions and climate change.

State

Executive Order S-3-05 and Assembly Bill 32

Former Governor Schwarzenegger issued Executive Order S-3-05 on June 1, 2005, identifying the following GHG emission reduction targets:

- By 2010, California shall reduce GHG emissions to 2000 levels
- By 2020, California shall reduce GHG emissions to 1990 levels

- By 2050, California shall reduce GHG emissions to 80 percent below 1990 levels

The Secretary of California Environmental Protection Agency (CalEPA) has been charged with coordination of efforts to meet these targets and formed the Climate Action Team (CAT) to implement the Order. The CAT also provided strategies and input to the CARB Scoping Plan.

In 2006, the California State Legislature adopted AB 32 (codified in California Health and Safety Code Division 25.5 – California Global Warming Solutions Act), to codify the targets in Executive Order S-3-05 of reducing GHG emissions in California to 1990 levels by 2020. The California Global Warming Solutions Act of 2006 recognizes that California is a major contributor to U.S. GHG emissions. AB 32 acknowledges that such emissions cause significant adverse impacts to human health and the environment, and therefore must be identified and mitigated where appropriate. The law further requires that reduction measures be technologically feasible and cost effective. Under AB 32, CARB has the primary responsibility for reducing GHG emissions. CARB is required to adopt rules and regulations directing State actions that would achieve GHG emissions reductions equivalent to 1990 State-wide levels by 2020.

Senate Bill 97

SB 97, adopted in 2007, amends CEQA to establish that GHG emissions and their effects are appropriate subjects for CEQA analysis, and directs the California Governor's Office of Planning and Research (OPR) to develop draft CEQA Guidelines for evaluating and mitigating GHG emissions and global climate change effects. In March 2010, the California Office of Administrative Law codified into law CEQA amendments that provide regulatory guidance with respect to the analysis and mitigation of the potential effects of GHG emissions, as found in CEQA Guidelines Section 15183.5. The California Resources Agency adopted the Guidelines in January 2009.

However, neither a threshold of significance nor any specific mitigation measures are included or provided in these amendments to the CEQA Guidelines. Rather, the CEQA Guidelines require a lead agency to make a good-faith effort based on the extent possible on scientific and factual data, to describe, calculate, or estimate the amount of GHG emissions resulting from a project. The CEQA Guidelines give discretion to the lead agency whether to: (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use; and/or (2) rely on a quantitative analysis or performance-based standards. Further, the CEQA Guidelines identify three factors that should be considered in the evaluation of the significance of GHG emissions:

1. The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;

2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and

3. The extent to which the project complies with regulations or requirements adopted to implement a State-wide, regional, or local plan for the reduction or mitigation of GHG emissions.

Senate Bill 375, Sustainable Communities and Climate Protection Act

The adoption of SB 375 on September 30, 2008 created a process whereby local governments and other stakeholders must work together within their region to achieve the GHG reductions specified in AB 32 through integrated development patterns, improved transportation planning, and other transportation measures and policies. Under SB 375, the CARB is required to set regional vehicular GHG reduction targets for 2020 and 2035. Additionally, SB 375 required that those targets be incorporated within an SCS, a newly required element within the Metropolitan Planning Organization's (MPO's) Regional Transportation Plan (RTP).

On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that require a 7 percent to 8 percent reduction by 2020 and between 13 percent and 16 percent reduction by 2035 relative to emissions in 2005 for each MPO.

Executive Order S-13-08, Climate Adaptation and Sea Level Rise Planning Directive

Executive Order S-13-08 provides clear direction for how the State should plan for future climate impacts. The first result is the 2009 California Adaptation Strategy (CAS) report which summarized the best-known science on climate change impacts in the State to assess vulnerability and outlines possible solutions that can be implemented within and across State agencies to promote resiliency.

CARB Scoping Plan

CARB, an entity with the CalEPA organization, is responsible for the coordination and administration of both Federal and State air pollution control programs within California. In this capacity, CARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs.

On December 11, 2008, CARB adopted the first Scoping Plan (CARB 2008) as directed by AB 32. The Scoping Plan presented a set of actions designed to reduce overall GHG emissions in California to the levels required by AB 32. The initial Scoping Plan provided an economy-wide approach to reducing emissions and highlighted the value of combining both carbon pricing with other complementary programs to meet California's 2020 GHG emissions target while ensuring progress in all sectors. Relative to transportation, the Scoping Plan included nine measures or recommended actions related to reducing vehicle miles traveled (VMT) and

vehicle GHGs through fuel and efficiency measures. These measures would be implemented State-wide rather than on a project-by-project basis.

Pursuant to AB 32, CARB is required to update the scoping plan at least every 5 years. CARB released the First Update to the Climate Change Scoping Plan in May 2014 to provide information on the development of measure-specific regulations and to adjust projections in consideration of the economic recession. The 2014 Update to the Scoping Plan presented an update on the program and its progress toward meeting the 2020 limit. It also developed the first vision for long-term progress beyond 2020. It also identified the need for a 2030 mid-term target to establish a continuum of actions to maintain and continue reductions, rather than only focusing on targets for 2020 or 2050. In response to Executive Order B-30-15 and SB 32, all State agencies with regulatory jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the Scoping Plan to reflect the 2030 target. On December 14, 2017, the 2017 Climate Change Scoping was approved by CARB on December 14, 2017 (CARB 2017). The 2017 Scoping Plan builds upon the framework established by the first Scoping Plan and 2014 Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that the State meets its GHG reduction targets.

Subsequent to the 2017 Scoping Plan, CARB adopted more aggressive SB 375 targets in 2018 as one measure to support progress toward the Scoping Plan goals, which aim to get SCSs that plan to achieve, in aggregate, a 19 percent reduction in State-wide per capita GHG emissions reductions relative to 2005 by 2035 from passenger vehicles. However, CARB recognized that additional state and local actions are needed to achieve the transportation system reductions necessary to meet our climate goals, which is approximately 25 percent reduction in State-wide per capita GHG emissions by 2035 relative to 2005. In 2019, CARB released a 2017 Scoping Plan Update which includes a discussion of the relationship between local government actions and achievement of the State's long-term GHG emissions reduction goals, and non-binding recommendations to support local governments in their efforts to reduce GHG emissions. The 2017 Scoping Plan Update also identifies that slower growth in VMT from more efficient land use development patterns would promote achievement of the State's climate goals.

Executive Order B-30-15, Senate Bill 32, and Assembly Bill 197

Former Governor Brown issued Executive Order B-30-15 on April 29, 2015 which set a new State-wide policy goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. This order acts as an intermediate goal to achieving 80 percent reductions by 2050 as outlined in Executive Order S-3-05 above. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in AB 32. California's new emission reduction target of 40 percent below 1990 levels by 2030 will make it possible to reach the long-term goal established by Executive Order S-3-05 of reducing emissions 80 percent under 1990 levels by 2050.

Senate Bill 350, Clean Energy and Pollution Reduction Act

SB 350 was adopted in 2015. SB 350 establishes California's 2030 GHG reduction target of 40 percent below 1990 levels and sets out to help the State achieve this goal by setting ambitious 2030 targets for energy efficiency and renewable electricity (California Energy Commission [CEC] 2017).

Senate Bill 32, California Global Warming Solutions Act, and Assembly Bill 197

SB 32 and AB 197 were both signed by former Governor Jerry Brown on September 8, 2016 and became effective on January 1, 2017. SB 32 codified the GHG emissions target in Executive Order B-30-15 of 40 percent below 1990 levels by 2030. AB 197 is paired with SB 32 and is a measure that increases legislative oversight over the CARB, to ensure strategies to lower emissions favor those most impacted by climate change.

Executive Order B-55-18

Executive Order B-55-18 (September 2018) establishes a State-wide goal to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter. The Executive Order demonstrates the State's continued commitment to address climate change.

Regional

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in portions of Riverside County including the City of Palm Springs and the Project site. To provide guidance to local lead agencies on determining significance for GHG emissions in environmental documents, the SCAQMD staff has convened a GHG Significance Threshold Working Group. Members of the working group include government agencies and representatives from various stakeholder groups that provide input to SCAQMD staff on developing the significance thresholds.

As of the present date, the only regulation adopted by the SCAQMD addressing the generation of GHG emissions is the establishment of a 10,000 MT CO_2e per year screening level threshold of significance for stationary source industrial projects for which the SCAQMD is the lead agency.

SCAQMD released a draft guidance document regarding interim CEQA GHG significance thresholds in October 2008. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for stationary sources (i.e., industrial projects) where the SCAQMD is lead agency. SCAQMD proposed a tiered approach, whereby the level of detail and refinement needed to determine significance increases with a project's total GHG emissions. The tiered approach defines projects that are exempt under CEQA and projects that are within the jurisdiction of, and subject to the policies of, a GHG

Reduction Plan as less than significant. These thresholds have not been finalized and continue to be developed through the working group.

On September 28, 2010, SCAQMD Working Group Meeting #15 provided further guidance, including a screening level numeric "bright-line" threshold of 3,000 metric tons of CO_2e annually and an efficiency-based threshold of 4.8 metric tons of CO_2e per service population (defined as the people who work, study, live, patronize and/or congregate on a project site) per year in 2020 and 3.0 metric tons of CO_2e per service population per year in 2035. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the governing board.

Riverside County Climate Action Plan

In November 2019, the County of Riverside updated its Climate Action Plan (CAP) to meet the State's long-term targets of reducing GHG emissions by 40 percent below 1990 annual emissions levels by year 2030 and by 80 percent below 1990 levels by year 2050. The CAP Update anticipates most reductions would come from increased energy efficiency, increased renewable energy, recycling waste, and reduced transportation-related emissions through increased use of alternative transportation. The CAP Update summarizes the County's historic and future GHG emissions and identifies opportunities for the County to increase energy efficiency and lower GHG emissions in a manner that is most feasible in the community. However, the communitywide GHG inventory represents all emissions from sources located within the unincorporated areas of Riverside County.

Riverside County Greenhouse Gas Screening

As part of the 2018 updated CAP, the County implemented cost effective strategies for reducing community-wide GHG emissions associated with new development projects. These strategies include applying an emissions level that is determined to be less than significant for small projects and utilizing the Screening Tables to mitigate project-related GHG emissions that exceed a threshold of 3,000 metric tons of CO_2e per year. This threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to the State-wide GHG emissions reduction goals for 2020 promulgated under AB 32 and the post-2020 reduction goals promulgated under SB 32. The purpose of the Screening Tables is to provide guidance in measuring the reduction of GHG emissions attributed to certain design and construction measures incorporated into development projects.

Local

City of Palm Springs General Plan

The City of Palm Springs has prepared a series of objectives, policies, and implementation programs related to air quality as part of the Palm Springs General Plan (2007). The objectives rely on cooperation with the SCAQMD regarding stationary sources.

For mobile sources, the objectives and policies encourage a balance between jobs and housing, as well as increased use of mass transit, carpooling and clean-burning energy sources for motorized vehicles. The implementation program addresses coordinating local transit improvements and carpooling and van pooling programs, adopting and implementing a Transportation System Management/Transportation Demand Management Ordinance, and establishing regular meetings with CVAG and the SCAQMD to implement regional actions to reduce local air pollutant emissions.

The Palm Springs General Plan (2007) policies require the development of bikeways and pedestrian paths and encourage balanced development that reduces vehicle miles traveled by providing jobs in this *"housing rich"* area. The Palm Springs General Plan policies require that CCR Title 24 be implemented and enforced and encourage the use of passive design concepts to increase energy efficiency.

City of Palm Springs Climate Action Plan

In 2013, the City completed a CAP, which provides a decision-making framework grounded on achieving the largest and most cost-effective GHG emissions reductions. The plan includes GHG inventory results along with policies, programs, and initiatives that can be implemented to meet reduction goals in Palm Springs. The CAP works towards the 2009 Sustainability Master Plan goal of being "carbon neutral" by establishing emission reduction goals (e.g., Mayor's Climate Protection Agreement, AB 32) and specific actions to achieve those goals. The actions outlined in the CAP are consistent with those outlined in the Sustainability Plan.

The City's CAP includes the following applicable policies related to reduction of GHG emissions.

Mobility 13 – Anti-Idling: Pass ordinance that restricts idling (in specific City zones) of greater than 5 minutes for all commercial vehicles

Recreate 2 – Ecotourism: Form public/private partnership to promote eco-tourism and tours of wind farms, solar arrays, and geothermal systems in the Valley

City of Palm Springs Sustainability Plan

The City of Palm Springs 2009 Sustainability Master Plan identified actions that enhance the economy, ecosystems, and quality of life in the City. This document provided the framework for future operational and policy decisions to incorporate sustainability is every aspect in the City. The plan set realistic goals, objectives, and detailed actions to achieve these goals. Community outreach events and surveys provided insight on the existing plans, priority topics, and ways to enhance and encourage sustainable practices. The 2009 Plan is superseded by the City's 2016 Sustainability Plan.

The Palm Springs Sustainability Plan, updated in May 2016, sets GHG emissions reduction targets for the City to address climate change impacts. The Sustainable City Plan includes targets of reducing GHG emissions to 1990 levels by 2020 and by at least 80 percent below

1990 levels by 2050. The Sustainable City Plan anticipates most reductions would come from increased energy efficiency, increased water conservation, and reduced transportation-related emissions through increased use of alternative transportation.

3.6.3 Impacts and Mitigation Measures

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact related to GHG emissions if it would:

a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or,
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG.

Most individual projects do not generate sufficient GHG emissions to create significant project-specific environmental 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 (CEQA Guidelines Section 15064[h][1]). Evaluating 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 where 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 previously described, the County of Riverside developed review process procedures for evaluating project-specific GHG impacts and determining significance for CEQA purposes, which are streamlined through: (1) the application of an emissions level that is determined to be less than significant for small projects; and (2) the utilization of Screening Tables to mitigate project GHG emissions that exceed the threshold level. A threshold level of 3,000 MT CO_2e per year is used to define small projects that are considered less than significant and do not require the use of the County's Screening Tables or alternative GHG mitigation analysis. Similarly, the SCAQMD also recommends a screening level numeric "bright-line" threshold of 3,000 MT CO_2e annually. The 3,000 MT CO_2e per year threshold was developed to ensure at least 90 percent of new GHG emissions would be reviewed and assessed for mitigation, thereby contributing to the State-wide GHG emissions reduction goals for 2020 promulgated under AB 32 and the post-2020 reduction goals promulgated under SB 32.

In the absence of updated specific guidance or recommendations for significance thresholds specifically designed to focus on operational emissions reductions beyond 2020, the sum of the proposed Project's annual GHG emissions are compared to the County of Riverside and SCAQMD GHG screening threshold of 3,000 MT CO_2e to determine significance. Therefore,

the proposed Project would be considered less than significant if Project-related GHG emissions are estimated to be below 3,000 MT CO_2e per year.

Methodology for Analysis

With respect to GHG emissions, CEQA Guidelines Section 15064.4(a) states that lead agencies should *"make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate"* GHG emissions. The CEQA Guidelines note that a lead agency shall have the discretion to *"quantify the GHG emissions from a project, and/or rely on a qualitative analysis or other performance-based standards."*

CEQA Guidelines Section 15064.4 gives lead agencies the discretion to determine whether to assess the significance of GHG emissions quantitatively or qualitatively. Under either approach, the lead agency's analysis must demonstrate a good faith effort to disclose the amount and significance of GHG emissions resulting from a project, based to the extent possible on scientific and factual data (CEQA Guidelines Section 15064.4[a]).

The analysis of environmental impacts includes the consistencies with plans and policies that address GHG emissions locally and State-wide as a basis for impact findings. This analysis also included quantification of estimated GHG emissions for the continued operation of the existing Facility.

Project-related GHG emissions were estimated using the CalEEMod Version 2016.3.2. Operational emissions for energy use were calculated using estimated electricity consumption and energy intensity factors for GHG emissions from Southern California Edison. Operation of the proposed Project would include general daily maintenance activities (e.g., driving around the Facility, ensuring radial gates and water channels are working properly, etc.), annual pond maintenance, and temporary relocation of Berm #2 on Section 24 before and after heavy storm events (refer to Section 3.1, *Air Quality*, for further description of the CalEEMod inputs). GHG emissions would be generated from operation of heavy equipment (particularly during annual pond maintenance activities), energy demands for operation of the radial gates, and workers vehicle trips to and from the Project site. It should be noted that the calculated GHG emissions included the conservative assumption of heavy equipment operating continuously throughout the workday; however, heavy equipment typically operates only periodically or cyclically throughout the workday. Therefore, the GHG emissions shown reflect a conservative, worst-case estimate. A complete listing of heavy equipment by operational activity, emission factors, and calculation parameters used in this analysis is included within the emissions calculation worksheets provided in Appendix B of this EIR.

Impact Analysis

Would the Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG?

Impact GHG-1. Continued operation of the Facility under the proposed Project would contribute to global greenhouse gas (GHG) emissions. However, GHG emissions associated with the proposed Project would result in a net zero increase over existing conditions. Therefore, the proposed Project would not conflict with GHG reduction policies in the Southern California Association of Governments (SCAG) 2020-2045 Regional Transportation Plan / Sustainable Communities Strategy (RTP/SCS) and City of Palm Springs Sustainability Plan. (Less than Significant.)

Project GHG Emissions

The total operational GHG emissions generated by the existing Facility is approximately 203.59 MT CO_2e/year (see Table 3.6-1). Since the right-of-way grant associated with the proposed Project would allow for continued CVWD operations at the Facility and would not result in *changes* in operations, GHG emissions presented in Table 3.6-1 represent both the existing GHG emissions at the Project site as well as the GHG emissions that would occur under the proposed Project. As such, the proposed Project would result in no new GHG emissions.

The majority of the Facility's GHG emissions result from mobile sources (i.e., heavy equipment used during routine maintenance of the Facility). Mobile-source GHGs emissions would be expected to decline over the next decade as older vehicles are replaced with newer vehicles resulting in a greater percentage of the vehicle fleet meeting more stringent combustion emissions standards.

Table 3.6-1. Annual Operational GHG Emissions for the Proposed Project

Annual Operational Emissions by Activity	GHGs (MT CO_2e)
Daily Maintenance	21.32
Pond Maintenance	176.02
Section 24 Work	6.25
Total	**203.59**
County of Riverside and SCAQMD Bright-Line Threshold	*3,000*
Exceeds Threshold?	**No**

Source: See Appendix B.

The proposed Project would result in no increases in GHG emissions relative to existing GHG emissions at the Facility. Additionally, operational GHG emissions generated by Project-related maintenance activities would continue to be well below the County of Riverside's and SCAQMD's threshold of 3,000 MT CO_2e. Therefore, impacts related to GHG emissions would be less than significant and no mitigation measures would be required.

Project Consistency with City of Palm Springs Climate Action Plan, Sustainable City Plan, and Climate Action & Adaptation Plan

The proposed Project would support the City's GHG reduction goals and policies established in the Palm Springs CAP and Sustainability Plan (see Table 3.6-2). The requested right-of-way agreement under the proposed Project would allow for the continued operation of the Facility; no physical changes to the environment or operational changes would occur. The City supports CVWD's efforts to expand its water supply reliability and the Project is consistent with local GHG reduction policies (see Table 3.6-2).

Table 3.6-2. Project Consistency with Land Use and Circulation Element, Sustainable City Plan, and Climate Action & Adaptation Plan

Policy	Relationship to Project
City of Palm Springs Climate Action Plan	
Mobility 13. Anti-Idling: Pass ordinance that restricts idling (in specific City zones) of greater than 5 minutes for all commercial vehicles	**Consistent.** Consistent with California Idling Regulations as defined by CARB and SCAQMD Rule 403, which prohibit heavy-duty diesel vehicles from idling for longer than 5 minutes, CVWD operations limit vehicle idling to no more than 5 minutes. Project operations would continue to limit vehicle idling to no more than 5 minutes, consistent with existing regulations.
Recreate 2. Ecotourism: Form public/private partnership to promote eco-tourism and tours of wind farms, solar arrays, and geothermal systems in the Valley	**Consistent.** CVWD regularly provides opportunities for eco-tourism with tours to the public and to private groups as part of an ongoing effort to educate the community on the water-related services and needs of the Coachella Valley. Tours offer an opportunity for customers to see the "behind-the-scenes" aspects of the CVWD services, while allowing the CVWD the opportunity to share important information about infrastructure, sustainability, and water quality. Tours are offered at several CVWD facilities, including the Whitewater Groundwater Replenishment Facility. The proposed lease renewal would allow for continued operation of the Facility and continued opportunities for eco-tourism at the Project site.
City of Palm Springs Sustainability Plan	
Partner with State, Federal, regional, and county agencies to develop short-term actions that improve community resilience.	**Consistent.** As a groundwater replenishment project, the proposed Project would continue to support the expansion of the groundwater storage capacity in the Coachella Valley Groundwater Basin. Groundwater replenishment ensures the region's resiliency to the effects of climate change by providing adequate water storage in times of drought and dry years, and associated water shortages.
Prioritize GHG reduction measures with co-benefits that make the community more resilient to climate change.	

Policy	Relationship to Project
Embed sustainability concepts and practices into the local culture through education, promotion, and community engagement.	**Consistent.** CVWD maintains several programs, educational opportunities, and outreach efforts to promote water conservation, sustainability, and resiliency. For example, CVWD provides rebates for reducing residential water use and water conservation contests for homeowners to win prizes for implementing water-saving measures. CVWD provides seminars, workshops, and webinars related to water conservation and sustainability. CVWD also offers public and private tours of several CVWD facilities, including the Whitewater Groundwater Replenishment Facility, to educate the community on the water-related services, while allowing the CVWD the opportunity to share important information about infrastructure, sustainability, and water quality. The proposed lease renewal would allow for continued operation of the Facility and continued opportunities for educational and outreach opportunities associated with the Project site.
Develop an engagement framework that moves from inform and consulting the community about planning and implementation efforts to collaborative decision making and empowerment.	
Continue working with the local network of sustainability-related groups to share resources, build partnerships, and unify outreach efforts.	

Similar to the City's CAP and Sustainability Plan, the City's Energy Action Plan is intended to reduce energy demand, improve efficiency, and transition to renewable energy sources. As previously described, the proposed Project would continue existing groundwater replenishment operations at the Facility and would not result in changes in operations or associated energy demand. Therefore, the proposed Project would not generate increase energy demand and would not conflict with the City's Energy Action Plan.

The proposed Project would be consistent with the City's GHG reduction goals and policies established in the CAP, Sustainability Plan, and Energy Action Plan, and impacts would be less than significant and no mitigation measures would be required.

Project Consistency with Regional and State-wide Plans, Policies, and Regulations

The significance of the GHG emissions associated with the proposed Project is also evaluated based on whether the proposed Project is consistent with relevant State-wide and regional mandates, plans, policies, and regulations to reduce GHG emissions, specifically the Riverside County CAP, SCAG's 2040-2045 RTP/SCS (Connect SoCal), AB 32 and SB 32 (California Health and Safety Code Division 25.5).

The Riverside County CAP establishes GHG reduction measures that are based on State GHG reduction goals, relating to alternative transportation, energy efficiency, clean energy, water conservation. The proposed Project is consistent with the Riverside County CAP's GHG reduction measures, which will assist Riverside County in achieving reduction targets in 2030 and 2050 (County of Riverside 2019).

Both the existing and the projected GHG inventories in the CAP were derived based on the land use designations and associated designations defined in the Riverside County General

Plan. In 1973, CVWD constructed the first 10 replenishment ponds and an additional 9 ponds were constructed in 1984. The proposed Project would continue existing operations and would not result in changes in operations of diverting Colorado River water to the Facility in order to replenish the groundwater basin. Because groundwater replenishment activities have been occurring at the CVWD Facility in its current capacity since 1973, the proposal to continue such activity would not represent a different use, intensity, or pattern of land use than considered in the Riverside CAP (2015). Because the proposed Project is consistent with the County's General Plan, the proposed Project would not conflict with the land use assumptions or exceed the population or job growth projections used by the County to develop the CAP.

In addition to complying with the land use assumptions and population/job growth projections used by the County to develop the CAP, the proposed Project demonstrates compliance with the County's GHG Plan through the CAP development review process, which ensures the implementation of appropriate GHG-reduction requirements for projects. As described in Section 3.6.2, *Regulatory Framework*, this process employs Screening Tables to mitigate project GHG emissions that exceed a threshold of 3,000 MT CO_2e per year. The 3,000 MT CO_2e per year value is used in defining small projects that are considered less than significant and do not need to use the Screening Tables or alternative GHG mitigation analysis. As shown above in Table 3.6-1, the proposed Project would generate less than 3,000 MT CO_2e per year. Therefore, the proposed Project would comply with the emissions reduction targets in the County's GHG Plan.

The SCAG's 2020-2045 RTP/SCS (Connect SoCal) provides transportation and growth strategies that include reduced water usage to reduce regional emissions. Many regional policies pertain to residential and commercial development and do not apply to the proposed Project. The proposed Project is a groundwater replenishment project, which supports water conservation measures and ensures climate change resiliency in the region, particularly in times of drought. The Project is consistent with the SCAG's 2020-2045 RTP/SCS (Connect SoCal).

As described in Section 4.0, *Other CEQA Considerations*, the proposed Project would not affect or directly change population growth, employment, and housing in the region because the proposed Project would neither increase potable water supply provided by CVWD nor would it increase the extractive capability of the development in the Coachella Valley. Therefore, its implementation would not facilitate growth in the region. Consequently, the proposed Project would not result in increased vehicle trips and associated GHG emissions. The proposed Project would not result in changes in existing operations at the Facility and would not increase existing operational GHG emissions identified in Table 3.6-1. Therefore, the proposed Project would be consistent with the regional GHG reduction goals and policies of the County's CAP and SCAG's 2020-2045 RTP/SCS (Connect SoCal).

State GHG reduction policies, such as AB 32, SB 32, and SB 375, are intended to reduce State-wide GHG emissions by achieving GHG emission reduction targets. As the proposed Project would continue existing operations and would not result in changes in operations and associated operational GHG emissions including emissions from vehicle trips, the proposed Project would not conflict with the State's GHG emission reduction targets outlined in AB 32, SB 32, and SB 375. Further, as described above, operations and maintenance activities would generate approximately 203.59 MT CO_2e/year, well below the SCAQMD screening thresholds pursuant to AB 32.

Executive Order S-13-08 provides direction for assessing vulnerability to climate change and outlines possible solutions that can be implemented within and across State agencies to promote resiliency. Groundwater replenishment ensures the region's resiliency to the effects of climate change by providing adequate water storage in times of drought and associated water shortages and reduces the impacts from aquifer overdraft, such as land subsidence and the associated damage to public infrastructure. Based on the above, the proposed Project would be consistent with the AB 32, SB 32, SB 375, and Executive Order S-13-08. Therefore, the proposed Project would be consistent with applicable plans, policies, and regulations and impacts would be less than significant and no mitigation measures would be required.

3.7 HYDROLOGY AND WATER QUALITY

This section describes the existing conditions and regulatory setting for hydrology and water quality and assesses potential impacts on hydrology and surface and ground water quantity and quality that could result from the proposed right-of-way grant from the BLM for the continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility).

3.7.1 Environmental Setting

The overall study area for hydrology and water quality is the Coachella Valley and the Coachella Groundwater Basin underlying the Project site. For surface water effects, the study area is restricted to the Project site, including a 5-mile reach of the Whitewater River Stormwater Channel (WRSC), the existing Facility, and associated transport channels and spreading ponds.

Regional Surface Water Hydrology

The Coachella Valley is bounded by the San Bernardino Mountains to the north, the Little San Bernardino Mountains to the east, the Salton Sea to the south, and the San Jacinto and Santa Rosa Mountains to the west. The area drained by the Coachella Valley watershed is approximately 65 percent mountainous and 35 percent valley floor linked together by intermediate alluvial fan topography (CVWD 2012). Elevations range from over 230 feet below sea level at the Salton Sea shoreline to over 10,000 feet above sea level at the crest of the San Jacinto Mountains. The height of the San Bernardino, San Jacinto, and Santa Rosa Mountains, in combination with prevailing eastern movement of storms create a rain shadow, which results in an arid climate and greatly reduces the contribution of direct precipitation to the water budget including groundwater recharge in the Coachella Valley Groundwater Basin (WCTG 2020). Average annual precipitation at the Coachella Valley floor is approximately 4.83 inches per year with monthly average precipitation ranging from 0.02 inch during May and June to 0.7 inch during December (National Climate Data Center 2020) while the surrounding mountains may receive more than 30 inches of precipitation per year (WCTG 2020).

The Whitewater River, and its related stormwater facilities, is the principal surface watercourse in the Coachella Valley. The Whitewater River begins at its headwaters within the San Bernardino Mountains northwest of the Coachella Valley and courses approximately 50 miles through the Project site and Coachella Valley to the Salton Sea. Within the Coachella Valley the natural flows from the Whitewater River become subsurface flow and flow only ephemerally.

The Whitewater River watershed drains approximately 1,500 square miles (CVWD 2011). In the western Coachella Valley, in the vicinity of the Project site, the Whitewater River flows

south out of the San Bernardino Mountains and Whitewater Canyon, where it enters the WRSC, through a gabion weir structure in the vicinity of the Metropolitan Water District of Southern California (Metropolitan) turnouts of the Colorado River Aqueduct and the Southern California Edison hydropower station before continuing south past the community of Whitewater, under I-10, turning east near SR-111 and the Windy Point weir – where diversion into the Facility occurs. The final downstream reach of the WRSC joins the Coachella Valley Stormwater Channel (CVSC), which begins at Point Happy in the City of La Quinta. The CVSC includes a 17-mile-long reach upstream of the Salton Sea that receives perennial wastewater discharge and agricultural drain flows.

Tributaries of the Whitewater River that join the river upstream of the existing Facility provide additional surface water flows to the Facility and include the San Gorgonio River, Falls Creek, and Snow Creek. The majority of local surface water is derived from surface flows from the San Bernardino and San Jacinto Mountains. This runoff – along with the other streams in the valley – recharges the groundwater basin by either percolation within streambeds or is captured in mountain-front debris basins (CVWD 2011).

Within the vicinity of the Project site between the Colorado River Aqueduct turnouts north of the community of Whitewater and the existing Facility, the WRSC flows through a maintained earthen channel and a variety of berms and maintenance channels to the USGS Windy Point flow gauge and Facility intake/sluicing structure where natural runoff and imported water is directed to the Facility. During normal operations (i.e., non-storm events), when the flow rate is equal or less than 800 cfs (combined imported and natural flows), water is conveyed through the USGS Windy Point gauge and diverted at the Windy Point intake/sluicing structure into the Facility for replenishment activities. Prior to, and during a storm event, normal operations are modified to prevent stormwater flows greater than 400 cfs from entering the replenishment Facility. During a large storm event, imported water is not delivered via the Colorado River Aqueduct turnouts to the WRSC and onto the replenishment Facility. Stormwater flows are diverted around the replenishment Facility in an effort to safely convey flows to avoid damage to the Facility's intake structures, cement-lined conveyance channel, replenishment ponds, and other related infrastructure. During storm events when no flows are diverted to the Facility, all stormwater flows remain in the WRSC and flow past the Facility and then southeast through to the Salton Sea via the CVSC.

Regional Surface Water Quality

Surface water quality within the vicinity of the Project site is a function of natural runoff within the Whitewater River watershed along with releases of Metropolitan-provided SWP exchange water at the Colorado River Aqueduct turnouts north of the community of Whitewater. Section 303(d) of the Clean Water Act (CWA) requires states to identify and list water bodies that do not meet water quality objectives and are not supporting their beneficial uses as well as identifying the pollutant or stressor causing impairment of the waterbody. The Colorado River Basin Regional Water Quality Control Board (RWQCB) current 303(d) list

does not include the Whitewater River or the WRSC but does include the CVSC between Indio and the Salton Sea (Colorado River Basin RWQCB 2019).

Regional Groundwater Quantity

The Coachella Valley Groundwater Basin, as defined by the California Department of Water Resources (DWR) Bulletin 118 Update (2016), is located within the larger Colorado River hydrologic region, and includes four subbasins: Whitewater River, Garnet Hill, Mission Creek, and Desert Hot Springs. The Whitewater River Subbasin (DWR Basin No. 7-21.01)[1] is the largest of these subbasins, encompassing approximately 400 square miles underlying 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.

The Whitewater River Subbasin is bounded on the southwest by the San Jacinto and Santa Rosa Mountains and separated from the Mission Creek Subbasin by the Banning Fault and from the Desert Hot Springs Subbasin by the San Andreas Fault (WCTG 2020). The Whitewater River Subbasin is itself divided into five subareas: Palm Spring, Thermal, Thousand Palms, Oasis, and Garnet Hill. Located in the northwestern portion of the Whitewater River Subbasin, the Palm Springs Subarea is bounded by the Garnet Hill Fault to the north and the San Jacinto Mountains to the south and generally underlies the Whitewater River from Palm Springs to Cathedral City.

The layers of geologic deposits beneath the surface that contain a basin's groundwater are referred to as the basin's hydrostratigraphy. Four principal groundwater zones are identified within the Whitewater River Subbasin defined below:

- *Semi-perched Aquifer and intervening retarding layers*. The Semi-perched Aquifer is composed of fine-grained Holocene-to Recent-aged lake deposits and alluvium that form an effective barrier to deep percolation of surface runoff and applied water in the central portion of the eastern Coachella Valley, where present. However, this zone is not present in the western part of the Coachella Valley including below the Facility.
- *Upper Aquifer*. The Upper Aquifer (water containing unit) typically consists of coarse sand and gravel with discontinuous lenses in the western part of the Coachella Valley and northern part of the eastern Coachella Valley area. The Upper Aquifer is unconfined or semiconfined to the west and confined to the east and southeast. Recharge to the Upper Aquifer occurs via percolation of streamflow runoff near the margins of the Coachella Valley, by percolation of agricultural irrigation water from the Semi-Perched Aquifer, and

[1] DWR uses the name "Indio Subbasin" in Bulletin 118 (2016) in place of Whitewater River Subbasin used by CVWD and the DWA.

by subsurface inflow from the San Gorgonio Pass area. The Upper Aquifer ranges in thickness from 150 to 300 feet.

- *Aquitard*. The aquitard is a layer of clay and sandy clay with discontinuous sand lenses having low permeability that separates the Upper and Lower aquifers. It is absent at the margins of the Coachella Valley Groundwater Basin and below the Facility. It reaches a maximum thickness of 200 feet in the center of the eastern Coachella Valley.
- *Lower Aquifer*. In the western part of the Coachella Valley, the northern portion of the eastern Coachella Valley area, and at the margins of the Coachella Valley Groundwater Basin, the Lower Aquifer is composed of coarse sand and gravel. The Lower Aquifer is recharged by percolation from the overlying Upper Aquifer, particularly where the two aquifers merge at the margins of the Coachella Valley. Outflow from the Lower Aquifer is primarily through water supply wells. Historically, some groundwater migrated out of the Lower Aquifer, flowing into the area beneath the Salton Sea. However, basin overdraft has reversed the direction of subsurface flow in some portions of the Coachella Valley Groundwater Basin.

Geologic deposits that contain the Whitewater River Subbasin are generally comprised of alluvial material with increasingly thick layers of silt and clay to the southeast towards the Salton Sea (WCTG 2020). Within the Palm Springs Subarea, water-bearing source units are composed of poorly sorted, heterogeneous alluvial fan deposits with little content of fine-grained material that would impede groundwater storage and movement (DWR 1964).

Overdraft is defined as the condition of a groundwater basin in which the outflows (i.e., demand) exceed the inflows (i.e., supply) to the groundwater basin over the long term. In 1975, DWR identified the Coachella Valley Groundwater Basin as being in a condition of overdraft (DWR 1975) with the historical occurrence of overdraft in the basin was caused by the rapid development of agriculture in the area during the early twentieth century, followed by increasing urban and recreational development in the later twentieth century. Increasing water demands created by this growth, and groundwater pumping to meet those demands, exceeded the natural recharge of the basin, resulting in overdraft.

In 1994, CVWD commenced preparation of a WMP to eliminate groundwater overdraft which resulted in adoption of the 2002 WMP and subsequent 2010 Plan Update.

In the case of the Whitewater River Subbasin, within the Coachella Valley Groundwater Basin, outflows include groundwater pumping; agricultural drains in the eastern Coachella Valley; and natural outflows to the Salton Sea as well as evapotranspiration to the atmosphere. Inflows include returns from uses (e.g., irrigation infiltration, etc.); natural inflows from surface flows and precipitation; and artificial recharge. Of the various outflows and inflows, groundwater pumping and artificial recharge make the greatest negative and positive

contributions to the Whitewater River Subbasin's water balance (see Chart 1; Stantec 2018; WCTG 2020).

Over the last three water years on record (2016-2017, 2017-2018, and 2018-2019), outflows from the Whitewater River Subbasin have been fairly consistent, ranging from 324,183 acre-feet for water year 2018-2019 to 347,339 acre-feet for water year 2017-2018. Differences in total outflows are largely driven by variations in in total groundwater pumping which are driven, in turn, by changes in demand. The most recent comprehensive information regarding groundwater conditions related to inflows and outflows to the Coachella Valley Groundwater Basin is presented in the 2020-2021 Engineer's Report on Water Supply and Replenishment Assessment (CVWD 2020a).

In the same time period, inflows to the Whitewater River Subbasin have been more variable and ranged from a high of 521,346 acre-feet for water year 2016-2017 to a low of 461,370 acre-feet during water year 2018-2019. Differences in total inflows are largely driven by variations in artificial recharge, which is driven, in turn, by changes in deliveries of imported water. The existing Facility is the most productive groundwater replenishment facility within the Whitewater River Subbasin. Further, the Facility is the only groundwater replenishment facility within the Coachella Valley with capacity to replenish this volume of groundwater sufficient to ensure a positive water balance for the Whitewater River Subbasin relative to consistent outflows over the same time period.

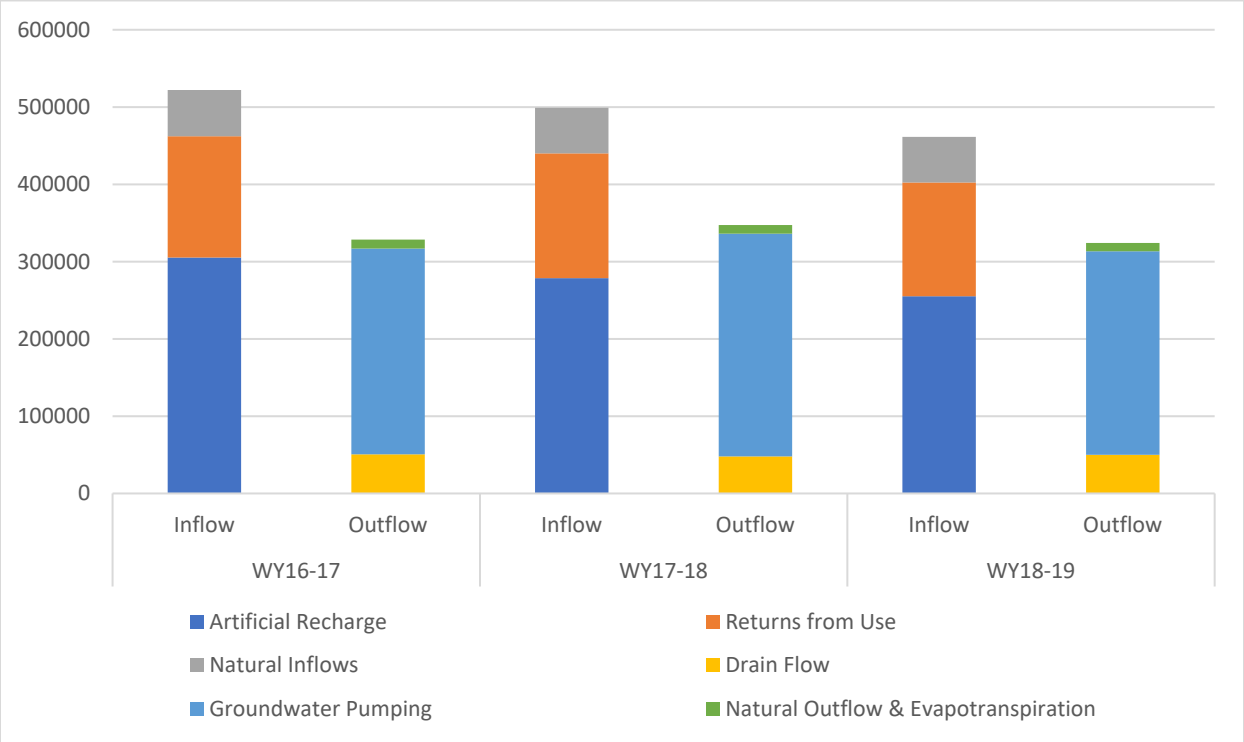


Chart 1. Recent Water Years Indio (Whitewater River) Subbasin Water Balance
Sources: Stantec 2018; WCTG 2020

Past overdraft conditions caused groundwater levels in the Coachella Valley Groundwater Basin to decline in some areas where natural recharge is unable to balance extraction of groundwater while areas where artificial recharge through groundwater replenishment has occurred has successfully raised groundwater levels, especially in the vicinity of the Facility (CVWD 2012; WCTG 2020). The 10-year average change in storage in the Whitewater River Subbasin has been positive during the last four water years (see Figure 7-2 in WCTG 2021).

Land subsidence, the lowering of the land surface due to extraction of groundwater such that aquifer pore spaces are no longer supported by fluid and then collapse, has been investigated by CVWD and the USGS since the 1990s. Within the Whitewater River Subbasin, up to 2 feet of subsidence occurred in the vicinity of Palm Desert, Indian Wells, and La Quinta between 1995 to 2010. However, in areas in close proximity to the Facility such as Palm Springs the land surface has undergone up to 1 inch of uplift between 2011 and 2019 in response to groundwater replenishment activities at the Facility upgradient from this area (WCTG 2020). Land surface rebound due to groundwater replenishment activities in areas with prior subsidence has also been reported in the Thermal area where the ground surface has rebounded about 2 inches following commencement of replenishment activities at the nearby Thomas E. Levy Groundwater Replenishment Facility (WCTG 2020).

Coachella Valley Groundwater Quality

Groundwater quality in the Coachella Valley varies with depth and location within the basin and is affected by natural occurring minerals and compounds present in the source rock of the aquifer that are then dissolved into the groundwater.

As all CVWD-provided municipal water supplies are extracted from its wells, CVWD conducts groundwater quality monitoring in accordance with Federal and State drinking water requirements and analyzes samples for more than 100 regulated and unregulated substances. Based on the most current water quality report, CVWD-provided drinking water complies with all Federal and State drinking water quality standards and does not exceed any Maximum Contaminant Levels (see Table 3.7-1; CVWD 2019a).

In addition to the Federal and State standards, the State Water Resources Control Board (SWRCB) issued notification and response levels for two per- and poly-fluoroalkyl substances (PFASs), perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) on August 22, 2019 and subsequently reduced response levels on February 6, 2020 to 40 parts per trillion (ppt) and 10 ppt respectively. From 2013 to 2015, all large water systems (i.e., water systems serving over 10,000 people) to collect and analyze drinking water samples for PFOS and PFOA during the USEPA's third Unregulated Contaminant Monitoring Rule (UCMR3). For that time period, the UCMR3 minimum reporting levels for PFOS and PFOA were 0.04 micrograms per liter (µg/L) (40,000 ppt) and 0.02 µg/L (20,000 ppt), respectively. Over the UCMR3 period, no CVWD wells reported any PFOS or PFOA levels in exceedance of their respective reporting levels. However, in 2019, the SWRCB has developed a phased investigation approach for assessing PFAS across California based on source investigation

and nearby drinking water well sampling at: 1) airports and public water system source well within a 2-mile radius; 2) municipal solid waste landfills and well within a 1-mile radius; and 3) impacted drinking water sources identified by UCMR3 monitoring efforts and within a 1-mile radius. No PFOA or PFOS was detected in monitored CVWD wells for UCMR3. CVWD wells 4565-1 located east of the WRSC along Vista Chino and 4522-1 adjacent to the Desert Princess Country Club are within a 1-mile radius of Palm Springs International Airport and were included in the SWRCB's Phase 1 PFAS Investigation. PFOA and PFOS were not detected in these wells as reported in the SWRCB's PFAS mapping tool record (SWRCB 2020).

Past studies by other agencies suggest that certain volatile organic compounds (VOCs), which may also exist as dense, non-aqueous phase liquids (DNAPLs), may have been present in Colorado River water at various times in the past. Based on the mechanism of water diversion to the Colorado River Aqueduct and subsequent flow within the WRSC, there is very little likelihood that such compounds would be present in the water in the replenishment ponds and then within the local groundwater. For example, the intake for the Colorado River Aqueduct is located at the mid-depth of Lake Havasu, and not at the bottom where any potential DNAPLs would be present (Maria T. Lopez, Metropolitan personal communication, May 6, 2020).

Table 3.7-1. CVWD 2019 Water Quality Summary

Detected Parameter	MCL	Cove Communities Range (Average)	MCL Violation? Yes/No	Major Source
Arsenic, µg/L	10	ND-9.4(ND)	No	Erosion of natural deposits
Barium, mg/L	1	ND-0.1 (ND)	No	Erosion of natural deposits
Chloride, mg/L	500 (Upper) / 600 (Short-Term)[2]	5.2-130 (21)	No	Leaching from natural deposits
Chlorine (as Cl_2), mg/L	MRDL 4.0	ND-3.5 (0.5)	No	Result from drinking water chlorination
Chromium, µg/L[3]	50	ND-33 (ND)	No	Erosion of natural deposits
Chromium-6, µg/L[4]	N/A	ND-23 (8.8)	No	Erosion of natural deposits
Copper, mg/L	1.0[1]	ND-0.56 (ND)	No	Leaching form natural deposits

Detected Parameter	MCL	Cove Communities Range (Average)	MCL Violation? Yes/No	Major Source
Dibromochloropropane (DBCP), ng/L	200	ND-60 (ND)	No	Leaching of banned nematocide which may still be in soils
Fluoride, mg/L	2.0	0.1-1.0 (0.6)	No	Erosion of natural deposits
Gross alpha particle activity, pCi/L	15	ND-15 (ND)	No	Erosion of natural deposits
Halocetic acids, µg/L[5]	60	ND-1.7 (1.8)	No	Byproduct of drinking water chlorination
Hardness (as $CaCO_3$), mg/L	N/A	9.3-310 (120)	No	Erosion of natural deposits
Nitrate (as Nitrogen), mg/L	10	ND-9.0 (1.2)	No	Leaching of fertilizer, animal wastes, or natural deposits
Odor as threshold, units	3[1]	ND-2.0 (ND)	No	Naturally occurring organic materials
pH, units	N/A	7.3-8.5 (7.9)	No	Physical characteristic
Sodium, mg/L	N/A	19-130 (32)	No	Erosion of natural deposits
Specific conductance, µS/cm	1,600 (Upper) / 2,200 (Short-Term)[1, 6]	240-1,100 (390)	No	Substances that form ions when in water
Sulfate, mg/L	500 (Upper) / 600 (Short-Term)[1, 6]	0.6-270 (50)	No	Leaching from natural deposits
Total Coliform bacteria, positive samples/month	5%	ND-1% (ND)	No	Naturally present in the environment
Total dissolved solids (TDS), mg/L	1,000 (Upper) / 1,500 (Short-Term)[1, 6]	140-600 (250)	No	Leaching from natural deposits
Total trihalomethanes, µg/L[5]	80	ND-18 (16)	No	Byproduct of drinking water chlorination
Turbidity, nephelometric turbidity units (NTU)	5[1]	ND-1.3 (ND)	No	Leaching from natural deposits

Detected Parameter	MCL	Cove Communities Range (Average)	MCL Violation? Yes/No	Major Source
Uranium, pCi/L	20	ND-13 (4.5)	No	Erosion of natural deposits

Notes:
[1]Values with this note have fixed Secondary MCLs, remaining values are Primary MCLs unless identified otherwise
[2] Values listed are the upper and short-term consumer acceptance contaminant levels
[3] Although regulated at the time, chromium and chromium-6 were included in 2015 unregulated contaminant monitoring per the USEPA, CVWD performed this monitoring at select CVWD domestic facilities. Chromium results: 0.3 µg/L-20 µg/L (9.2) and chromium-6 results: 01. µg/L – 20 µg/L (9.1)
[4] California's Chromium-6 drinking water MCL was withdrawn September 11, 2017
[5] The reported average represents the highest locational running average based on distribution system monitoring on a quarterly basis
[6] Values listed are the upper and short-term consumer acceptance contaminant levels

Salinity

Colorado River Water Total Dissolved Solids

In a 1971 study, the USEPA analyzed salt loading in the Colorado River Basin and divided it into two categories, naturally occurring and human-caused (USEPA 1971). The USEPA concluded that about 47 percent of the salinity concentration measured in water arriving at Hoover Dam is from natural causes, including salt contributions from saline springs, ground water discharge into the river system (excluding irrigation return flows), erosion and dissolution of sediments, and the concentrating effects of evaporation and transpiration. The remaining 53 percent of the salinity concentration in the water arriving at Hoover Dam results from various human activities including out-of-Basin exports, irrigation, reservoir evaporation and phreatophyte use, and municipal and industrial uses (Colorado River Basin Salinity Control Forum 2020).

The Colorado River Basin Salinity Control Act was passed by the U.S. Congress in 1974 to address the growing salinity problem which would require cost effective salinity control measures on the river. Colorado River water used for direct delivery and recharge in the Coachella Valley has higher TDS concentrations on average than most of the groundwater within the Subbasin. For 1980-2007, the average Colorado River salinity at Imperial Dam was 719 mg/L with a range of 506-962 mg/L (CVWD 2012).

The TDS range of Colorado River water acquired from Metropolitan for groundwater recharge at the existing Facility is 530 to 750 mg/L and averaging 636 mg/L since 1973 (CVWD 2012). Colorado River water was tested again in June 2020 and exhibited a similar range of TDS from 540 to 570 mg/L (see Appendix J).

Coachella Valley Groundwater Total Dissolved Solids

As previously described, during the 1930s, TDS concentrations in groundwater found in large portions of the Coachella Valley averaged less than 250 mg/L. In the 1970s, the groundwater typically contained 300 mg/L TDS in the Upper aquifer and 150 to 200 mg/L TDS in the Lower aquifer (WMP 2002).

Since the initiation groundwater replenishment activities at the Facility, TDS levels in wells near the Facility have increased from a range of 150 to 300 mg/L to 300 to 600 mg/L TDS. However, increased salinity levels appear to be geographically limited to the immediate replenishment area as wells located more than 8 miles away from the Facility have shown little change in quality over time (CVWD 2012). More recent studies in support of CVWD's Salt and Nutrient Management Plan (SNMP) report a range of TDS levels stratified by depth within the aquifer in the western portion of the Whitewater River Subbasin (see Table 3.7-2; CVWD 2015). TDS concentrations typically decrease with depth within the aquifer and downgradient (southeast) away from the Facility. While the range of TDS in the shallowest layers of the aquifer within the western portion of the Whitewater River Subbasin may be above the SWRCB's recommended consumer acceptance contaminant level of 500 mg/L, no recorded values are near or above the State of California's upper consumer acceptance contaminant level of 1,000 mg/L or the short-term consumer acceptance contaminant level of 1,500 mg/L. Neither the USEPA nor the State of California have set an enforceable, primary MCL for TDS.

Table 3.7-2. West Whitewater River Subbasin TDS Levels by Aquifer Layer (1999-2013)

Aquifer Zone	TDS (mg/L)[1]
Layer 1 (Less than 450 feet bgs)	426-656
Layer 2 (450-750 feet bgs)	336-492
Layer 3 (Greater than 750 feet bgs)	188-220

Notes: [1] TDS value within 95% confidence interval
Source: CVWD 2015.

Soil Leaching

In March 2020, a soil field sampling program was conducted at the existing Facility. The purpose of the soil field sampling program was to obtain soil and sediment samples from within, and adjacent to, the replenishment ponds appropriate to evaluate whether constituents that could affect water quality are accumulating in, or leaching from, the soils

and sediments within the Facility. The primary objective was to obtain data that contributes to the overall evaluation of the potential impacts of the proposed Project on groundwater quality to support the environmental impact analysis for the proposed Project. Soil samples were collected from six replenishment ponds (i.e., Ponds 1,2, 5, 12, 14, and 19) and from a background location to the east of the Facility. Within each pond and the background location, samples were collected from five randomly selected locations and subsequently composited into a single sample for leach testing by an analytical laboratory. The samples from the ponds were obtained from a depth of 6 feet below the pond bottoms to ensure that native soils were obtained, as opposed to sediment that accumulates in the ponds during replenishment operations. The background location samples were obtained from a depth 6 inches below ground surface.

Leach tests, based on the USEPA Waste Extraction Test (WET) methodology using two different fluids, deionized water and Colorado River Aqueduct water, were conducted on the composited soil samples. Leaching with deionized water was used to mimic the effect of percolation of rainfall or water with a substantially lower TDS than the Colorado River Aqueduct water. Leaching with Colorado River Aqueduct water was conducted to mimic existing operations at the Facility.

The soil samples were analyzed for the following:

- Title 22 metals plus aluminum, iron, manganese, and mercury;
- Total organic carbon; and
- Total petroleum hydrocarbons.

Grain size analysis and measurement of cation exchange capacity (CEC) was also conducted on the soil samples.

The leachate samples and the Colorado River Aqueduct water were analyzed for the constituents above, the following:

- General minerals and salts, to include calcium, magnesium, sodium, potassium, chloride, sulfate, bicarbonate, total alkalinity, TDS, specific conductance, pH, nitrate, total phosphorus, fluoride, and methylene blue active substances (foaming agents).

In addition, a water sample from the WRSC was collected and analyzed for a limited set of general minerals, including total hardness, calcium, magnesium, bicarbonate, total alkalinity, TDS, specific conductance, and pH.

The findings present below are summarized from the Soil Sampling Report of Results Sediment Collection, Leach Testing, and Analysis (ECORP 2020; see Appendix I).

Total organic carbon and petroleum hydrocarbons were not detected in any of the soil samples, indicating that the soils have little or no capacity to adsorb and retain organic compounds. Sieve analysis indicates that the soils are predominantly fine to medium-grained sands with very low silt and clay fractions. The CEC was very low, consistent with the grain

size analysis. The CEC results indicate that the soils do not have the ability to retain a residual load of salts or metals that could leach over time or create a pulse if conditions changed at the Facility.

The deionized water leaching data indicate that there may have been some very minor changes in the soil chemistry due to recharge over the past several decades at the Facility. However, these changes have not resulted in a significant build-up of salts or minerals in the soils associated with the infiltration ponds. The TDS differences between the different leachate samples were so small that they would have no measurable effect on the overall quality and chemistry of water that percolates to the groundwater aquifer if recharge of Colorado River Aqueduct water ceased and percolation through the soils occurred only by rainfall, or by water that had an appreciably lower TDS concentration than the Colorado River Aqueduct water. This finding is consistent with the low CEC values measured in the soil samples.

The Colorado River Aqueduct water leachate results from the pond and background composite samples are extremely consistent, with almost all parameter values being nearly identical to those measured in the Colorado River Aqueduct water sample. There was no perceptible difference between the upstream pond, downstream pond, and background sample data. Despite the elevated TDS of the Colorado River Aqueduct water, the low CEC values and lack of organic carbon in the soils preclude any ability to accumulate chemical constituents on the native soils beneath the Facility, as evidenced by the consistency between the leaching results from the pond soil samples and the background sample.

Overall, the data obtained from the soil sampling and leach tests demonstrate that the Colorado River Aqueduct water has not left any significant dissolved solids behind on the soils beneath the Facility and that the soils are not leaching any significant quantity of minerals, salts, or metals into the Colorado River Aqueduct water as it percolates to the underlying aquifer. These results indicate that changes to facility operations, such as a change in the amount of recharge or a change in the TDS level of the recharge water, would not result in the release of additional TDS to the groundwater, since there is no significant mass of salts, minerals, or metals being retained in the soils.

Floodplains

CVWD acts as the local flood management agency within its service area and conducts ongoing operations and maintenance activities to safely direct stormwater flows within the WRSC/CVSC.

CVWD operates and maintains approximately 207 miles of stormwater projects to protect an approximately 590-square-mile area from flooding. These stormwater projects include the 70-mile-long WRSC/CVSC and its tributaries have been channelized and improved to safely convey flood flows typically resulting from intermittent mountain storm events (CVWD 2011). The regional system collects, detains, and conveys storm flows within the greater Coachella Valley watershed including from local jurisdictions. The WRSC/CVSC was built to withstand

a flow of 80,000 cfs, greater than flows generated by a 100-year flood event (CVWD 2017). While local jurisdictions may route stormwater flows to the WRSC/CVSC, they are responsible for flood control within their individual 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.

The WRSC, south of I-10, and the Facility are mapped within the Federal Emergency Management Agency (FEMA) Zone A on Flood Insurance Rate Maps (FIRMs) 06065C0870G and 06065C0890G (Effective August 28, 2008).

3.7.2 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 CWA, which is managed by the USEPA, with implementation largely delegated to the SWRCB and the nine RWQCBs. Water quality at the Project site is primarily regulated by the Colorado River Basin RWQCB. The following provides a description of the water quality requirements applicable to the proposed Project. Flood protection guidance is primarily provided by the FEMA and is implemented at the state and local level through legislation and local flood protection ordinances.

Federal

Clean Water Act

The CWA, enacted in 1972 and amended several times since, is the primary Federal law regulating water quality in the U.S. and forms the basis for several State and local laws throughout the country. The CWA established the basic structure for regulating discharges of pollutants into the water of the U.S. The CWA gave the USEPA 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 CWA is administered by the USEPA and U.S. Army Corps of Engineers (USACE). At the State and regional levels in California, the CWA is administered 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.

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.

State

Clean Water Act Section 402: National Pollution Discharge Elimination System

In 1987, amendments to the CWA 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.

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 water quality in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution.

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 RWQCB 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 2019), and is currently undergoing its 2020 Triennial Review. The Basin Plan has five major components: 1) identifies the waters of the region; 2) designates beneficial use of those water; 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

The USEPA has delegated to the California Department of Public Health the responsibility for administering California's drinking-water program. In the 1976, California adopted its own safe drinking water act (contained in the California 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."*

Colorado River Basin Regional Water Quality Control Board Water Quality Control Plan for the Colorado River Basin

The Colorado River Basin (Region 7) RWQCB has prepared a Basin Plan (Colorado River Basin RWQCB 2019) designed to protect the beneficial uses, including municipal drinking water, within the region through the establishment of Water Quality Objectives (WQOs) for surface waters and groundwater. WQOs are *"limits or levels of water quality constituents or characteristics which are established for the reasonable protections of beneficial uses of water or the prevention of nuisance within a specific area."* Colorado River Basin Plan WQOs for groundwater include:

A. Taste and Odors – Groundwater for use as a domestic or municipal supply shall not contain taste or odor-producing substances in concentrations that adversely affect beneficial uses as a result of human activity.

B. Bacteriological Quality – The concentration of coliform organisms in groundwater for domestic or municipal uses shall comply with the total coliform MCL per Section 64426.1 of Title 22 of the California Code of Regulations.
C. Chemical and Physical Quality – Groundwater designated for use as domestic or municipal supply shall not contain concentrations of chemical constituents in excess of the MCLs specified in Sections 64431 (Inorganic Chemicals), 64444 (Organic Chemicals), and 64678 (Determination of Exceedances of Lead and Copper Action Levels).
D. Brines – Discharges of water softener regeneration brines, other mineralized wastes, and toxic wastes to disposal facilities which ultimately discharge in areas where such wastes can percolate to ground waters usable for domestic and municipal purposes are prohibited.
E. Radioactivity – Groundwater for use as domestic or municipal supply shall not contain material in excess of the MCL specified in Tables 64442 and 64443 of Sections 64442 and 64443 respectively of Title 22 of the California Code of Regulations.
    a. Radium MCL = 5 picoCuries (pCi)/L (inclusive of radium-226 and -228)
    b. Gross Alpha Particle Activity MCL = 15 pCi/L
    c. Uranium = 20 pCi/L
F. Groundwater Overdraft – Groundwater basins in the Colorado River Basin determined to be in overdraft and including the Indio Subarea of the Whitewater Hydrologic Unit (analogous to the Indio Subbasin) will be investigated.

Local

CVWD Ordinance No. 1234 (as amended)

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.

Coachella Valley Water Management Plan

In 1994, CVWD commenced preparation of a WMP to eliminate groundwater overdraft which resulted in adoption of the 2002 WMP and subsequent 2010 WMP Update and included the following objectives:

1. Meet current and future water demands with a 10 percent supply buffer;
2. Eliminate long-term groundwater overdraft;

3. Manage and protect water quality;
4. Comply with state and federal laws and regulations;
5. Manage future costs; and,
6. Minimize adverse environmental impacts.

With regard to the groundwater management and recharge to meet current and future water demand as well as eliminating long-term overdraft, the 2002 WMP had a planning target of 103,000 acre-feet per year of SWP water at the Facility by 2035. This target was revised in the 2010 WMP Update for the continued use of SWP exchange water provided by Metropolitan for groundwater replenishment at an average rate of 100,000 acre-feet per year over a 20-year period.

City of Palm Springs General Plan

The Recreation, Open Space, and Conservation Element of the City of Palm Springs General Plan (City of Palm Springs 2007) provide the following water supply and quality policies applicable to the proposed Project:

Policy RC9.3 – Ensure the highest quality of potable water resources continues to be available by managing stormwater runoff, wellhead protection, septic tanks, and other potential sources of pollutants.

Policy RC9.4 – Encourage the preservation and management of natural floodplain areas that allow for water percolations, replenishment of the natural aquifers, proper drainage, and prevention of flood damage.

Policy RC9.5 – Protect the quality and quantity of water from adverse impacts of development activities so that sufficient water is available to sustain habitats and wildlife.

Municipal Separate Storm Sewer System (MS4) Permit

The Colorado River Basin RWQCB has issued a NPDES MS4 Permit under Order No. R7-2008-0001. In cooperation with the County of Riverside and incorporated cities within the Whitewater River Watershed, CVWD is responsible for, *"implementing that portion of the urban runoff management program for any discharges to and from [its] MS4 facilities."* As such, any discharge into the WRSC/CVSC or other stormwater facilities within CVWD's jurisdiction must comply with the MS4 Permit (CVWD 2019b).

3.7.3 Impacts and Mitigation Measures

Methodology for Analysis

The hydrology and water quality impact analysis is based on an assessment of baseline conditions for the Project site and the surrounding vicinity, including climate, watersheds and surface waters, groundwater, and floodplains as described in the Environmental Setting for this issue area. This analysis identifies potential impacts based on the predicted interaction

between the affected environment and continued operation of the proposed Project. These impacts are analyzed in accordance with the significance criteria presented below.

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on water resources if it would:

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    i. Result in substantial erosion or siltation on- or off-site;
    ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    iii. 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; or
    iv. Impede or redirect flood flows.
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation; or,
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

Impact Analysis

Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact HWQ-1. Continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility would require intermittent grading and other ground-disturbing activities within the Whitewater River Stormwater Channel (WRSC), which would increase the potential for erosion and sedimentation of surface waters. Maintenance equipment operating in the WRSC would have the potential to leak oil, diesel, grease, and other chemicals, resulting in potential discharges to surface water or groundwater aquifers. Operations and maintenance activities would continue to abide by a Stormwater Pollution Prevention Plan (SWPPP) that sets

forth specific actions to be put in place during operations and maintenance activities to both limit the potential for any spills to occur and actions to be implemented in response to spills. (Less than Significant.)

Ground-disturbing operations and maintenance activities within the existing Facility and WRSC are required to comply with all applicable Federal, State, and local water quality standards and waste discharge requirements including compliance with the NPDES MS4 Permit issued by the Colorado River Basin RWQCB under Order No. R7-2008-001. Compliance with the MS4 Permit during ground-disturbing actions would be achieved through development and implementation of a SWPPP and associated best management practices designed to prevent sedimentation of surface waters within the WRSC associated with ground-disturbing maintenance activities.

Ongoing ground-disturbing maintenance activities require grading and/or excavation of soils associated with repairing and reshaping of berms to direct water flows within the WSRC, inherently increasing erosion during maintenance activities. However, implementation of the SWPPP and associated best management practices would be expected to prevent sedimentation of surface waters. The SWPPP and associated best management practices would also be implemented to prevent leaking of pollutants such as oil, grease, and chemicals from maintenance equipment from discharging to the surface waters or groundwater. Thus, the implementation of the SWPPP and associated best management practices would be expected to prevent violations of water quality standards stemming from ongoing annual operations and maintenance activities. Therefore, impacts would be less than significant and no mitigation would be required.

Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Impact HWQ-2. Continued operation of the existing Whitewater River Groundwater Replenishment Facility would continue the use of Colorado River water provided by Metropolitan Water District of Southern California (Metropolitan) in exchange for Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) State Water Project (SWP) water. Colorado River water has higher concentrations of total dissolved solids (TDS) than the local groundwater found near the Facility prior to its operation. Groundwater replenishment activities using Colorado River water have elevated groundwater concentrations of TDS over time and the continued use of this water for similar, ongoing uses would be expected to extend this elevated condition for the life of the proposed Project and would increase TDS in some groundwater to levels up to that found in delivered Colorado River water. This in turn could cause groundwater produced from Coachella Valley wells in the vicinity of the Facility to contain TDS levels above the 500 milligrams per liter (mg/L) recommended

consumer acceptance contaminant level for drinking water. (Significant and Unavoidable.)

Potential impacts to groundwater quality are discussed below and are summarized based on the analyses in the Coachella Valley WMP and EIR (2002); the WMP Update and Subsequent EIR (2010 and 2012); 2019 CVWD 2018-2019 Annual Review and Water Quality Report; and Indio Subbasin Annual Water Reports for Water Years 2017-2018, 2018-2019, and 2018-2019 (Stantec 2018; WCTG 2020).

The Facility would continue to utilize Colorado River Water via an exchange agreement between CVWD and DWA and Metropolitan to replenish groundwater within the Whitewater River Subbasin. Colorado River Water contains greater TDS concentrations than typical groundwater within the Whitewater River Subbasin (see Appendix G), which results in additional salt being imported to the Whitewater River Subbasin and greater Coachella Valley Groundwater Basin as a whole. There is no fixed consumer acceptance contaminant level established for TDS. Instead, the State of California uses a non-health-based consumer acceptance contaminant level range of 500 to 1,500 mg/L for TDS in drinking water to avoid aesthetic concerns. TDS levels below the 500 mg/L recommended consumer acceptance contaminant level are more desirable for a higher degree of consumer acceptance and TDS levels up to the 1,000 mg/L upper consumer acceptance contaminant level are acceptable if it is neither responsible nor feasible to provide more suitable waters. TDS levels ranging to the short-term consumer acceptance contaminant level are acceptable only for existing community water systems on a temporary basis pending construction of treatment facilities or development of acceptable new water sources. Wells in the vicinity of the Facility have recorded TDS values near or above the recommended consumer acceptance contaminant level of 500 mg/L for drinking water (refer to Tables 3.7-1 and 3.7-2). This would be a significant and unavoidable impact.

As discussed above, Colorado River water has higher TDS concentrations than local groundwater found near the Facility (see Appendix J). Historic TDS concentrations in the Coachella Valley Groundwater Basin dating back to the 1970s averaged between 250-300 mg/L. Since the initiation of groundwater replenishment activities at the Facility, TDS concentrations in groundwater wells have increased from 150-300 mg/L to 300-600 mg/L, an increase linked to groundwater replenishment with higher salinity Colorado River water. Continued groundwater replenishment activities under the proposed Project would further elevate the concentration of TDS in the groundwater benefitting from this replenishment to levels up to that found in delivered Colorado River water. As discussed above, elevated TDS concentrations associated with groundwater replenishment activities vary in extent both in area and depth within the aquifer with TDS decreasing away from the Facility and deeper in the aquifer. The proposed continuation of the groundwater replenishment activities at the Facility would continue to result in more groundwater with TDS concentrations above the recommended consumer acceptance contaminant level of 500 mg/L. However, because TDS levels in Colorado River Aqueduct water is approximately 600 mg/L and wells in the vicinity

of the Facility have recorded TDS concentrations up to 600 mg/L, continued operation of the Facility would not result in TDS levels reaching 1,000 mg/L at locations or depths where the concentration is below that level.

The previous Coachella Valley WMP Program EIR found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue 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, including recommended aesthetic thresholds, may be exceeded in some groundwater.

CVWD monitors the quality of drinking water produced at wells through its service area including wells in proximity to the Facility, and would provide alternate supplies or wellhead treatment if health-based drinking water standards are exceeded (CVWD 2012).

Mitigation Measure

MM HWQ-1. Monitor Groundwater Drinking Wells and Ensure Health-Based Water Quality Standards are Met if exceeded due to Facility Recharge Activities. CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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.

Residual Impacts

Since there is no feasible mitigation measure that would not be environmentally or economically prohibitive (refer to Section 2.8.2, *Alternatives Considered but Eliminated*), mitigation of groundwater quality impacts to below a level of significance is not feasible, the proposed Project would result in a significant and unavoidable impact to groundwater quality.

Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Impact HWQ-3. Operation of the Whitewater River Groundwater Replenishment Facility would continue the use of Colorado River water provided by Metropolitan Water District of Southern California (Metropolitan)

in exchange for Coachella Valley Water District (CVWD) and Desert Water Agency (DWA) State Water Project (SWP) water supplies for groundwater replenishment within the Coachella Valley Groundwater Basin. The proposed Project would continue groundwater recharge activities at the Facility that have been ongoing in one way or another since the early 1900s and at the Facility since the 1970s. (Less than Significant.)

In 1975, DWR designated the Coachella Valley Groundwater Basin to be in a state of groundwater overdraft. The existing Facility is an integral component in CVWD's groundwater recharge program within the Coachella Valley that has reversed groundwater drawdown and eliminated groundwater overdraft. For example, over the last three water years (2017 to 2019), the Whitewater River Subbasin has had net positive water balance inflows (i.e., artificial recharge, natural inflows, and returns from use) less outflows (i.e., groundwater pumping, agricultural drain flow, and natural outflows and evapotranspiration). The 10-year average change in storage in this Subbasin has been positive during the last four water years (WCTG 2021). The Facility itself was responsible for approximately 83 percent of CVWD groundwater replenishment to the Subbasin over the last 3 years. Additionally, the Facility is responsible for 100 percent of DWA groundwater replenishment to the Subbasin. Without replenishment efforts supported by the Facility the Subbasin would have had a net negative water balance over that time period. The continued operation of the existing Facility under the proposed Project would provide groundwater replenishment capacity for CVWD to maintain a net positive water balance within the Whitewater River Subbasin to avoid groundwater overdraft. Therefore, the proposed Project would have a less than significant impact related to groundwater overdraft and no mitigation measures would be necessary.

Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces?

Impact HWQ-4. Operations and maintenance activities for the Facility require ground-disturbing activities within the Whitewater River Stormwater Channel (WRSC) that the Coachella Valley Water District (CVWD) operates to control stormwater flooding along the WRSC in the Coachella Valley. However, ongoing operations and maintenance of the existing Facility would not alter the greater drainage pattern of the WRSC, would not contribute new flood flows to the WRSC, and would not redirect flood flows outside of the existing WRSC. (Less than Significant.)

Ongoing operations and maintenance activities at the Facility would continue under the proposed Project would require intermittent work within the WRSC that provides replenishment water, including SWP exchange water, to the Facility. Generally, these activities would occur within the WRSC and would not reconfigure the main alignment of the

channel but would maintain berms and water control structures to better control typical and flood flows within the channel. Further, CVWD would continue to operate in its capacity as the flood control agency managing the WRSC. Because the continued operation would not alter the existing drainage pattern of the WRSC, would not contribute new flood flows, and would not redirect any existing flood flows the proposed Project would have a less than significant impact related to flood control and no mitigation measures would be required necessary.

Would the Project result in flood hazard, tsunami, or seiche zones, would the Project risk release of pollutants due to project inundation?

Impact HWQ-5. The existing Whitewater Groundwater Replenishment Facility is located in the Coachella Valley within a designated Special Flood Hazard Area (Zone A) for the Whitewater River Stormwater Channel (WRSC) and in proximity to the San Andreas Fault. However, operation of the Facility is a passive use that does not retain any hazardous materials or wastes or other pollutants on-site that would flow off-site during flood events or damage to the Facility. (Less than Significant.)

The existing Facility does not include any permanent habitable structures beyond the various water control structures including berms, sluice gates, and conveyance channels. None of these features are used for storage or containment of hazardous materials or wastes. No new permanent structures that would be used for storage or containment of hazardous materials or wastes are including in the proposed Project. Therefore, the continued operation of the existing Facility under the proposed Project would not result in release of hazardous materials or wastes during flood events that may inundate the Facility and the proposed Project would have a *less than significant impact* and no mitigation measures would be necessary.

Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Impact HWQ-6. The ongoing, and proposed continuing, groundwater replenishment activities at the Whitewater Groundwater Replenishment Facility are in compliance with, and integral to, Coachella Valley Water District's (CVWD's) existing Water Management Plan (WMP). Additionally, continuation of ongoing groundwater recharge activities at the Whitewater River Groundwater Replenishment Facility would not result in any inconsistency with or obstruct implementation of the Colorado River Basin Regional Water Quality Control Board's (RWQCB's) Colorado Basin Plan. (Less than Significant.)

CVWD has been designated an *"exclusive"* Groundwater Sustainability Agency (GSA) over its service area by DWR in the Indio Subbasin. DWA, Coachella Water Authority, and Indio

Water Authority, were also designated as GSAs in the Indio Subbasin over their respective service areas. The four agencies are working collaboratively to implement the Sustainable Groundwater Management Act (SGMA) in the Indio Subbasin. On December 29, 2016, CVWD, DWA, CWA, and Indio Water Authority collaboratively submitted the 2010 Coachella Valley WMP Update as an Alternative Groundwater Sustainability Plan (GSP) for the Indio Subbasin, with an associated Bridge Document, to DWR for review and evaluation. On July 17, 2019, DWR determined that the Alternative GSP for the Indio Subbasin satisfies the objectives of SGMA and notified the Indio Subbasin GSAs that the Alternative GSP was approved, and that they would be required to submit an assessment and update of the Alternative GSP by January 1, 2022, and every five years thereafter.

Groundwater recharge is a critical component of CVWD's groundwater basin management plan and the existing Facility is an integral component in CVWD's and DWA's groundwater recharge program within the Coachella Valley expected to recharge an average of at least 100,000 acre-feet per year over a 20-year period. Since 2010, the Facility has recharged an average of 144,484 AF of imported water annually (refer to Table 2-1; CVWD 2017, 2020). Based on recent water balance tables for the last three water years (2016-2017, 2017-2018, and 2018-2019), the Facility provided 83 percent of CVWD's groundwater recharge over that period ensuring a positive water balance. Continued groundwater replenishment activities at the Facility have stopped and even reversed declining water well elevations and helped eliminate groundwater overdraft conditions within the Subbasin.

Pursuant to Federal and State regulations, including the Colorado River Basin RWQCB's Basin plan, CVWD water wells must comply with all applicable drinking water standards and all drinking water samples have been within applicable MCLs (refer to Table 3.7-1). As discussed above, continuation of existing groundwater replenishment activities at the Facility using higher salinity Colorado River water would continue to elevate TDS concentrations in groundwater surrounding the Facility to levels up to that found in delivered Colorado River water. However, Colorado River water TDS levels are well below the upper consumer acceptance contaminant level of 1,000 mg/L for aesthetic considerations in drinking water. Some groundwater wells in the vicinity of the Facility currently exhibit TDS concentrations above 500 mg/L as Colorado River water itself typically has TDS levels above this recommended consumer acceptance contaminant level. As discussed above, CVWD would monitor groundwater wells for exceedances of any health-based water quality standards due to Facility recharge activities and take necessary actions to bring drinking water supplies into compliance by either providing domestic water from the domestic water system or providing well-head treatment.

Continued operation of the Facility under the proposed Project would ensure that the Facility, and CVWD, are successful in meeting CVWD's WMP groundwater management objectives including eliminating long-term groundwater overdraft, management and protection of water quality, and compliance with Federal and State regulations. Therefore, the continued operation of the Facility under the proposed Project would not result in any inconsistency

with or obstruct implementation of CVWD's WMP or the Colorado River Basin RWQCB's Basin Plan. Further, the Facility is an important component of CVWD's groundwater replenishment activities and is critical to sustainable groundwater management within the Whitewater River Subbasin. The continued operation of the Facility under the proposed Project would have a less than significant impact related to implementation of groundwater management plans and no mitigation measures would be required.

3.8 LAND USE AND PLANNING

This section describes existing land uses surrounding the Whitewater River Groundwater Replenishment Facility (Facility) and associated operations and maintenance activities within the Whitewater River Stormwater Channel (WRSC). Land use regulations that address land use planning in the vicinity of the Project site area are provided for evaluation of land use compatibility. Potential land use impacts from continued operation of the Facility under the proposed Project are evaluated and mitigation measures that would reduce or avoid significant impacts are identified, where necessary.

3.8.1 Environmental Setting

Site Setting

The existing Facility is located within the City of Palm Springs in Riverside County. Existing land uses were identified and characterized based on site visits, aerial photographs, and review of relevant long-range planning documents. The Facility and associated operations and maintenance areas within the WRSC are located on lands owned by CVWD, owned/administered by the BLM, and owned/administered by the CSLC. The Project site can be divided into two individual areas:

- The "renewal area" covers the existing Facility itself, the low-flow dike and channel crossing, conveyance channels, and intake and sluicing structures. BLM-administered lands within the "renewal area" include portions of Ponds 6 through 19, the concrete-line and earthen conveyance channels, Intake Structure 2, and the low-flow dike and channel crossing. With the exception of a small portion of CSLC-administered lands crossed by the concrete-lined conveyance channel, the remainder of the renewal area comprises land owned and administered by CVWD, including the Windy Point Intake/sluicing structure, portions of the earthen and concrete-lined conveyance channels, all of Ponds 1 through 5, and portions of Ponds 6 through 19 (refer to Figure 3 in Section 2.0, *Project Description*).
- The "amendment area" covers public land administered by the BLM that is used to access the Facility and for conveyance of natural flows and imported Colorado River water within the WRSC, including portions of Sections 23 and 24 of Township 3 South, Range 3 East (refer to Figure 3 in Section 2.0, *Project Description*).

Surrounding land uses in proximity to the Facility and associated operations and maintenance areas are described in detail in Section 2.3, *Surrounding Land Uses* and include:

- North: WRSC and Union Pacific Railroad
- East: Undeveloped lands within the City of Palm Springs and WRSC
- South: SR-111
- West: Undeveloped areas west of the WRSC

Other development within and adjacent to the Facility and the WRSC include evenly spaced rows of wind generation facilities (i.e., windmills and associated infrastructure).

Plan Consistency

CEQA Guidelines Section 15125(d), state that the environmental setting of an EIR must discuss *"any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans."*

The City of Palm Springs General Plan designates the portions of the Project site within the City's jurisdiction as Open Space-Water. This land use designation is reserved for flood control or drainage facilities located within the 100-year floodplain.

Portions of the Project site are located on public lands managed by the BLM and administered pursuant to the Federal Land Policy and Management Act of 1976 (FLPMA) as well as the BLM's California Desert Conservation Area (CDCA) Plan, originally completed in 1980 and amended in 1999. The CDCA includes 25 million acres, approximately 12 million of which are public lands. BLM-administered lands that compose part of the Project site do not include any lands designated as National Conservation Lands, National Monument, or within the designated boundaries of the Desert Renewable Energy Conservation Plan (DRECP). The DRECP governs approximately 10 million acres of BLM lands administered under the plan to streamline permitting and development of renewable energy infrastructure while balancing ecological preservation and conservation of the desert environment.

3.8.2 Regulatory Framework

Federal

The BLM-administered lands within the Project site are subject to FLPMA as implemented by the BLM and in compliance with the BLM's CDCA Plan. The BLM is preparing a separate Environmental Impact Statement (EIS) compliant with the National Environmental Policy Act of 1969.

In addition to the CDCA, the BLM's DRECP, an amendment to the CDCA Plan applies on BLM-administered lands within the Facility and took effect in 2016. The DRECP itself covers 22.5 million acres with two overarching goals for BLM-administered lands within its jurisdiction: 1) identifying areas with high quality renewable energy potential and access to transmission lines in areas where environmental impacts can be managed and mitigated; and 2) specifying species, ecosystem, and climate adaptation requirements for desert wildlife as well as the protection of recreation, cultural, and other resources.

Beyond FPLPMA and the BLM's administration of the CDCA and DRECP, the BLM also implements via BLM Manual 6340, *Management of Designated Wilderness* Areas, the Wilderness Act of 1964, California Wilderness Act of 1984, and California Desert Protection Act of 1994 on public lands in the vicinity of the Facility. However, the Facility itself is not located on lands designated as wild lands.

Regional

California State Lands Commission

The CSLC was established under the State Lands Act in 1938 and secures and safeguards the public's access rights to natural habitats for wildlife, vegetation, and biological communities. The CSLC protects and enhances these lands and natural resources by issuing leases for use or development, providing public access, resolving boundaries between public and private lands, and implementing regulatory programs to protect state waters from oil spills and introduction of invasive species.

The facility's intake and conveyance channel are mostly on CVWD-owned land, but a portion of the conveyance channel passes through CLSC land designated as School Lands. CSLC manages approximately 458,843 acres of School Lands held in fee ownership and the reserved mineral interests on approximately 790,000 acres of School Lands where the surface estate has been sold. Public Resources Code section 6217.7 requires that the CLSC deposit all net revenues, monies, and remittances from the sale of School Lands into the State Treasury to the credit of the School Land Bank Fund.

Management of the School Lands Program is divided between the CSLC's Mineral Resources Management Division and the Land Management Division. The Mineral Resources Management Division is responsible for geothermal resource, solid mineral, and oil and gas activities on school lands. The Land Management Division is responsible for surface activities on school lands. These management activities are funded either through the School Land Bank Fund (e.g., the Abandoned Mines Program) or are reimbursed before remittance of net revenues to the Teachers' Retirement Fund.

Coachella Valley Multiple Species Habitat Conservation Plan

As described in Section 3.2, *Biological Resources*, the overall goal of the CVMSHCP is to enhance and maintain biological diversity and ecosystem processes while allowing future development. The CVMSHCP serves two primary purposes: balancing environmental protection and economic development objectives in the CVMSHCP area and simplifying compliance with endangered species related laws. The CVMSHCP is a comprehensive regional plan that addresses the conservation needs of the native flora, fauna, and natural vegetation communities occurring throughout the Coachella Valley region of western Riverside County.

Local

City of Palm Springs General Plan

The City of Palm Springs General Plan was adopted in 2007 and guides the City's land use development. The General Plan establishes policies to guide development and conservation within city limits as well as housing, circulation, safety, air quality, noise, and community design.

The Project site is located in the largely undeveloped northwest portion of the City on lands with the Open Space-Water and Open Space-Desert land use designations. This land use designation is reserved for flood control or drainage facilities located within the 100-year flood zone as established by FEMA FIRMs and subject to sporadic flooding and other hazards in the event of a 100-year flood in the WRSC. No habitable structures are permitted within these areas. The General Plan does not include any land use policies specific to the Open Space -Water land use designation.

Beyond the land use designation of the Facility, the City's General Plan includes the following policies applicable to water resource facilities.

Circulation Element

Policy CR10.13 – Work with the Desert Water Agency, Coachella Valley Water District, and Mission Springs Water District to promote water and wastewater conservation practices.

Recreation, Open Space, & Conservation Element

Policy RC9.1 – Work with the Desert Water Agency, Coachella Valley Water District, and Mission Springs Water District to ensure that a sufficient quantity and quality of potable water is available for current and future residential, business, and visitor uses.

Policy RC9.2 – Encourage the responsible management and use of water resources through appropriate water conservation measures, financial incentives, and regulations.

Policy RC9.4 – Encourage the preservation and management of natural floodplain areas that allow for water percolation, replenishment of the natural aquifers, proper drainage, and prevention of flood damage.

Policy RC9.6 – Cooperate with surrounding jurisdictions and the Coachella Valley Association of Governments to serve as a voice for drafting and advocating an integrated water policy for the region that addresses the supply, quality, and reliability of water.

3.8.3 Impacts and Mitigation Measures

Methodology for Analysis

This analysis evaluates the potential for land use impacts that could result from the continued operation and maintenance of the existing Facility. This analysis compares the existing land

use setting with the with the conditions of the Project site under the proposed Project, including any changes in land administration. Federal, State, regional and local planning documents and maps, were reviewed to characterize existing land uses on and adjacent to Project components. Applicable land use plans and policies (e.g., CVMSHCP, CDCA, DRECP) were reviewed to determine their applicability to the proposed Project and whether continued operation and maintenance activities associated with the proposed Project would be consistent with the relevant land use policy, plan, or regulation.

Significance Criteria

Pursuant to Appendix G of the 2021 CEQA Guidelines, a project would have a significant impact on land use if it would:

a) Physically divide an established community; or
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Areas of No Project Impact

a) Physically divide an established community

The existing Facility is generally surrounded by undeveloped land along the WRSC. While portions of the Facility itself are located within the city limits of Palm Springs, the nearest residential development is separated from the Facility by SR-111. The proposed Project is intended to support the continued operation and maintenance of the existing Facility. There would be no expansion of the Facility or its operations or any new linear features (e.g., roads, fences, etc.) that could potentially divide an established community. There is currently no public access through the Project site; therefore, the proposed Project would not impact public access. The proposed Project would also not result in dividing an established community.

Impact Analysis

The land use compatibility analysis evaluates the potential for land use impacts, including long-term impacts that could result from the continued operation and maintenance of the existing Facility. The analysis compares the existing land use, its setting, and planning goals for consistency and compatibility of the proposed Project during the lifespan of the proposed Project.

Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impact LUP-1 Continued operation of the existing Whitewater River Groundwater Replenishment Facility under the proposed project would not

conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant.)

Under the proposed Project, the Facility would continue operating consistent with ongoing operations, and there would be no change to the physical development or use of the Facility as it currently exists.

With regard to the BLM's CDCA and DRECP, the Facility predates the creation of the DRECP and is not located within any of the renewable energy Development Focus Areas (areas within which the activities associated with solar, wind, and geothermal development, operation, and decommissioning will be allowed, streamlined, and incentivized) or conservation and recreation designations including, but not limited to, California Desert National Conservation Lands, Areas of Critical Environmental Concern, Wildlife Allocations, Special Recreation Management Areas, Extensive Recreation Management Areas, or National Scenic Cooperative Management Areas (BLM 2016).

Table 3.8-1. Project Consistency with the Palm Springs General Plan

Policy	Relationship to Project
City of Palm Springs General Plan	
Land Use Element	
Open Space-Water. Areas designated as Open Space-Water are reserved for flood control or drainage facilities only. Properties under this designation fall within the 100-year flood zone as established by the adoption of Federal Emergency Management Agency flood maps and are subject to sporadic flooding and other hazards in the event of a 100-year flood. No habitable structures are permitted within these areas. **Open Space-Desert.** This designation is intended to identify areas to be retained to protects natural, scenic, and wildlife resources unique to Palm Springs and to identify areas where minimal development is desired to protect people and property from environmental hazards such as blowsand associated with the undeveloped desert floor areas. Residential development in this area is permitted as long as it does not exceed 1 unit per 10 acres and is incidental to the overall desert use. Cluster development is encouraged to respond to the environmental sensitivity of the area. Other permitted uses in this land use designation include recreational facilities and public facilities that comply with the intent of the goals and policies identified in the General Plan. Where mineral deposits are present or are found within areas designated for Desert land use, mineral extraction is permitted, provided that appropriate buffers are	**Consistent.** The Facility is consistent with the existing land use designations (Open Space-Water and Open Space-Desert). No physical changes to the Facility are proposed and the Facility would remain consistent with the General Plan.

Policy	Relationship to Project
established to minimize conflicts between residential and mining uses and the appropriate environmental analysis has been conducted.	
Circulation Element	
CR10.13. Work with the Desert Water Agency, Coachella Valley Water District, and Mission Springs Water District to promote water and wastewater conservation practices.	**Consistent.** CVWD maintains several programs promoting water conservation and provides opportunities for public engagement and education related to water efficiency (e.g., rebates, opportunities to report water waste, water conservation contests, seminars, workshops, and webinars). The proposed Project would allow for continued operation of the Facility, which replenishes groundwater to ensure water reliability during drought and dry years.
Recreation, Open Space, & Conservation Element	
RC9.1. Work with the Desert Water Agency, Coachella Valley Water District, and Mission Springs Water District to ensure that a sufficient quantity and quality of potable water is available for current and future residential, business, and visitor uses.	**Consistent.** The proposed Project would allow for continued operation of the Facility, to support CVWD efforts to provide continued groundwater storage, address land subsidence, ensure water reliability, and increase community resiliency to the effects of climate change, including drought and water shortages. Continued operations at the Facility would help CVWD ensure that that a sufficient quantity and quality of potable water is available for current and future customers.
RC9.2. Encourage the responsible management and use of water resources through appropriate water conservation measures, financial incentives, and regulations.	
RC9.4. Encourage the preservation and management of natural floodplain areas that allow for water percolation, replenishment of the natural aquifers, proper drainage, and prevention of flood damage.	
RC9.6. Cooperate with surrounding jurisdictions and the Coachella Valley Association of Governments to serve as a voice for drafting and advocating an integrated water policy for the region that addresses the supply, quality, and reliability of water.	

(For a more robust discussion of the Project's consistency with the CVMSHCP, refer to Section 3.2, *Biological Resources*. Similarly, for a more robust discussion of consistency with the City of Palm Springs Climate Act Plan and the City of Palm Springs Sustainable City Plan, refer to Section 3.6, *Greenhouse Gas Emissions*.).

The existing Facility predates the DRECP and is not located within any of the special land use designations defined by that planning document. Additionally, the continued operation of the Facility would not conflict with the BLM's ongoing implementation of the DRECP as it would not necessitate further amendments to existing land use plans. The existing Facility is consistent with the City of Palm Springs General Plan Land Use element designation as Open Space-Water and Open Space-Desert, with no existing habitable structures present. Further,

the proposed Project would continue the Facility's existing consistency with other City General Plan policies relevant to water facilities. With regard to the County of Riverside General Plan, the existing Facility is consistent with the County's General Plan (specifically, the Western Coachella Area Plan) designation as Open Space-Water. Because no physical changes to the Facility are proposed, the Facility would remain consistent with the County's General Plan. Therefore, the proposed Project would not create any conflict with any land use plan, policy, or regulation and would have a less than significant impact; no mitigation measures are necessary.

3.9 CUMULATIVE IMPACTS

This section discusses the approach to cumulative impact analysis and summarizes the cumulative projects that could have a nexus with the proposed right-of-way grant from the BLM for the continued operation and maintenance of the existing Whitewater River Groundwater Replenishment Facility (Facility).

As described in Section 1.0, *Introduction*, the proposed right-of-way grant would allow CVWD to continue groundwater replenishment at the Facility and would not involve any new construction or expansion of the Facility, apart from the on-going operations and maintenance activities described in Section 2.6.5, *Proposed Project Operations and Maintenance*.

3.9.1 Introduction

According to CEQA Guidelines Section 15130(a)(1), a *"cumulative impact"* is defined as an impact that is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts. CEQA Guidelines Section 15355 define cumulative impacts as *"two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts."* Cumulative impacts can result from individually minor, but collectively significant, projects occurring over a period of time (CEQA Guidelines Section 15355[b]). CEQA Guidelines Section 15355 further states that the individual effects can be various changes related to a single project or the change involved in a number of other closely related past, present, and reasonably foreseeable future projects.

CEQA Guidelines Section 15130(a) clarifies that an EIR shall "*discuss the cumulative impacts of a project when the project's incremental effect is cumulatively considerable*." In this context, *"cumulatively considerable"* means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and/or the effects of probable future projects, as defined by CEQA Guidelines Section 15130. The discussion of cumulative impacts must reflect the severity of the impacts as well as the likelihood of their occurrence. The standards for *"significant"* or *"cumulatively considerable"* are based on the established significance thresholds for each resource area. Pursuant to CEQA Guidelines Sections 15130(b)(1)(B) and 15130(d), consistency with the projections or requirements of previously approved local, regional, or State-wide planning documents may also be a guide to determining whether a project's impact is cumulatively significant.

CEQA Guidelines Section 15130(B) identifies the following elements as necessary for an adequate discussion of cumulative effects:

> "(2) *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic*
>
> *(3) The geographic scope of the area affected by the cumulative effect and a reasonable explanation for the geographic limitation used.*
>
> *(4) A summary of the expected environmental effects to result from those projects with specific reference to additional information stating where that information is available.*
>
> *(5) A reasonable analysis of the cumulative impacts of the relevant projects. An EIR shall examine reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects."*

According to CEQA Guidelines Section 15130(b), the discussion and evaluation of cumulative impacts need not be as detailed as the discussion of environmental impacts attributable to the proposed project alone. Additionally, the discussion should remain practical and reasonable (i.e., not speculative) in considering other projects and related cumulative impacts. Beneficial impacts are also considered in this cumulative impact analysis. Further, pursuant to CEQA Guidelines Section 15130(a)(1), an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR, and that the EIR may determine that a proposed project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant (CEQA Guidelines Section 15130 [a][3]). Therefore, a proposed project would only have a significant cumulative impact is the contribution of the proposed project to that impact is deemed to be cumulatively considerable in light of applicable thresholds of significance.

The CEQA Guidelines provide two different methods to determine the scope of projects for the cumulative impact analysis:

- **List Method** – A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency (CEQA Guidelines Section 15130).
- **General Plan Projection Method** – A summary of projections contained in an adopted General Plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact (CEQA Guidelines Section 15130).

This EIR primarily examines cumulative effects using the List Method. Table 3.9-1 contains a list of pending, approved, and recently adopted groundwater replenishment programs and related implementation projects that would affect groundwater. With regard to general development within the vicinity of the Project site the EIR uses the General Plan Projection Method. Cumulative growth and cumulative development within the region is expected to occur consistent with the land use assumptions and growth projections described in the South Coast Resources Management Plan (BLM 2011) and the City of Palm Springs General Plan (City of Palm Springs 2007).

CEQA Guidelines Section 15130(b)(2) further states that the EIR should define the geographic scope of the area affected by the cumulative effects and provide a reasonable explanation for the geographic limitation used. As described in further detail within Section 3.9.2, *Cumulative Impact Analysis*, the geographic scope for the analysis of cumulative impacts in this EIR varies by each environmental impact topic (e.g., air basin, watershed, etc.), but generally includes the Coachella Valley.

Table 3.9-1. Water Transfer, Groundwater Recharge, Groundwater Treatment, and other Cumulative Projects

Project Name	Status	Cumulative Resources
Projects Related to the 2002 Program EIR for the Coachella Valley Water Management Plan (WMP) included in the Subsequent Program EIR for the Coachella Valley WMP 2010 Update		
Quantification Settlement Agreement	Signed in October 2003	Hydrology and Water Resources
• Imperial Irrigation District (IID) / San Diego County Water Authority Water Transfer (130-200,000 acre-feet per year [AFY])	Being implemented	Hydrology and Water Resources
• IID / CVWD Water Transfer (100,000 AFY)	Being implemented	Hydrology and Water Resources
• Metropolitan Water District of Southern California (Metropolitan) / CVWD State Water Project (SWP) Water Transfer (35,000 AFY)	Included in 2002 Program EIR for the Coachella Valley WMP and Quantification Settlement Agreement (QSA) Program EIR	Hydrology and Water Resources
• 1988 Metropolitan / IID Water Conservation	Included in QSA Program EIR	Hydrology and Water Resources

Project Name	Status	Cumulative Resources
Program (20,000 AFY)		
• Coachella Canal Lining Project	Construction complete	Hydrology and Water Resources
• All-American Canal Lining Project	Construction complete	Hydrology and Water Resources
• IID Priority 3 Caps	Included in QSA Program EIR	Hydrology and Water Resources
• CVWD Priority 3 Caps	Included in QSA Program EIR	Hydrology and Water Resources
• Sharing Miscellaneous and Indian Present Perfected Rights Obligations	Included in QSA Program EIR	Hydrology and Water Resources
Colorado River Interim Surplus Guidelines	Adopted in 2003	Hydrology and Water Resources
Secretarial Implementation Agreement and Inadvertent Overrun and Payback Policy (IA/IOP)	Adopted in 2004	Hydrology and Water Resources
Colorado River Basin Salinity Control Program	On-going	Hydrology and Water Resources
Mission Creek Subbasin Recharge	On-going	Hydrology and Water Resources
CVWD Dike 4 Pilot Recharge Facility	Replaced by full-scale by the Thomas E. Levy Replenishment Facility, in operation since 2009	Hydrology and Water Resources
Martinez Canyon Pilot Recharge	Deferred	Hydrology and Water Resources
CVWD SWP Table A Purchases	Table A Amounts purchased from Metropolitan, Berrenda Mesa Water District and Tulare Lake Basin Water Storage District	Hydrology and Water Resources

Project Name	Status	Cumulative Resources
CVWD Well-head Treatment	On-going; three arsenic removal plants in operation since 2006	Hydrology and Water Resources
Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)	The California Department of Fish and Wildlife issued the Natural Community Conservation Planning Permit for the CVMSHCP on September 9, 2008; U.S. Fish and Wildlife issued the final permit on October 1, 2008	Biological Resources
Potentially Related Projects Approved or Completed after the 2002 Program EIR		
Yuba River Accord Dry Year Water Purchase Program	Agreement among California Department of Water Resources, CVWD, and Desert Water Agency in place	Hydrology and Water Resources
Groundwater Recharge Programs included in the Subsequent Program EIR for the Coachella Valley WMP 2010 Update		
Operate and monitor the Thomas E. Levy groundwater replenishment facility with a 40,000 AFY goal	On-going; operational impacts addressed in the 2007 Supplemental EIR for the Dike 4 Recharge Facility	Hydrology and Water Resources
Investigate groundwater storage opportunities with IID	On-going	Hydrology and Water Resources
Transfer the unused portion of the 35,000 AFY of SWP water available under the QSA to the Whitewater Recharge Facility (QSA assumed to be reinstated)	Completed in 2011; impacts evaluated in the 2002 Program EIR	Hydrology and Water Resources
Work with the City of Indio to evaluate the feasibility of developing a groundwater recharge project that reduces groundwater overdraft. If feasible, work with the City of Indio to construct the facility.	Feasibility study completed in 2011	Hydrology and Water Resources
Design and construct an additional pumping station and pipeline from Lake Cahuilla to the Levy facility if the existing pumping station and pipeline	Completed in 2015; beneficial impacts of recharge addressed in the 2007 Supplemental EIR for the Dike 4 Recharge Facility	Hydrology and Water Resources

Project Name	Status	Cumulative Resources
cannot provide sufficient water to meet the annual goal		
Conduct siting studies, environmental impact evaluation and design for Martinez Canyon Replenishment Facility	Completed in 2018	Hydrology and Water Resources
Potentially Related Projects Approved or Completed after the Subsequent Program EIR for the Coachella Valley WMP 2010 Update		
Palm Desert Groundwater Replenishment Project	CEQA completed in 2018; Addendum No. 1 to the EIR for the Palm Desert Groundwater Replenishment Project certified in 2019. Phase I is operational; Phase II is in design/permit acquisition.	Hydrology and Water Resources
Second Amendment to the 2003 Delivery and Exchange Agreement Between Metropolitan Water District and Coachella Valley Water District for 35,000 acre-feet	Adopted in 2019	Hydrology and Water Resources
2019 Amended and Restated Agreement for Exchange and Advance Delivery; Exchange Agreement Between Metropolitan Water District, Desert Water Agency, and Coachella Valley Water District	Adopted in 2019	Hydrology and Water Resources
Letter Agreement with Rosedale-Rio Bravo Water Storage District to Increase Annual Maximum Delivery from 16,500 to 20,000 AFY	Adopted in 2020	Hydrology and Water Resources

In addition to the cumulative projects listed in Table 3.9-1, the cumulative impacts analysis also programmatically considers approved long-term plans, including the Coachella Valley Water Management Plan and the Integrated Water Management Plan.

Coachella Valley Water Management Plan. As described in Section 2.5.1, *Water Supply Sources*, the goal of the Water Management Plan (CVWD 2010) is to assure adequate

quantities of safe, high quality water at the lowest cost to Coachella Valley water users. To meet this goal, four objectives must be met:

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.
4. Minimize environmental impacts.

Coachella Valley Integrated Regional Water Management (IRWM) / Stormwater Resource (SWR) Plan. The IRWM/SWR Plan (Coachella Valley Regional Water Management Group 2018) presents an integrated regional approach for addressing water management issues through a process that identifies and involves water management stakeholders from the Coachella Valley. The Coachella Valley IRWM/SWR Plan:

- Defines the Region and water systems.
- Identifies regional water management goals and objectives.
- Establishes objectives and measurable targets for the Region.
- Identifies water management issues and needs.
- Identifies stakeholder involvement and agency coordination processes.
- Identifies and evaluates resource management strategies.
- Assesses the integration of projects based on objectives.
- Establishes an IRWM and SWRP project evaluation and prioritization process based on regional priorities.
- Establishes a framework for implementation of projects.

3.9.2 Cumulative Impact Analysis

Air Quality

A cumulative impact to air quality would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects within the Salton Sea Air Basin (Basin) , would cumulatively result in the air quality violations or growth that would be inconsistent with the SCAQMD's adopted 2016 AQMP.

As previously described, the proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Facility. Therefore, there would be no criteria air pollutant emissions associated with any construction activities. As described in the methodology for

analysis in Section 3.2, *Air Quality*, operational emissions typically include mobile source emissions, emissions associated with energy consumption, and area source emissions. Operations associated with the continued operation of the Facility would include daily maintenance and inspection activities, which primarily consist of vehicle trips around the Facility to ensure berm structures are maintained and radial gates are operating properly. Continued operation of the Facility would also include annual maintenance of Ponds 1, 2, 10, and 11, which includes excavation of the top layer of soil along the pond bottoms and grading this soil to armor the pond walls. Additionally, Berm #2 on Section 24 is temporarily relocated before and following heavy storm events (approximately five times per year) to divert stormwater around the Facility. Continued operation of the Facility would also include the occasional repair or replacement of other berms and the low-flow dike and channel crossing. These activities would include earth movement, operation of heavy equipment, and vehicle trips. Existing criteria pollutant emissions associated with these activities are described in Table 3.1-3 (refer to Section 3.1.1, *Environmental Setting*).

As described in Impact AQ-1 and Impact AQ-2, the issuance of a right-of-way grant from the BLM would allow for the continued operation and maintenance of the existing Facility. Given that the proposed Project would not result in physical or operational changes, the proposed Project would result in a net zero increase in the existing criteria air pollutant emissions relative too existing conditions. As described in Impact AQ-1, the proposed Project would not include any new residential development or commercial uses that would directly generate growth within the City of Palm Springs, Riverside County, or the greater Coachella Valley. Further, the proposed Project would not indirectly generate population growth as it would not affect the existing capacity of the 19 replenishment ponds or the overall rate of annual groundwater replenishment.

Therefore, implementation of the proposed Project would not result in an increase in operational emissions that would result in a significant contribution to a cumulatively considerable impact to air quality including those that have been previously identified in the Subsequent Program EIR for the Coachella Valley WMP 2010 Update (CVWD 2011) as listed in Table 3.9-1. Additionally, the implementation of the proposed Project would not contribute to cumulative air quality impacts associated with general development in the region.

Biological Resources

A cumulative impact to biological resources would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects, would result in significant impacts to federally listed, State-listed, or other special status species or their habitats within the Project site and its immediate surroundings within the Coachella Valley. As described in Section 3.2, *Biological Resources*, the implementation of the proposed Project would involve the issuance of a right-of-way grant by the BLM for the continued operation and maintenance of the existing Facility. Under the proposed Project existing maintenance and repair operations within the renewal area would continue in a scale

and approach comparable to existing conditions to ensure effective and efficient use of the Facility. The amendment area would continue to be used for access to the replenishment facilities and for conveyance of natural flows and Colorado River water, similar to existing conditions. Project maintenance and repair activities at the Facility, including sloping, shaping, and restoring of berms; excavation of material buildup in dikes and channels; and tilling and grading in the replenishment ponds would continue without alteration under the proposed Project. These activities have been on-going since the establishment of the Facility in 1984 and no new maintenance activities are proposed or would be required. As described in Section 3.2.2, *Regulatory Framework*, the use of the Facility, including the replenishment ponds on BLM lands and the Colorado River Aqueduct turnout and recharge channel, is considered a "covered activity" under the CVMSHCP (CVAG 2007). Therefore, continued operation and maintenance of this Facility, would not conflict with the CVMSHCP or any other local policies or ordinances (ECORP 2019; see Appendix C).

Implementation of the proposed Project would not result in the direct removal of sensitive natural communities or other habitats not already within the disturbance footprint associated with the existing Facility. The biological surveys completed for the proposed Project did not identify any suitable habitat for special status species, with the exception of the Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*), which was identified in the amendment area, and the Coachella Valley giant sand-treader cricket (*Macrobaenetes valgum*) which may occur within the Snow Creek area (ECORP 2019; see Appendix C). As described in Impact BIO-1, in order to ensure the protection of special status during operation and routine maintenance, CVWD would continue to comply with and adhere to the avoidance and minimization measures required by the CVMSHCP for operations and maintenance activities. CVWD also continue to cooperate with the Coachella Valley Conservation Commission on the conservation of lands and establishment and enhancement of habitat areas for sensitive species. Additionally, CVWD has already conserved approximately 1,218 acres of land to the east of the amendment area between Indian Canyon Drive and Gene Autry Trail as part of a mitigation established in 1984 under the existing Biological Opinion for protection of the Coachella Valley fringe-toed lizard (*Uma inornata*; CVFTL), which determined CVWD's operation and maintenance may cause *"destruction of approximately 236 acres of CVFTL habitat on 1,450 acres of public lands would jeopardize the continued existence of CVFTL and hinder the recovery efforts for the lizard."*

Therefore, because the proposed Project would have less than significant impacts on biological resources, including special status species and their habitats, and would continue to comply with existing avoidance and minimization measures required under the CVMSHCP, implementation of the proposed Project would not substantially contribute to any cumulatively considerable impacts on biological resources.

Cultural Resources and Tribal Cultural Resources

A cumulative impact to cultural resources would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects,

would result in significant impacts to cultural or tribal cultural resources within the boundaries of the Project site, where ground disturbing activities would occur, and its immediate surroundings within the Coachella Valley. Under the proposed Project existing maintenance and repair operations within the renewal area would continue in a scale and approach comparable to existing conditions to ensure effective and efficient use of the Facility. The amendment area would continue to be used for access to the replenishment facilities and for conveyance of natural flows and Colorado River water, similar to existing conditions. Project maintenance and repair activities at the Facility, including sloping, shaping, and restoring of berms; excavation of material buildup in dikes and channels; and tilling in the replenishment ponds would continue without alteration under the proposed Project. The proposed Project would not involve any new excavation, grading, or ground clearing. As described in Impact CR-1, the continued operation and maintenance of the Facility under the proposed Project would comply with all applicable Federal and State laws and regulations including the Archaeological Resources Protection Act and California Public Resources Code Section 5097.5, which require the preservation of all potential archaeological resources. While not anticipated, in the event of an inadvertent discovery during operations and maintenance activities at the Project site, all activity in the vicinity of the find shall cease until it can be evaluated by a Qualified Archaeologist. If the find is determined to be potentially significant, the Qualified Archaeologist, in consultation with appropriate Native American tribe(s) (if the find is a prehistoric or Native American resource), shall develop a treatment plan. Pursuant to California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98, should human remains be discovered, no further disturbance within 100 feet of the discovery shall occur until the County of Riverside coroner has made the necessary findings as to the origin and disposition of the remains. If the local coroner determines the remains are of Native American descent, the coroner shall notify the NAHC within 24 hours. The NAHC shall determine and notify a most likely descendant who would complete an inspection of the remains within 48 hours of notification and recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Therefore, because implementation of the proposed Project avoid potential impacts to cultural resources and would comply with all applicable laws and regulations protecting cultural and tribal cultural resources within the limits of Project-related ground disturbance, the proposed Project would not substantially contribute to any cumulatively considerable impacts on cultural resources or tribal cultural resources related to cumulative development.

Energy

Appendix F, *Energy Conservation* of the CEQA Guidelines provides a goal of conserving energy in the State of California. Under CEQA (California Public Resources Code Section 21100[b][3]), EIRs must include a discussion of the potentially significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy. The appendix indicates the following methods to achieve

this goal: 1) decreasing overall per capita energy consumption; 2) decreasing reliance on natural gas and oil; and 3) increasing reliance on renewable energy sources. In addition to building code compliance, other relevant considerations may include, among others, the project size, location, orientation, equipment use and any renewable energy features that are incorporated into the project (CEQA Guidelines Section 15126.2[b]).

As described in Impact ENG-1, the proposed Project would allow for the continued operation of CVWD's existing Facility. Existing electricity usage for operation of the radial gates at intake points and fuel usage by CVWD vehicles during day-to-day operations and maintenance activities would be identical to those described under existing conditions. Therefore, the proposed Project would not result in any change in energy use from the existing conditions and would not contribute to a cumulatively considerable impact related to energy usage, including fuels, in the Coachella Valley.

Geology and Soils

Impacts to geology, soils, and seismicity are generally site-specific because they depend on local geological conditions. However, a cumulative impact related to geology and soils would result if the potential impacts associated with the proposed Project, when combined with other past, present, and future projects, would increase the potential for people within the Coachella Valley to be exposed to geological hazards. As previously described, under the proposed Project, existing maintenance and repair operations within the renewal area would continue in a scale and approach comparable to existing conditions to ensure effective and efficient use of the groundwater replenishment facility. Therefore, as described in Impact GEO-1, potential impacts related to fault ruptures, seismic shaking, liquefication, landslides and other land movement would be less than significant. Additionally, the continued implementation of a SWPPP including best management practices during ground-disturbing activities including berm maintenance 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 would ensure that impacts related to erosion would be less than significant. Therefore, these on-going operations and maintenance activities associated with the Facility would not substantially contribute to cumulatively significant impacts related to geology or soils. However, as described further under Hydrology and Water Quality, the continued groundwater recharge at the Facility in conjunction with the implementation of the Coachella Valley WMP 2010 Update would slow or halt land subsidence in the Coachella Valley, resulting in a cumulatively beneficial impact (CVWD 2011).

On-going maintenance and repair operations would have a low potential for encountering paleontological resources due to the young age of the surficial geologic units within the vicinity (University of California Museum of Paleontology 2020). Further, continued compliance with all applicable provisions of Federal, State, and local regulations – including notifying a Qualified Paleontologist in the event of an unanticipated paleontological discovery

(refer to Section 3.5.2, *Regulatory Framework*) – would render impacts less than significant for the life of the proposed Project. Therefore, these on-going activities at the Facility would not substantially contribute to cumulatively significant impacts related to paleontological resources.

Greenhouse Gas Emissions

As described in Section 3.6, *Greenhouse Gas Emissions*, there are several challenges to analyzing GHG emissions and global climate change pursuant to CEQA Guidelines Section 15064.4. The approach to analysis of GHG emissions under CEQA is fundamentally different from the approach to analysis of criteria pollutant emissions (refer to Section 3.1, *Air Quality*). As air quality is linked to conditions in a particular air basin, it is appropriate to consider the creation of new emissions in that air basin to be an environmental impact, regardless of whether the emissions are truly *"new"* emissions regionally or globally. Within the global context of climate change, it is important to consider whether GHG emissions are truly *"new"* emissions or are merely replacing existing emissions or being moved from one place to another. Impact analyses typically address local development projects or long-term land use plans that may have local or regional impacts. In contrast, climate change presents the considerable challenge of analyzing the relationship between local projects and the potential for global environmental impacts, if any. For instance, the use of models that measure overall emissions increases without accounting for existing emissions will substantially overstate the impact of a development project on global climate change. This makes an accurate analysis of GHG emissions substantially different from criteria pollutant emissions, where the *"addition"* of redistributed emissions to a new locale has the potential to result in a substantial difference to overall air quality in the Basin.

The total operational GHG emissions generated by the existing Facility is approximately 203.59 MT CO_2e per year. As described for criteria air pollutant emissions, the right-of-way grant associated with the proposed Project would allow for continued CVWD operations at the Facility and would not result in changes in operations. Therefore, the GHG emissions presented in Table 3.6-1 represent both the existing GHG emissions at the Project site as well as the GHG emissions that would occur under the proposed Project. As such, the proposed Project would result in no new GHG emissions and would not substantially contribute to cumulatively considerable cumulative impacts.

Hydrology and Water Quality

The proposed Project is generally limited to real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation of CVWD's existing Facility in compliance with the policies of the Coachella Valley WMP 2010 Update (CVWD 2011). Ground-disturbing operations and maintenance activities within the Facility and Whitewater River Stormwater Channel (WRSC) would be required to comply with all applicable Federal, State, and local water quality standards and waste discharge requirements including compliance with the National Pollutant Discharge Elimination System MS4 Permit

issued by the Colorado River Basin RWQCB under Order No. R7-2008-001. Compliance with the MS4 Permit during ground-disturbing actions would be achieved through development and implementation of a SWPPP and associated best management practices designed to prevent sedimentation of surface waters within the WRSC associated with ground-disturbing maintenance activities. Therefore, with the implementation of these best management practices, implementation of the proposed Project would have a less than significant impact on surface water quality and flooding (refer to Impact HWQ-1, HWQ-4, and HWQ-5).

The Subsequent Program EIR for the Coachella Valley WMP 2010 Update determined that groundwater recharge efforts in the Coachella Valley address groundwater overdraft conditions throughout the valley, and the overall cumulative effect on groundwater levels would be beneficial (CVWD 2011). The proposed Project would continue the operation of the existing Facility under the proposed Project and would provide groundwater replenishment capacity for CVWD to maintain a net positive water balance within the Whitewater River Subbasin to avoid long-term groundwater overdraft. 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. However, as described in Impact HWQ-2, continued groundwater recharge activities – including the continued operation of the facility under the proposed Project – would continue to increase salinity (i.e., TDS) concentrations in some groundwater in the vicinity of the Facility.

The Subsequent Program EIR for the Coachella Valley WMP 2010 Update found that overall impacts to groundwater quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant (CVWD 2011). A Statement of Overriding Considerations for the Subsequent Program EIR for the Coachella Valley WMP 2010 Update was adopted for significant irreversible environmental change associated with increased salinity levels in some groundwater (CVWD 2011).

CVWD would continue to monitor the quality of drinking water produced at wells through its service area including wells in proximity to the Facility and would provide alternate supplies or wellhead treatment if health-based drinking water standards are exceeded due to recharge activities (CVWD 2012) (refer to MM HWQ-1). Nevertheless, that would not be environmentally or economically prohibitive, mitigation of groundwater quality impacts to below a level of significance is not feasible, the proposed Project would result in a significant and unavoidable impact and would contribute to cumulatively significant impacts to groundwater quality.

Land Use and Planning

As discussed in Section 3.8, *Land Use and Planning*, the Facility itself is located within the City of Palm Springs in Riverside County. The Facility and associated operations and maintenance areas within the WRSC are located on lands owned by CVWD, administered by the BLM, and administered by the CSLC.

The existing Facility is consistent with the City of Palm Springs General Plan Land Use element designation as Open Space – Water (City of Palm Springs 2007), with no existing habitable structures present. Further, the proposed Project would continue the Facility's existing consistency with other City General Plan policies relevant to water facilities. Additionally, while portions of the Project site are located on BLM-administered lands subject to the CDCA Plan and DRECP, the Project site is not located within any of the special management areas designated under the DRECP and is consistent with those plans.

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.

4.0 OTHER CEQA CONSIDERATIONS

This section addresses other topics required by the California Environmental Quality Act (CEQA) including: significant and unavoidable impacts; summary of cumulative impacts; irreversible environmental impacts; growth inducement; and environmental resource areas found to have negligible or no impact.

CEQA Guidelines Section 15126 requires that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation.

4.1 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines Section 15126.2(c) requires that an Environmental Impact Report (EIR) describe any significant impacts that cannot be avoided or otherwise reduced to acceptable or insignificant levels by the implementation mitigation measures. Where there are significant impacts, their implications, and the reasons why the project is being proposed – notwithstanding their effect – should be described.

Significant and unavoidable impacts of the proposed Project are limited to hydrology and groundwater quality. Potential environmental impacts would be significant and unavoidable due to increased total dissolved solids (TDS) concentrations in some groundwater near the recharge area, where wells could exhibit increased TDS concentrations above the recommended consumer acceptance contamination level of 500 milligrams per liter (mg/L) for drinking water.

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 could be cumulatively considerable. As defined in CEQA Guidelines Section 15065(a)(3), *"cumulatively considerable"* means that the incremental impacts 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 is fully assessed by environmental issue area in Section 3.9, *Cumulative Impacts*. That analysis concludes that that the proposed Project would not result in significant cumulative impacts for any of the environmental issue areas except water quality. As described in Section 3.7, *Hydrology and Water Quality*, the proposed Project may result in a significant unavoidable impact on groundwater quality (see Section 3.7, *Hydrology and Water Quality*), 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 increasing TDS levels in some groundwater.

4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Section 15126.2(d) requires a discussion of *"significant irreversible environmental changes which would be caused by the proposed project should it be implemented. Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

The CEQA Guidelines require that an EIR 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 is generally limited to real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Whitewater River Groundwater Replenishment Facility (Facility) in compliance with the policies of the Coachella Valley Water Management Plan (2010). The right-of-way grant would allow CVWD to continue groundwater replenishment at the Facility by delivering Colorado River water at a maximum rate of 511,000 acre-feet in any given year. The proposed Project does not involve new construction or ground-disturbing activities at the Facility, apart from the existing, ongoing maintenance activities described in Section 2.6.5, *Proposed Project Operations and Maintenance*. Therefore, there would be no net increase in the energy consumption and no requirements for additional utilities or public services. Significant irreversible environmental changes would be limited to increased TDS concentrations in some groundwater above the recommended consumer acceptance contamination level of 500 mg/L for drinking water. However, while it would not reduce impacts related to increased TDS concentrations to a less than significant level, CVWD would implement a mitigation measure (MM HWQ-1 in Section 3.7, *Hydrology and Water Quality*) to monitor groundwater drinking wells to ensure that health-based water quality standards continue to be met if exceeded due to Facility recharge activities.

4.4 GROWTH INDUCEMENT

CEQA Guidelines Section 15126(d) requires a discussion of a 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. Therefore, a project's growth inducing

potential would be considered significant if it could result in significant physical effects in one or more environmental issue areas.

4.4.1 Population Growth

The proposed Project would not include any new residential development or commercial uses that would directly generate growth within the City of Palm Springs, Riverside County, or the greater Coachella Valley. Further, the proposed Project would not indirectly generate population growth within the Coachella Valley as it would not affect the existing capacity of the 19 replenishment ponds or the overall rate of annual groundwater replenishment. The proposed right-of-way grant would allow CVWD to continue groundwater replenishment at the Facility by delivering Colorado River water at a maximum rate of 511,000 acre-feet in any given year. As described in Section 2.6.1, *Project Background* annual requested State Water Project (SWP) supplies are not always delivered and are subject to available water supplies (e.g., the SWP currently has only about half of the water supply capacity needed to meet maximum obligations during droughts). Supplies of SWP are further constrained by drought and other factors, including environmental requirements related to the protection of the federally endangered Delta smelt (*Hypomesus transpacificus*), in the Sacramento-San Joaquin Delta in Northern California. The continued operation and maintenance of the existing Facility would not facilitate any increase in the existing growth rate within the City of Palm Springs, Riverside County, or the greater Coachella Valley, but rather would support existing population and land uses in these areas, particularly in light of ongoing long-term drought conditions in California.

4.4.2 Economic Growth

The continued operation and maintenance of the Facility would involve existing CVWD operations staff and skilled and general workers that currently support the existing Facility. The proposed Project would not result in construction activities or expansion of the existing groundwater recharge operations such that it would require additional CVWD employees or skilled and general workers. Further, as described in Section 4.4.1, *Population Growth*, the proposed Project would support the existing population and land uses within the CVWD service area.

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 within Palm Springs, Riverside County, or the greater Coachella Valley would be addressed as part of the CEQA environmental review for such development projects.

4.4.3 Removal of Obstacles to Growth

The Project site located in a previously disturbed and developed area that is well-served by existing infrastructure. The replenished groundwater under the proposed Project would

continue to be utilized to avoid land subsidence and to ensure local availability of irrigation and domestic water within the Coachella Valley Water District (CVWD) service area. No new utilities or roads would be installed as part of the proposed Project, and the proposed Project would not increase access to or through the area. Further, the proposed Project would not indirectly generate population growth within the Coachella Valley as it would not affect the existing capacity of the 19 replenishment ponds or the overall rate of annual groundwater replenishment. Therefore, implementation of the proposed Project would not remove an obstacle to growth.

4.5 EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires a statement briefly indicating the reasons that various possible effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Through the scoping process, CVWD determined that the proposed Project would have a negligible impact or no impact on the following resources:

- Aesthetics;
- Agriculture and Forestry Resources;
- Energy;
- Hazards and Hazardous Materials;
- Mineral Resources;
- Noise;
- Population and Housing;
- Public Services;
- Recreation;
- Transportation;
- Utilities and Service Systems; and
- Wildfire.

4.5.1 Aesthetics

The Facility is mapped by the BLM as Visual Resource Management Class IV which allows for management activities and uses requiring major modifications to the natural landscape and can accommodate changes to the characteristic landscape. Implementation of the proposed Project would not result in major alterations to the existing landscape and it would have no impact on aesthetics and visual resources. The Project site is developed with the Facility, which is composed of 19 replenishment ponds used to receive and infiltrate Colorado River water. Surrounding land uses include wind energy development, the Union Pacific Railroad, limited rural residential developments, and undeveloped arid open space. The implementation of the proposed Project would be limited to the requested issuance of a right-of-way grant by BLM and the continued operation and maintenance of the Facility. Therefore, the proposed Project, would not result in any physical environmental changes relative to existing conditions are proposed, and the proposed Project would have no short-term, temporary, or long-term impacts on scenic vistas, scenic resources, or the visual character of the Project site. Therefore, there the proposed Project would have no impact to this environmental area.

4.5.2 Agriculture and Forestry Resources

The proposed Project would not have the potential for significant impacts associated with important agricultural or forestry resources. The Project site and surrounding areas are entirely arid desert and do not contain any developed agricultural or forestry resources. Colorado River Water used to replenish the groundwater basin may be used to support agricultural land uses. However, the issuance of a right-of-way grant and the continued operation of the Facility would not change any land use designations affecting such resources and would not indirectly affect such resources. Therefore, there would be no impacts to these resource areas.

4.5.3 Hazards and Hazardous Materials

The proposed Project would not have the potential for significant impacts associated with hazards or hazardous materials. The Project site is not listed as an active hazardous contamination site under Federal and State databases, and no active hazardous contamination sites are located within a 0.5-mile radius of the Project site. As described in Section 2.6.5, *Proposed Project Operations and Maintenance*, annual maintenance activities involve the use one D8 bulldozer, one 800 class and one long stick excavators, three articulating rock trucks, one motor graders, five water trucks, and six standard CVWD service trucks; however, the proposed Project would not result in an increase in the necessary use of fuel, hydraulic fluids, or hazardous materials required to support these ongoing activities. The proposed Project site is not located within an airport land use plan or within 2 miles of a public airport. Operation of the Facility would not introduce potentially flammable activities in fire-prone areas. Therefore, there would be no significant impacts in regard to hazards and hazardous materials.

4.5.4 Mineral Resources

The California Geological Survey (CGS) (Busch 2007) mapping identifies the entire Project site and surrounding vicinity as having likelihood for the presence of significant mineral deposits. However, the Project site has been used for groundwater replenishment activities dating back to the early 1900s. As described in Section 2.6.2, *History of Right-of-Way Grants*, CVWD has maintained a BLM permit for groundwater replenishment activities since 1924 including the first right-of-way grant of issued by the BLM in 1937. Therefore, the continued operation and maintenance of CVWD's existing Facility would not have the potential to result in significant impacts associated with important mineral resources. Additionally, mineral resources would remain readily abundant in the surrounding vicinity.

4.5.5 Noise

The proposed Project would not have the potential to cause significant impacts associated with noise in the surrounding environment. The nearest sensitive receptors (e.g., residential

development) are more than 0.25 miles from the Facility south State Route 111 (SR-111) and north of the Union Pacific Railroad, which are the dominant sources of noise in the vicinity. Further, no new development or operational activities are proposed at the Facility that would introduce new noise-generating activities to the area. As previously described, the proposed Project is generally limited to real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Facility. Therefore, while noise would continue to be generated during maintenance and repair activities involving heavy equipment – including one D8 bulldozer, one 800 class and one long stick excavators, three articulating rock trucks, one motor graders, five water trucks, and six standard CVWD service trucks – these activities should be short-term and temporary and would generate operational noise would be identifical to existing conditions.

4.5.6 Population and Housing

The proposed Project would not have the potential to result in significant impacts associated with population and housing. As described in Section 4.4.1, *Population Growth,* the proposed Project would not include any new residential development or commercial uses that would directly generate growth within the City of Palm Springs, Riverside County, or the greater Coachella Valley. Further, the proposed Project would not indirectly generate population growth as it would not affect the existing capacity of the 19 replenishment ponds or the overall rate of annual groundwater replenishment. Continued maintenance and operation of the Facility would not require additional staff beyond those currently employed by CVWD. Therefore, the proposed Project would not generate additional jobs or require additional housing in the region. Further, the continued operation and maintenance of the existing Facility would not facilitate any increase in the existing population growth rate within the City of Palm Springs, Riverside County, or the greater Coachella Valley, but rather would support the existing population and land uses in these areas, particularly in light of ongoing long-term drought conditions in California.

4.5.7 Public Services

The proposed Project would not change the demand for police, fire, and school services in the vicinity of the Project site. As previously described, no new employment opportunities would not be created from implementation of the proposed Project. Operation of the proposed Project would enable the 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 (refer to Section 4.4, *Growth Inducement*). As the proposed Project would not generate population growth, it would also not affect established service ratios for fire protection, police protection, schools, or libraries. Therefore, the proposed Project would not affect existing public service facilities and would have no impact on public services.

4.5.8 Recreation

The proposed Project would not have the potential for significant impacts associated with recreation. This section of the Whitewater River channel is not used as open space or for passive recreation. While recreational facilities existing in the vicinity – including the Pacific Crest Trail (located approximately 5 miles west of the Facility – none of these facilities would be directly or indirectly impacted by the continued operation and maintenance of the Facility. No recreational users would not be displaced from the area during continued operations and maintenance of the Facility. The proposed Project would have no effects on use at existing parks or other recreational facilities; therefore, the proposed Project would have no impact on these resources.

4.5.9 Transportation

The proposed Project would not have the potential for significant impacts associated with transportation. The regional transportation network would not be affected under the proposed Project because there would be no physical changes compared to existing conditions. CVWD employees would continue to use local highways and surface streets for transportation to and from the Project site. The proposed Project would neither result in additional trip-generating activities, nor would it increase the number of employees required to operate and maintain the Facility. No new roads or changes to the existing alignment of any roads would occur under the proposed Project. The City of Palm Springs, County of Riverside, and California Department of Transportation would continue to manage the local and regional transportation system, and the proposed Project would not interfere with any established plans, policies, or programs. Therefore, the proposed Project would have no impact.

4.5.10 Utilities and Service Systems

The proposed Project would not have the potential for significant impacts associated with established utilities and service systems. The proposed Project is solely the renewal of right-of-way agreements and no changes to the physical environment would occur. The proposed Project would not generate population growth or the need for new water and sanitary sewer connections requiring expansion of a water or wastewater treatment plant. Additionally, no new paved surfaces are proposed that would require construction of new stormwater drainage facilities or expansion of existing facilities. Therefore, the proposed Project would not affect existing utilities and service systems, and there would be no impact.

4.5.11 Wildfire

The proposed Project would not have the potential for significant impacts associated with wildfires. The California Department of Forestry and Fire Protection (CAL FIRE) has identified the Project site and the immediate surrounding vicinity as being located outside of

Moderate, High, and Very High Fire Hazard Severity Zones in the Local Responsibility Area for incorporated cities and Federal Responsibility Area for public lands administered by the BLM. This indicates that the Project site is unlikely to be subject to wildfire hazards. However, the proposed Project would not involve installation of any infrastructure such as high-tension electricity lines that would exacerbate wildfire risk and would not increase public exposure to wildfires (i.e., placing residential uses in areas of high wildfire risk). The Project site is not located on a significant slope and would not result in increased structural or population hazards associated with post-fire slope instability or drainage alterations. The Project site is highly accessible from multiple emergency response routes and would not change or otherwise interfere with an existing evacuation route. No physical changes to the existing environment or groundwater replenishment operations are proposed, as the proposed Project is a real estate action only. Therefore, the proposed Project would have no impact to wildfire risks, hazards, response times, or related conditions.

5.0 ALTERNATIVES

As described in Section 4.1, *Significant and Unavoidable Impacts*, significant and unavoidable impacts of the proposed Project are limited to hydrology and groundwater quality. Potential environmental impacts would be significant and unavoidable due to increased total dissolved solids (TDS) concentrations in some groundwater near the recharge area, where wells could exhibit increased TDS levels above the recommended consumer acceptance contamination level of 500 milligrams per liter (mg/L) for drinking water (refer to Impact HWQ-2). There are no feasible mitigation measures that would reduce TDS concentrations to below 500 mg/L. However, this recommended consumer acceptance contaminant level is focused on aesthetic effects and is non-enforceable and continued operation of the Facility would not result in groundwater TDS levels reaching the 1,000 mg/L upper consumer acceptance contaminant level for drinking water. MM HWQ-1 would require monitoring of groundwater drinking wells to ensure health-based water quality standards are met if exceeded due to recharge activities associated with the Whitewater River Groundwater Recharge Facility (Facility). All other impacts associated with the proposed Project would be less than significant or less than significant with mitigation measures incorporated.

5.1 ALTERNATIVES CONSIDERED BUT ELIMINATED

As noted in Section 2.8, *Project Description*, in accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15126.6(c), the lead agency is responsible for selecting a range of potentially feasible project alternatives for examination and must briefly discuss the alternatives considered and eliminated from detailed consideration. During the development of the proposed Project, a variety of alternative projects were considered to examine alternatives identified in existing regional plans as well as other locations for the project. These alternatives also considered the physical, regulatory, and/or environmental viability of each alternative. Alternatives that failed to meet basic Project objectives, were infeasible, or did not substantially lessen or avoid significant environmental impacts were considered by not further analyzed in detail in this Environmental Impact Report (EIR). Please refer to Section 2.8.2, *Alternatives Considered but Eliminated* for descriptions of each considered but eliminated alternative.

5.2 SELECTED CEQA ALTERNATIVES

5.2.1 Alternative 1: No Project Alternative

Under the No Project Alternative, Coachella Valley Water District (CVWD) would not request the right-of-way grant renewal and amendment from the Bureau of Land Management (BLM). CVWD would be required to cease activities on public lands administered by BLM, and the land would be reclaimed in accordance with BLM requirements.

CVWD would retain ownership over CVWD-owned lands – including the Windy Point intake/sluicing structure, Intake Structure 1, portions of the concrete-line and earthen conveyance channels, Ponds 1 through 5, and portions of Ponds 6 through 19. However, the remainder of the Facility would be located on public lands administered by the BLM. In addition to being unable to use Ponds 6 through 19 for replenishment, CVWD would no longer have access to the low-flow dike and channel crossing or the existing berms within the 178.83-acre amendment area. The low-flow dike and channel crossing channelize the water delivery towards the replenishment Facility. The existing berms in this amendment area are used to direct surface flows toward the Windy Point intake/sluicing structure. Berm #2 requires modification prior to storm events and to return the berm to its existing condition following the storm events. Without the modification of Berm #2, the berm would no longer divert the stormwater around the Facility to the Whitewater River Stormwater Channel (WRSC).

Under the No Project Alternative, CVWD would no longer be able to use the Facility in its current configuration and would have to cease its operation of the Facility.

Pursuant to CEQA Guidelines Section 15126.6(e)(2), the No Project Alternative analysis has been carried forward for analysis to discuss the existing conditions at the time the Notice pf Preparation (NOP) is published (January 31, 2020) and to compare the potential environmental impacts of the No Project Alternative to those of the proposed Project.

5.2.1.1 Avoid/Lessen Impacts

Under the No Project Alternative, CVWD would no longer be able to use the Facility in its current configuration and would have to cease its operation of the Facility. As described in further detail within Section 5.3, *Alternatives Analysis*, the No Project Alternatives would result in temporary construction-related impacts associated with the demolition and reclamation activities required for portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. These activities would result in increased air emissions, noise, etc. as compared to the proposed Project. Additionally, with the cease in operation of the Facility the No Project Alternative would result in potential overdraft conditions for the Whitewater River Subbasin and associated long-term impacts related to potential subsidence (see Section 5.3.8, *Hydrology and Water Quality*).

5.2.1.2 Meeting Project Objectives

The No Project Alternative would not meet the basic Project objectives (Objectives 1 through 5) as it would require CVWD to cease operation of the existing Facility, which has been in operation since 1973. Although historically, CVWD has used the area for spreading ponds dating back to 1918 and under various permits from Federal entities, as needed.

The No Project Alternative is in direct conflict with CVWD water management goals identified in the Coachella Valley Water Management Plan (2010) (Objective 5) and would require substantial revision to the Water Management Plan, which relies on groundwater recharge to

avoid overdraft conditions in the Coachella Valley Groundwater Basin and calls for the expansion of groundwater replenishment at most recharge facilities.

5.2.1.3 Feasibility of Alternative

The No Project Alternative is feasible; however, groundwater recharge would cease at the Facility, which is in direct conflict of the Coachella Valley Water Management Plan (2010) and regional water supply needs.

5.2.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Under Alternative 2, CVWD would only request a right-of-way grant for the amendment area (178.83 acres) and the low-flow dike and channel crossing portion of the renewal area (2.2 acres). CVWD's application for a right-of-way grant for the portion of the 509.7-acre portion of the renewal area would not be approved by the BLM. This would include portions of Ponds 6 through 19, portions of the concrete-lined and earthen conveyance channels, and Intake Structure 2. CVWD would cease activities on these public lands administered by BLM, and the land would be reclaimed in accordance with BLM requirements.

This alternative would require the removal of large portions of Ponds 6 and 7 and would eliminate the ability of CVWD to convey water to Ponds 8 through 19. With this alternative, only Ponds 1 through 5 and a portion of Ponds 6 and 7, which are located on CVWD lands, would be available for groundwater replenishment. (The construction of berms to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands would also be necessary.) Therefore, the replenishment capacity of the Facility would be reduced to approximately 87,000 acre-feet per year, or approximately 17 percent of the existing capacity. As described for the proposed Project in Section 2.6.5, *Proposed Project Operations and Maintenance*, under this alternative water would be conveyed from the existing Colorado River Aqueduct turnouts downstream to the infiltration ponds via a 5-mile reach of the WRSC. Water would enter the Facility through the U.S. Geological Survey (USGS) Windy Point gauge to the Windy Point intake/sluicing structure where it would be directed into the infiltration ponds. Maintenance activities and the implementation of avoidance and minimization measures would be the same as those described for the proposed Project in Section 2.6.5, *Proposed Project Operations and Maintenance*.

5.2.2.1 Avoid/Lessen Impacts

As with the No Project Alternative, Alternative 2 would result in temporary construction-related impacts associated with the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. These activities would result in increased air emissions, noise, etc. as compared to the proposed Project. Additionally, Alternative 2 would reduce regional water supplies to 17 percent of existing capacity resulting in potential overdraft conditions for the Whitewater River Subbasin and associated long-term impacts related to potential subsidence (see Section 5.3.8, *Hydrology and Water Quality*).

5.2.2.2 Meeting Project Objectives

Alternative 2 would not meet Project Objectives 1, 3, and 4. Objective 1 would not be achieved as a right-of-way grant for the Facility including the 19 replenishment ponds would not be fully met (only the amendment area use would be continued). Objective 3 would be fully met as the Facility would no longer be able to meet contractual obligations with the Metropolitan and Desert Water Agency (DWA) as water treatment areas would be reduced. Similarly, Objective 4 would not be met as water replenishment capacity would be decreased to approximately 87,000 acre-feet per year.

5.2.2.3 Feasibility of the Alternative

Alternative 2 is feasible as the amendment area of the Facility would continue to be permitted.

5.2.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Under this alternative CVWD would purchase or exchange land with BLM for the purpose of unifying CVWD ownership of the existing Facility. Under this alternative CVWD would not require issuance of a right-of-way grant to continue operation of the Facility.

The BLM has discretionary authority to approve a land exchange to improve land management objectives by consolidating ownership and protecting environmentally sensitive areas. By exchanging public lands that are of limited interest to the BLM but of value to others, the BLM can acquire other lands with important recreation, conservation, scenic, cultural, and other resource uses. Land exchanges also allow the BLM to reposition or consolidate lands into more manageable units and to meet community expansion needs. The BLM's Land Exchange Handbook provides specific guidance to ensure that statutory and regulatory requirements are followed, and the public interest protected.

5.2.3.1 Avoid/Lessen Impacts

Alternative 3 would generally result in the same impacts as described for the proposed Project. However, this alternative would allow CVWD to purchase or exchange land with BLM, which would avoid future right-of-way grant applications and ensure the continued groundwater replenishment activities consistent with the Coachella Valley Water Management Plan (2010).

5.2.3.2 Meeting Project Objectives

Alternative 3 would meet Project objectives 1 through 5, and no conflict would occur.

5.2.3.3 Feasibility of the Alternative

Alternative 3 is feasible; however, this alternative requires coordination and approval with BLM for land purchase or exchange, which CVWD cannot guarantee or control.

5.3 ALTERNATIVES ANALYSIS

5.3.1 Overview

As set forth in CEQA Guidelines Section 15126.6, the purpose of the alternatives analysis is to focus on alternatives to the project or its location which can avoid or substantially reduce 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 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 Air Quality

5.3.2.1 Alternative 1: No Project Alternative

The No Project Alternative would result in the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. Therefore, the No Project Alternative would temporarily impact air quality in the Salton Sea Air Basin by increasing emissions during demolition and reclamation activities. Nevertheless, temporary impacts to air quality under the No Project Alternative would be less than significant with the implementation of dust control measures and South Coast Air Quality Management District (SCAQMD) rules. Over the long-term, existing operational emissions associated with the Facility described in Section 3.1, *Air Quality* would be eliminated, resulting in a minor long-term beneficial impact to air quality.

5.3.2.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Alternative 2 would have similar impacts to the No Project Alternative associated with the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2 in the renewal area. Additionally, the construction of berms would be necessary to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands. Temporary impacts to air quality under Alternative 2 would be less than significant with the implementation of dust control measures for demolition and SCAQMD rules. Over the long-term, a portion of the existing operational emissions associated with the Facility described in Section 3.1, *Air Quality* would be eliminated, resulting in a minor long-term beneficial impact to air quality.

5.3.2.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities described for the No Project Alternative and Alternative 2. Additionally, ongoing operations

maintenance activities at the Facility would continue under this alternative as described for the proposed Project. Therefore, the implementation of this alternative would result in a net zero increase in criteria air pollutant emissions and impacts would be less than significant similar to those described for the proposed Project.

5.3.3 Biological Resources

5.3.3.1 Alternative 1: No Project Alternative

Alternative 1 would result in temporary disturbance of potential habitat for special status species associated with the demolition, reclamation, and construction activities. However, CVWD would be required to comply with the requirements of the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) in order to avoid or mitigate potential impacts to sensitive species and their habitats. Given the existing disturbed conditions at the Facility as well as limited duration and relatively small acreage of ground-disturbing activities, impacts would be less than significant. The demolition and reclamation of portions of Ponds 6 through 19 would remove artificial aquatic features, which are used by migratory and nesting birds. However, the existing operation and maintenance activities would no longer occur at the Facility, which would result in a long-term decrease in ground disturbance and eliminate the potential for direct and indirect impacts (e.g., noise) on other terrestrial biological resources (e.g., reptiles, small mammals, etc.).

5.3.3.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Alternative 2 would have similar impacts to the No Project Alternative as demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2 would be required in the renewal area. However, under this alternative additional construction activities would be required to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands. Nevertheless, as described for the No Project Alternative, CVWD would be required to comply with the requirements of the CVMSHCP in order to avoid or mitigate potential impacts to sensitive species and their habitats. Given the existing disturbed conditions at the Facility as well as the limited duration of construction and relatively small acreage of ground-disturbing activities impacts would be less than significant. As described for the No Project Alternative, the demolition and reclamation of portions of Ponds 6 through 19 would remove artificial aquatic features, which are used by migratory and nesting birds. However, this alternative would maintain a portions of the ponds, which would remain available as habitat for migratory and nesting birds (i.e., Ponds 1 through 5 and a portion of Ponds 6 and 7, which are located on CVWD lands, would be available for groundwater replenishment). Additionally, there would be a minor reduction in the operation and maintenance activities at the Facility, which would result in a long-term decrease in ground disturbance and would reduce the potential for direct and indirect impacts (e.g., noise) on other terrestrial biological resources (e.g., reptiles, small mammals, etc.) as compared to the proposed Project.

5.3.3.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities described for the No Project Alternative and Alternative 2. Ongoing operations and maintenance activities at the Facility would continue under this alternative as described for the proposed Project. The use of the Facility is considered a covered activity by CVMSHCP. Additionally, the majority of CVMSHCP-modeled habitat within the replenishment ponds is considered disturbed and no direct removal of sensitive natural communities or habitats would occur at the Facility. CVWD has previously conserved approximately 1,218 acres of land to the east of the amendment area for protection of the Coachella Valley fringe-toed lizard (*Uma inornata)*, which would continue under Alternative 3. Therefore, the implementation of this alternative would result identical long-term operational impacts to biological resources as those described for the proposed Project.

5.3.4 Cultural Resources and Tribal Resources

5.3.4.1 Alternative 1: No Project Alternative

Alternative 1 would require the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. As described in Section 3.3, *Cultural Resources and Tribal Cultural Resources*, the Class III Cultural Resource Survey prepared for the proposed Project identified three potentially significant archaeological resources that are recommended eligible for the California Register of Historic Places (CRHR) and National Register of Historic Places (NRHP). Ground disturbing activities required to demolish and reclaim the ponds would have the potential to impact these buried archaeological as well as other previously undiscovered archaeological resources and/or tribal resources. The Agua Caliente Band of Cahuilla Indians withdrew their request for monitoring upon receiving explanation that the proposed Project would be limited to a real estate action. However, if Alternative 1 is selected, further notification and consultation with the Agua Caliente Band of Cahuilla Indians and Native American monitoring may be required given the need for demolition and reclamation activities.

5.3.4.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Alternative 2 would have similar impacts to cultural resources and tribal cultural resources as described for the No Project Alternative. This alternative would involve ground disturbing activities associated with the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. Additionally, the construction of berms would be required to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands. As described for the No Project Alternative ground disturbing activities required to demolish and reclaim the ponds would have the potential to impact previously undiscovered archaeological resources and/or tribal resources. The Agua Caliente Band of Cahuilla Indians withdrew their request for monitoring upon receiving

explanation that the proposed Project would be limited to a real estate action. However, if Alternative 2 is selected, further notification and consultation with the Agua Caliente Band of Cahuilla Indians and Native American monitoring may be required given the need for demolition and reclamation activities.

5.3.4.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities as described for the No Project Alternative and Alternative 2. Ongoing operations and maintenance activities at the Facility would continue under this alternative as described for the proposed Project. Impacts to cultural resources and tribal cultural resources would be less than significant with mitigation and similar to those described for the proposed Project.

5.3.5 Energy

5.3.5.1 Alternative 1: No Project Alternative

Under the No Project Alternative, CVWD would retain ownership over CVWD-owned lands – including the Windy Point intake/sluicing structure, Intake Structure 1, portions of the concrete-line and earthen conveyance channels, Ponds 1 through 5, and portions of Ponds 6 through 19. However, the remainder of the Facility would be located on public lands administered by the BLM. In addition to being unable to use Ponds 6 through 19 for replenishment, CVWD would no longer have access to the low-flow dike and channel crossing or the existing berms within the 178.83-acre amendment area. The low-flow dike and channel crossing channelizes the water delivery towards the replenishment Facility. The existing berms in this amendment area are used to direct surface flows toward the Windy Point intake/sluicing structure. Berm #2 requires modification prior to storm events and to return the berm to its existing condition following storm events. Without the modification of Berm #2, the berm would no longer divert the stormwater around the Facility to the WRSC. Under the No Project Alternative, CVWD would no longer be able to use the existing Facility in its current configuration and would have to cease its operation.

The No Project Alternative would result in the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. Therefore, the No Project Alternative would result in a temporary increase in energy use and fuel consumption during demolition and reclamation activities. However, over the long-term, the existing energy use and fuel consumption associated with the Facility described in Section 3.1, *Air Quality* would be eliminated, resulting in a minor long-term beneficial impact.

5.3.5.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Under Alternative 2 BLM would only approve a right-of-way grant for the amendment area, which would reduce the area of the Facility on BLM-owned lands to approximately 178 acres. Similar to Alternative 1, this would require the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. In addition, Alternative 2 would require the construction of berms to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands would also be necessary. These construction and demolition activities would require a temporary increase in energy use and fuel consumption. However, the overall reduction in existing Facility size would reduce the operational energy demand compared to the proposed Project resulting in a minor long-term beneficial impact.

5.3.5.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities as described for the No Project Alternative and Alternative 2. Additionally, ongoing operations and maintenance activities at the Facility would continue under this alternative as described for the proposed Project. Therefore, the implementation of this alternative would result in a net zero increase in energy use and fuel consumption and impacts would be less than significant similar to those described for the proposed Project.

5.3.6 Geology and Soils

The existing Facility is located outside of any known fault traces as well as liquefaction risk zones. Therefore, as described for the proposed Project, Alternatives 1 through 3 would result in less than significant impacts to seismic hazards. The Facility is located in the seismically active region of Southern California; therefore, the area is subject to ground shaking. However, under Alternatives 1 through 3, CVWD would continue to comply with the relevant State and local standards relevant to the operation and maintenance of the existing Facility; therefore, Alternatives 1 through 3 would result in less than significant impacts to risk of loss, injury, or death.

5.3.6.1 Alternative 1: No Project Alternative

Under the No Project Alternative, ground disturbance would be required for demolition and reclamation of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. Alternative 1 would result in disturbance to surficial soil units to remove infrastructure, so temporary impacts to soils would be greater under the No Project Alternative than the proposed Project. However, the Facility is sited on disturbed area that undergoes operational maintenance and repair as well as vehicular travel; therefore, impacts would be less than significant. The No Project Alternative would be required to implement a Stormwater Pollution Prevention Plan (SWPPP), which would require best management practices necessary to control erosion and discharge of polluted runoff during demolition and

reclamation activities. Given the limited scope of demolition and reclamation activities, temporary impacts would be less than significant. Over the long-term existing operations and maintenance activities would no longer occur at the Facility resulting in a minor beneficial impact related to the potential for soil erosion.

5.3.6.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Alternative 2 would have similar impacts to the No Project Alternative as demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2 would be required in the renewal area. Additionally, the construction of berms would be required to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands. As described for the No Project Alternative, impacts to geology and soils under Alternative 2 would be less than significant with the implementation of a SWPPP, which would require best management practices necessary to control erosion and discharge of polluted runoff during demolition and reclamation activities. Given the limited scope of demolition and reclamation activities, temporary impacts would be less than significant. Over the long-term the extent of existing operations and maintenance activities would be reduced at the Facility resulting in a minor beneficial impact related to the potential for soil erosion.

5.3.6.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities described for the No Project Alternative and Alternative 2. Ongoing operations and maintenance activities at the Facility would continue under this alternative as described for the proposed Project. Impacts to cultural resources and tribal cultural resources would be less than significant with mitigation and similar to those described for the proposed Project. CVWD would continue to enforce the existing limits on operations and maintenance activities during wind speeds over 25 miles per hour to avoid substantial loss of topsoil. Additionally, CVWD would continue to follow the requirements of the SWPPP for the Facility. Therefore, impacts to soils would be less than significant and similar to those described for the proposed Project.

5.3.7 Greenhouse Gas Emissions

5.3.7.1 Alternative 1: No Project Alternative

The No Project Alternative would result in the demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2. Therefore, the No Project Alternative would result in a temporary increase in greenhouse gas (GHG) emissions. However, the removal of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2, the removal of infrastructure would require a limited construction crew and duration. Under this alternative, the temporary construction work would comply with California Idling Regulations as well as SCAQMD

applicable thresholds and management practices. Over the long-term, existing operational emissions associated with the Facility described in Section 3.6, *Greenhouse Gas Emissions* would be eliminated, resulting in a minor long-term beneficial impact.

5.3.2.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Alternative 2 would have similar impacts to the No Project Alternative as demolition and reclamation of portions of Ponds 6 through 19, concrete-lined and earthen conveyance channels, and Intake Structure 2 would be required in the renewal area. Additionally, the construction of berms would be necessary to reshape Ponds 6 and 7 in order to limit their footprint to CVWD-owned lands. Temporary impacts related to GHG emissions would be less than significant given the limited scope of demolition, reclamation, and construction activities under Alternative 2. Over the long-term, there would be a minor reduction in GHG emissions associated with the Facility, resulting in a minor long-term beneficial impact related to GHG emissions.

5.3.7.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would not require any of the demolition, reclamation, or construction activities as described for the No Project Alternative and Alternative 2. Additionally, ongoing operations maintenance activities at the Facility would continue under this alternative as described for the proposed Project. Therefore, the implementation of this alternative would result in a net zero increase in GHG emissions and impacts would be less than significant similar to those described for the proposed Project.

5.3.8 Hydrology and Water Quality

5.3.8.1 Alternative 1: No Project Alternative

Under the No Project Alternative CVWD would retain ownership over CVWD-owned lands – including the Windy Point intake/sluicing structure, Intake Structure 1, portions of the concrete-line and earthen conveyance channels, Ponds 1 through 5, and portions of Ponds 6 through 19. However, the remainder of the Facility would be located on public lands administered by the BLM. In addition to being unable to use Ponds 6 through 19 for replenishment, CVWD would no longer have access to the low-flow dike and channel crossing or the existing berms within the 178.83-acre amendment area. The low-flow dike and channel crossing channelizes the water delivery towards the replenishment Facility. The existing berms in this amendment area are used to direct surface flows toward the Windy Point intake/sluicing structure. Berm #2 requires modification prior to storm events and to return the berm to its existing condition following storm events. Without the modification of Berm #2, the berm would no longer divert the stormwater around the Facility to the WRSC. Under the No Project Alternative, CVWD would no longer be able to use the existing Facility in its current configuration and would have to cease its operation of the Facility.

The implementation of a SWPPP and best management practices, as described in Section 3.6.6, *Geology and Soils*, would avoid sedimentation of surface waters and prevent leaking of pollutants such as oil, grease, and chemicals from maintenance equipment from discharging to the surface waters or groundwater. Thus, with the implementation of the SWPPP and associated best management practices, impacts to surface water quality associated with demolition and reclamation activities would be less than significant.

The No Project Alternative would result in the discontinuation of the largest groundwater storage and recharge facility in the Coachella Valley (refer to Section 3.7, *Hydrology and Water Quality*). Removal of the facilities would be in direct conflict with the Coachella Valley Water Management Plan (2010). Natural recharge of the groundwater basin is not sufficient to support the water demand in the Coachella Valley. Reliance on groundwater to meet demands without importing the balance would result in significant groundwater overdraft (CVWD 2012, 2015). As described in the 2010 Coachella Valley Water Management Plan Update Subsequent Program EIR, the No Project Alternative would not meet current and future water demands with a 10 percent supply buffer, would increase groundwater overdraft and potential subsidence, would not manage water quality by allowing additional percolation of poor quality water and seawater intrusion, and would increase the cost of and energy use for groundwater pumping. Declining water levels and increasingly expensive groundwater pumping costs would increase economic impacts to Coachella Valley water users. Valuable recycled water resources would be wasted rather than used.

5.3.8.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Under Alternative 2, only Ponds 1 through 5 and a portion of Ponds 6 and 7, which are located on CVWD lands, would be available for groundwater replenishment. As described for the No Project Alternative, the demolition and reclamation activities as well as the construction activities as well as the construction of berms required to reshape Ponds 6 and 7 would result in the potential for impacts to surface water quality. However, the implementation of a SWPPP and best management practices, as described in Section 3.6.6, *Geology and Soils*, would avoid sedimentation of surface waters and prevent leaking of pollutants such as oil, grease, and chemicals from maintenance equipment from discharging to the surface waters or groundwater. Thus, with the implementation of the SWPPP and associated best management practices impacts to surface water quality under this alternative would be less than significant.

As previously described, under Alternative 2 the replenishment capacity of the Facility would be reduced to approximately 87,000 acre-feet per year, or approximately 17 percent of the existing capacity, which would not meet existing nor projected demand for the Whitewater River Subbasin. Therefore, Alternative 2 would result in significant and unavoidable impacts to groundwater in the Whitewater River Subbasin. Impacts related to overdraft and potential subsidence would be less than those described for the No Project Alternative, but greater than those described the proposed Project.

Under this alternative the Facility would continue to utilize Colorado River Water via an exchange agreement between CVWD, DWA, and Metropolitan Water District of Southern California (Metropolitan) to replenish groundwater within the Whitewater River Subbasin. Colorado River Water contains greater TDS concentrations than typical groundwater within the Whitewater River Subbasin, which results in additional salt being imported to the Whitewater River Subbasin and greater Coachella Valley Groundwater Basin as a whole. There is no fixed consumer acceptance contaminant level established for TDS. Instead, the State of California uses a non-health-based consumer acceptance contaminant level range of 500 to 1,500 mg/L to avoid aesthetic concerns. Wells in the vicinity of the Facility have recorded TDS values near or above the recommended consumer acceptance contaminant level of 500 mg/L for drinking water (refer to Tables 3.7-1 and 3.7-2). This would remain a significant and unavoidable impact as described for the proposed Project.

5.3.8.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would continue to provide necessary groundwater replenishment to the Whitewater River Subbasin consistent with the Coachella Valley Water Management Plan (2010). Impacts to groundwater would be identical to those described for the proposed Project under Impact HWQ-2 and HWQ-3. However, this alternative CVWD would not be required to request a future right-of-way grant from the BLM to continue operation of the Facility. This would ensure the continued implementation of the Water Management Plan and would reduce the potential for future groundwater overdraft and potential subsidence.

Under this alternative the Facility would continue to utilize Colorado River Water via an exchange agreement between CVWD, DWA, and Metropolitan to replenish groundwater within the Whitewater River Subbasin. Colorado River Water contains greater TDS concentrations than typical groundwater within the Whitewater River Subbasin, which results in additional salt being imported to the Whitewater River Subbasin and greater Coachella Valley Groundwater Basin as a whole. There is no fixed consumer acceptance contaminant level established for TDS. Instead, the State of California uses a non-health-based consumer acceptance contaminant level range of 500 to 1,500 mg/L to avoid aesthetic concerns. Wells in the vicinity of the Facility have recorded TDS values near or above the recommended consumer acceptance contaminant level of 500 mg/L for drinking water (refer to Tables 3.7-1 and 3.7-2). This would remain a significant and unavoidable impact as described for the proposed Project.

5.3.9 Land Use and Planning

The Facility is surrounded by undeveloped lands and is not adjacent to a residential development. No expansion of the Facility or its operations under the proposed Project or its alternatives. Therefore, no division of a community would result from the following alternatives.

5.3.9.1 Alternative 1: No Project Alternative

As described in Section 5.3.8, *Hydrology and Water Quality*, the No Project Alternative would result in the discontinuation of operation of the largest groundwater storage and recharge facility in the Coachella. Removal of the Facility would be in direct conflict with the Coachella Valley Water Management Plan (2010). Additionally, the No Project Alternative would be in conflict with the City of Palm Spring's Recreation, Open Space, and Conservation Element's Policy RC9.1 because sufficient potable water would no longer be available to current and future residential, business, and visitor users. This alternative would result in significant and unavoidable inconsistency with existing land use plans including but not limited to the Coachella Valley Water Management Plan (2010) and the City of Palm Springs General Plan. Therefore, impacts would be greater under the No Project Alternative than the proposed Project.

5.3.9.2 Alternative 2: Amendment Area Only / Decrease Operations Alternative

Similar to the No Project Alternative, Alternative 2 would greatly reduce groundwater storage and replenishment capacity of the Facility (reduced to approximately 17 percent of existing storage), which would drastically impact water availability for current and future users in the Coachella Valley. As described in Section 5.3.8, *Hydrology and Water Quality*, the reduction in the size of the Facility under this alternative would also conflict with the Coachella Valley Water Management Plan (2010). Similarly, Alternative 2 would also be inconsistent with existing land use plans for the City and would result in significant and unavoidable impacts to land use consistency. Alternative 2 would result in greater impacts to land use consistency than the proposed Project.

5.3.9.3 Alternative 3: Withdrawal of BLM-Managed Lands and Land Exchange with CVWD

Alternative 3 would result in the continuation of existing land uses and configuration of infrastructure at the Facility. There would be no alteration to on-site infrastructure nor additional construction activities. Maintenance and operation activities would remain the same as the existing conditions. This Alternative would not conflict with existing plans, regulations, or habitat conservation plans. Therefore, Alternative 3 would result in no impacts to land use. Impacts under Alternative 3 to land use would be equal to the proposed Project.

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 5-1 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 5-1. Comparison of Alternatives

Environmental Issue Area	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Amendment Area Only / Decrease Operations Alternative	Alternative 3: Withdrawal of BLM-managed Lands and Land Exchange with CVWD
Air Quality	Less than Significant	-/+	-/+	=
Biological Resources	Less than Significant	-/+	-/+	=
Cultural Resources	Less than Significant with Mitigation	-	-	=
Energy	Less than Significant	-/+	-/+	=
Geology and Soils	Less than Significant	-/+	-/+	=

Environmental Issue Area	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: Amendment Area Only / Decrease Operations Alternative	Alternative 3: Withdrawal of BLM-managed Lands and Land Exchange with CVWD
Greenhouse Gas Emissions	Less than Significant	-/+	-/+	=
Hydrology and Water Quality	Significant and Unavoidable	- overdraft / water supply = water quality	- overdraft / water supply = water quality	=
Land Use and Planning	Less than Significant	-	-	=

Note: -/+ indicates the alternative would increase the severity temporary impacts, but would reduce long-term impacts as compared to the proposed Project..

The No Project Alternative and Alternative 2 would not avoid the TDS impact described for the proposed Project (refer to Impact HWQ-2) and would result in significant impacts to groundwater related to significant overdraft and potential land subsidence (CVWD 2012, 2015); therefore, these alternatives were removed from consideration as environmentally superior.

Alternative 3 is the environmentally superior alternative because: 1) no construction or demolition activities would occur, which result in ground disturbance and associated impacts to environmental resources; and 2) the Facility would continue to provide groundwater storage, recharge, and supplies to the Whitewater River Subbasin consistent with existing levels. If the Facility is removed or the size is reduced, the Coachella Valley region would not have sufficient groundwater supplies to meet residential and business demands, which would result in overdraft in the Whitewater River Subbasin over time. Alternative 3 is superior to the proposed Project because transference of land ownership to CVWD of BLM-managed lands would ensure long-term groundwater storage and supply stability and prevent overdraft conditions, which would meet Project objectives to a greater extent.

6.0 REFERENCES

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7.0 LIST OF PREPARERS

This Environmental Impact Report (EIR) was prepared by the Coachella Valley Water District (CVWD), with the assistance of Wood Environment & Infrastructure Solutions, Inc. Staff involved in the preparation of the EIR are listed below:

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8.0 INTRODUCTION TO THE FINAL EIR

8.1 PUBLIC REVIEW PROCESS

As required by California Environmental Quality Act (CEQA) Guidelines Section 15105, the 45-day public review period for the Draft Environmental Impact Statement (EIR) began on August 20, 2021 and closed on October 4, 2021. During this time, the Coachella Valley Water District (CVWD) distributed the Draft EIR to the State Clearinghouse, public agencies with an interest in the proposed Project, nearby property owners, and other individuals that expressed an interest during the scoping period. In addition, a notice was published in the *Desert Sun* on August 21, 2021. The Draft EIR and other supporting materials were made available online at: http://www.cvwd.org/502/Whitewater-River-Groundwater-Replenishme. During the 45-day review period CVWD received a total of one (1) comment letter, provided by the Bureau of Indian Affairs (see Appendix K).

8.2 CEQA REQUIREMENTS

Before approving a project that may cause a significant environmental impact, CEQA requires the Lead Agency (i.e., CVWD) to prepare a Final EIR. CEQA Guidelines Section 15132 specifies that the Final EIR shall consist of:

a) The Draft EIR or a revision of the Draft EIR;

b) Comments and recommendations received on the Draft EIR either verbatim or in summary;

c) A list of persons, organizations, and public agencies commenting on the Draft EIR;

d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process; and

e) Any other information added by the Lead Agency.

8.3 CONSIDERATION OF RECIRCULATION

If significant new information is added to a Draft 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.

8.4 USE OF THE FINAL EIR

The Final EIR provides the public and CVWD decision-makers (i.e., the CVWD Board of Directors) with an opportunity to review the response to comments, any revisions to the Draft EIR if made, and other components of the EIR prior to CVWD's decision on the proposed Project and its alternatives. The Final EIR will serve as the environmental document to support approval of the proposed Project or its alternatives, either in whole or in part.

After completing a Final EIR, and before approving a project, the Lead Agency must first "certify" the Final EIR. As required by CEQA Guidelines Section 15090, certification consists of three distinct but complementary findings:

- The Final EIR has been completed in compliance with CEQA;
- The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project; and
- The Final EIR reflects the Lead Agency's independent judgment and analysis.

The Final EIR and the findings will be submitted to CVWD decision-makers for consideration in connection with the proposed Project.

CEQA "Findings of Fact" are adopted pursuant to CEQA Guidelines Section 15091(a), which provides that if an EIR that has been certified for a project identifies one or more significant environmental effects, the Lead Agency decision-making body must make one or more of the following findings with respect to each significant effect identified in the Final EIR:

- Changes or alterations have been required in, or incorporated into, the project which avoid or substantially reduce the significant environmental effect as identified in the EIR.
- Such changes or alterations are within the responsibility and jurisdiction of another public agency or 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.
- 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.

Each finding must be accompanied by a brief explanation of the rationale for the finding, though references to supporting text in the EIR documentation is commonly used to satisfy that requirement. In addition, pursuant to CEQA Guidelines Section 15091(d), the Lead Agency must adopt, in conjunction with the findings, a program for reporting on or monitoring the changes that it has either required in the project or made a condition of approval to avoid or substantially reduce environmental effects. These measures must be fully enforceable through permit conditions, agreements, or other assigned obligations. This program is referred to as the Mitigation Monitoring and Reporting Program (MMRP) (see Section 10, *Mitigation, Monitoring, and Reporting Program*).

Additionally, pursuant to CEQA Guidelines Sections 15091(b) and 15093(b), when a Lead Agency approves a project that would result in significant, unavoidable impacts that are disclosed in the Final EIR, the Lead Agency must state in writing its reasons for supporting the approved action. This written statement, known as a Statement of Overriding Considerations, must be supported by substantial information in the record, which includes this Final EIR.

9.0 RESPONSE TO COMMENTS ON THE DRAFT EIR

9.1 INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088, the Coachella Valley Water District (CVWD), as the Lead Agency, has reviewed all of the comments received during the 45-day public comment period for the Draft Environmental Impact Report (EIR). The comments on the Draft EIR include issues that warrant clarification; however, none of these clarifications constitute significant new information or substantial changes to the proposed Project as defined by CEQA Guidelines Section 15088.5.

The Draft EIR was made available for a 45-day review period between August 20, 2021 and October 4, 2021. During this period, one (1) written comment letter was received (see Table 9-1). The body of this letter, provided by the Bureau of Indian Affairs (BIA), has been separated into individual comments, which have been numbered. This results in a numbering system whereby the first comment in the letter is depicted as BIA-1, the second comment in the letter is depicted as BIA-2, and so on. The complete copy of this comment letter is included in Appendix K.

Table 9-1. Comment on the Draft EIR

Comment ID	Name of Commenter	Date Received	Number of Comments
Federal Agencies			
BIA	Amy Dutschke, Regional Director Bureau of Indian Affairs	October 5, 2021	BIA-1 through -22

9.2 RESPONSE TO COMMENTS

Comment BIA-1: *"The BIA recommends an in-depth discussion of the* [Antidegradation] *policy and the effects of the salinity plume over time and space (geography) should be added to the Draft EIR, as well as an assimilative capacity study based upon total salt loading."*

Response to Comment BIA-1: The Antidegradation Policy specifically applies to regulation of the disposal of waste to high-quality surface waters and groundwaters of the State. Given that the Whitewater River Groundwater Replenishment Facility is a domestic water supply utility and given that the proposed right-of-way grant and continued operation and maintenance of the facility would not constitute a waste / wastewater discharge project, a detailed analysis of consistency with the Antidegradation Policy is not required.

As discussed the Regulatory Framework and Significance Criteria subsection in Section 3.7, *Hydrology and Water Quality*, CVWD's analysis in the EIR is appropriately focused on water

quality parameters used to guide CVWD's compliance with drinking water standards. The EIR fully acknowledges that *"Colorado River water used for direct delivery and recharge in the Coachella Valley has higher Total Dissolved Solids (TDS) concentrations on average than most of the groundwater within the Subbasin."* This is supported by water samples acquired from the Metropolitan Water District of Southern California (Metropolitan), which indicate that the Colorado River water used for groundwater recharges currently has TDS ranging from 540 to 570 milligrams per liter (mg/L). Further, Impact HWQ-2 discloses that continued operation of the Whitewater River Groundwater Replenishment Facility would *"…increase TDS in some groundwater to levels up to that found in delivered Colorado River water. This in turn could cause groundwater produced from Coachella Valley wells in the vicinity of the Facility to contain TDS levels above the 500 mg/L recommended consumer acceptance contaminant level for drinking water."*

Comment BIA-2: *"The Bureau of Indian Affairs (BIA) suggested an alternative that reduce the annual maximum recharge quantity of Colorado River water… The authors of the DEIR eliminated the 'Reduced Total Volume Alternative' based on omissions of facts, misleading presentations of the facts and bias towards the CEQA Proposed Project.'"*

Response to Comment BIA-2: The scoping letter provided by the BIA states, *"As the Coachella Valley is a terminal groundwater system, the [EIR] should address the historical recharge quantities and total TDS loading during the past ROW agreement (1984 to 2014) and the proposed maximum of 511,000 acre-feet per year. A much lower annual maximum alternative(s) should be considered and evaluated."* As requested by the BIA during scoping, CVWD included all requested analysis in the Draft EIR.

The comment on the Draft EIR correctly describes that a Reduced Total Volume alternative, involving a maximum recharge of 220,000 acre-feet per year (AFY) of water, was considered but dismissed. As described in Section 2.8.2, *Alternatives Considered but Eliminated*:

> *"This alternative was rejected for several reasons including the fact that reduced groundwater recharge at the Facility would result in greater environmental impacts related to a reduced capacity for the Facility to counteract ongoing groundwater overdraft in the Coachella Valley, potential inconsistency with CVWD's Water Management Plan targets for replenishment (CVWD 2010), and potential disproportionate impacts on environmental justice communities in the West Whitewater subbasin in the vicinity of the Facility due to increased water rates due to continuing overdraft (BLM 2021)."*

Nevertheless, the description of Alternative 2: Amendment Area Only / Decrease Operations Alternative does analyze a reduction in maximum recharge in the event that the Bureau of Land Management (BLM) does not issue the requested right-of-way grant for the renewal

area. Analysis of groundwater supply and groundwater quality issues are provided in Section 5.3.8, *Hydrology and Water Quality*.

Comment BIA-3: *"Please provide supporting documentation for the tons of salt removed each year of operation, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-3: While the use of "tons of salt" may provide the public with a physical reference point, it does not demonstrate whether or not increasing salinity from recharge using Colorado River water would be in compliance with the established Consumer Maximum Contaminant Level Ranges for TDS. Tons of salt has no regulatory definition or established levels on which to base an assessment of impacts to groundwater. Therefore, CVWD's analysis in the EIR is focused on water quality parameters that guide CVWD's compliance with drinking water standards. This use of TDS concentration rather than tons of salt remains appropriate from an impact assessment perspective in compliance with CEQA Section 15064 (refer also to the response to BIA-1).

Comment BIA-4: *"Please provide additional figures and text focused on the salinity plume showing the Tribal Lands, major cities, major roads, and well locations so the public and decision makers can see where the impacts to the land and people will occur as a result of this project and updated the DEIR to reflect this information."*

Response to Comment BIA-4: As described in the EIR and the responses to BIA-1 and -3, CVWD's assessment of water quality impacts is based on compliance with established regulations and focuses on the potential for increases in TDS concentrations associated with recharge using Colorado River water. The EIR acknowledges that *"Colorado River water used for direct delivery and recharge in the Coachella Valley has higher TDS concentrations on average than most of the groundwater within the Subbasin*." The EIR discusses variation in extent of subsurface TDS concentrations associated with groundwater replenishment activities both in area and depth within the aquifer with TDS decreasing away from the Facility and deeper in the aquifer.

With regard to the requested figures and text, the presence of elevated TDS concentrations beneath a specific land area, property, political boundary, or cultural feature does not provide a basis to define an impact. As described in the EIR, the primary impacts are to the water quality in the aquifer and pumping/delivery of groundwater with elevated TDS concentrations for beneficial uses (e.g., domestic, commercial, and industrial). The water quality impacts to the aquifer would be the exact same if the elevated TDS concentrations were located beneath a remote area with no development (e.g., cities, roads, tribal lands) in accordance with the regulatory standards identified in Section 3.7.2, *Regulatory Framework*.

The TDS concentrations in water delivered to customers in the service area is a function of which wells are pumped, the screening depths of the wells, and the duration of pumping from a given location. The location of elevated TDS concentrations underneath a customer's house or business does not necessarily correlate to the potential effects on those customers. Properties that do not overlie areas with elevated TDS concentrations could still be affected by elevated TDS. Further, the 2010 Coachella Valley Water Management Plan Update, which is referenced extensively in the EIR, states that recharge at the Facility accounts for only about 36 percent of the salt loading in the Whitewater River Subbasin from imported water. Thus, the potential extent of elevated TDS concentrations to water users are not solely attributable to the Facility or the proposed Project.

Comment BIA-5: *"There is no mention of the alluvial flooding and downcutting in the DEIR concerning the long-term loss of flood plain processes and degradation of the flood plain habitat."*

"Please provide supporting documentation and analysis of the channelization of the Whitewater River in the areas between the MWD outlet to the facility covered by the Whitewater Flood Plain Conservation Plan, recharge effects of the project on the Garnet Hill subarea, etc., and updated the DEIR to reflect this information."

Response to Comment BIA-5: Floodplains are addressed in Section 3.7, *Hydrology and Water Quality*. As described on Page 3.7-12, *"CVWD operates and maintains approximately 207 miles of stormwater projects to protect an approximately 590-square-mile area from flooding. These stormwater projects include the 70-mile-long [Whitewater River Stormwater Channel / Coachella Valley Stormwater Channel] WRSC/CVSC and its tributaries…"* Additionally, *"CVWD conducts ongoing stormwater management planning and construction activities, in coordination with other agencies and jurisdictions, to provide flood protection within its service area."* Further, normal operations of the Facility (i.e., non-storm events) when the flow rate is equal to or less than 800 cubic feet per second (combined natural and imported flows) are suspended when stormwater flows exceed 400 cubic feet per second which effectively decouples operation of the Facility from any downcutting of the existing channel during large flood events (refer to Pages 2-16 to 2-17).

As described in Impact HWQ-4 and -5 the implementation of the proposed Project would not result in significant impacts with respect to flooding. CVWD would continue to operate in its capacity as the flood control agency managing the WRSC. Because the continued operation would not alter the existing drainage pattern of the WRSC, would not contribute new flood flows, and would not redirect any existing flood flows, the proposed Project would have a less than significant impact related to flood control and no mitigation measures would be necessary.

Garnet Hill is a subarea of the Whitewater Subbasin benefitting from groundwater replenishment at the White Water Groundwater Replenishment Facility. Therefore, any potential impacts assessed for the Whitewater River Subbasin include those for the Garnet Hill Subarea. As described in Impact HWQ-4 and -5, the implementation of the proposed Project would not result in significant impacts with respect to flooding or the alteration of the existing channel. Specifically, the proposed Project would maintain the channel as it exists as part of the current environmental baseline.

Comment BIA-6: *"Please provide supporting documentation and analysis of the SWP actual deliveries (to MWD) and the expected trend this water supply will yield in the future, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-6: The comment describes State Water Project (SWP) deliveries and asserts that the maximum SWP contract is 194,000 acre-feet per year (AFY) and claims that number cannot be found in the EIR. However, Page 2-17 states, "*CVWD and DWA request their full Table A SWP water allocation amounts from DWR each year, for a combined total of 194,100 acre-feet per year, and continue to exchange their SWP water for Colorado River water for delivery at the Facility through an exchange agreement with Metropolitan."* The EIR goes on to describe that:

> *"…the entire allocation of SWP water is typically not delivered or guaranteed and may vary due to SWP limitations such as weather conditions (e.g., drought) that may be exacerbated by climate change, increased demand, restrictions on water export from the Sacramento-San Joaquin Delta to protect the federally endangered Delta smelt (Hypomesus transpacificus), and other factors. In addition, depending on availability, CVWD and DWA may receive water unrelated to their SWP allocation, which is also delivered through the Colorado River Aqueduct as part of the exchange agreement with Metropolitan in the form of Colorado River water."*

Colorado River Exchange Water delivered annually to the Whitewater River Groundwater Replenishment Facility is shown in Table 2-1. The largest delivery occurred in 2017 with 385,994 acre-feet of imported water. As stated in Section 2.6.1, *Project Background*, Colorado River Exchange Water deliveries vary year-to-year based on regulatory restrictions and operational considerations within the constraints of the Advanced Delivery Agreement with Metropolitan.

The proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation of CVWD's existing Whitewater River Groundwater Replenishment Facility consistent with the *Coachella Valley Water Management Plan* (2010). Meaning that the proposed Project has no effect on the availability of SWP water or other water delivered through the Colorado River

Aqueduct. The right-of-way grant would simply allow CVWD to continue groundwater replenishment at the Facility by delivering Colorado River water at a maximum rate of 511,000 acre-feet in any given year.

Comment BIA-7: *"Please provide the actual full contract quantity by year, a discussion of other water delivered by the SWP then exchanged by MWD with Colorado River water, etc., and updated the DEIR to reflect this information."*

Response to Comment BIA-7: Colorado River Exchange Water delivered annually to the Whitewater River Groundwater Replenishment Facility is shown in Table 2-1. The largest delivery occurred in 2017 with 385,994 acre-feet of imported water. As stated in Section 2.6.1, *Project Background*, Colorado River Exchange Water deliveries vary year-to-year based on regulatory restrictions and operational considerations within the constraints of the Advanced Delivery Agreement with Metropolitan. As stated above in the response to BIA-6, the proposed Project is generally limited to a real estate action that would allow CVWD to continue groundwater replenishment activities at the Facility consistent with ongoing activities as defined by existing water delivery agreements.

Comment BIA-8: *"Please provide supporting documentation and analysis of the water balance between Actual SWP deliveries and water delivered by MWD showing the cumulative advanced deliveries (banked water), etc., distinguishing between Table A, Advanced, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-8: As described on Page 2-17, CWVD and the Desert Water Agency (DWA) have an Advanced Delivery Agreement with Metropolitan. The EIR goes on to describe that:

> *"The Advance Delivery Agreement established a key asset in Metropolitan's water storage portfolio, the Advance Delivery Account, with a storage capacity of up to 800,000 acre-feet. In wet years, deliveries often exceed available SWP supplies, and Metropolitan builds the storage balance. Metropolitan draws upon this storage balance in dry years, when needed to meet Metropolitan service area demands. Metropolitan also draws upon this balance, making fewer deliveries than available DWA and CVWD SWP supplies, in years when Metropolitan is rebuilding depleted storage in other surface water and groundwater storage assets. Total storage in the Advance Delivery Account has ranged from a high of 552 thousand acre-feet (TAF) during 1987 to a low of 7 TAF during 2009. Within the calendar year, maximum deliveries to the Facility were 386 TAF, with 245 TAF being credited to the Advance Delivery Account during 2017, a wet year, where the account played a key role in capturing abundant water supplies for future dry years. The maximum withdrawal from the account within a calendar year was 120 TAF during 2016, when*

Metropolitan was rebuilding depleted surface water storage subsequent to the historic 2014-2015 drought."

The EIR evaluates the potential impacts of the total volume of Colorado River water delivered to the Facility for each alternative. Whether that Colorado River water is SWP exchange water or Metropolitan advanced deliveries does not alter the environmental effects. The allocation of water between different categories is subject to contracts and agreements among the various water agencies. The proposed Right-of-Way agreement between BLM and CVWD would not alter the terms of those contracts. While the advanced deliveries might result in additional volumes of imported water being recharged at the Facility, the recharge capacity of the Facility remains the same because no change to the physical parameters of the Facility is proposed. The environmental analysis presented in the EIR includes the potential effects of delivery of the entire capacity volume, no matter the contractual source. It would not be appropriate for the EIR to consider an alternative that would violate or require re-negotiation of the terms of existing contracts.

Comment BIA-9: *"Please provide supporting documentation and analysis of the short-term differences between 'CEQA Proposed Project' and 'Reduced Total Volume Alternative,' with an example such as, compare the annual impact over a five-year period where the deliveries the first 2 years are at 511,000 ac-ft/year and 3 years of no deliveries and compare to 5 years where 200,000 ac-ft per year are delivered, etc., and update the DEIR to reflect this information."*

Response to BIA-9: The EIR thoroughly analyzes a reduced total volume alternative in Section 5, *Alternatives*. However, the EIR finds that *"[t]he No Project Alternative and Alternative 2 would not avoid the TDS impact described for the proposed Project (refer to Impact HWQ-2) and would result in significant impacts to groundwater related to significant overdraft and potential land subsidence (CVWD 2012, 2015)…"* For these reasons the No Project Alternative and Alternative 2 were considered but determined not to be environmentally superior.

The proposed recharge scenarios in the comment – 2 years at 511,000 AFY followed by three years of no deliveries versus 5 years at 200,000 AFY – are speculative and would not be consistent with the pattern of past deliveries.

Comment BIA-10: *"Please provide all public documentation concerning the rejection and subsequent requested rewrite of the SNMP, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-11: Please refer to the response to BIA-1 regarding salinity concerns associated with Colorado River water. With respect to the 2015 SNMP, the EIR does not dismiss the plan. The EIR uses baseline information related to water quality and past and future salt loading (i.e., TDS levels) from the plan; however, given that the plan was not accepted by the Colorado River RWQCB the EIR does not assess consistency with or otherwise reference the policies or management actions in the plan.

In February 2020, the Colorado River RWQCB provided a letter to the agencies with an assessment and recommendations regarding the 2015 SNMP, and encouraged the agencies to restart the development of the plan. The Coachella Valley water and wastewater agencies, including CVWD, DWA, Indio Water Authority (IWA), Coachella Water Authority and Coachella Sanitary District, Myoma Dunes Mutual Water Company, Valley Sanitary District, Mission Springs Water District, and City of Palm Springs, agreed to prepare a Development Workplan to describe a scope of work to update the 2015 SNMP. The agencies also agreed to prepare a Groundwater Monitoring Program Workplan to define an updated monitoring network.

The Development Workplan was submitted to the Colorado River RWQCB in May 2021 and accepted it in October 4, 2021 (refer to the response to Comment BIA-2). The Groundwater Monitoring Program Workplan was submitted to the Colorado River RWQCB in December 2020, and approved it in February 2021. The agencies have begun the process of updating the 2015 SNMP in accordance with the Development Workplan approved by the Colorado River RWQCB.

Comment BIA-11: *"On March 1st, 2016, the BIA raised concerns about salt loading from the use of the Colorado River water to the Bureau of Land Management (BLM) staff and management. Specific to concerns was the physical quantity (tons per year) of salt imported into the Coachella Valley ground water supply and the accelerated loading due to recharge amounts higher than wat was expressed in the EA for the previous ROW."*

Response to Comment BIA-11: While the comment states the BIA raised concerns about salt loading from the use of Colorado River water to BLM staff and management, CVWD was not involved in these conversations. However, the EIR does address the scoping comments provided by BIA. (See Table 1-1 for a summary of scoping comments and associated responses. Additionally, see Appendix A for the complete comment letter received from BIA during the scoping period.) Additionally, the EIR identified and analyzed alternatives that would limit infiltration at the Whitewater River Groundwater Replenishment Facility, including the No Project Alternative and Alternative 2, both of which were carried forward for analysis. With regard to the request for an analysis of recharge utilizing tons of salt per year, please refer to response BIA-3.

Comment BIA-12: *"October 24th, 2018, an alternative to limit recharge to the five-year average was discussed in detail. This alternative is not included in the DEIR as an alternative discussed but dismissed."*

Response to Comment BIA-12: Refer to the responses to BIA-2 and -11.

Comment BIA-13: *"The CVWD to contribute [sic] a proportional share to activities to reduce the quantity of salt in the Colorado River by 340,000 tons per year… Please provide supporting documentation and analysis of the cost and the effectiveness of this mitigation measure, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-13: No such mitigation is required by the EIR. The EIR requires the implementation of MM HWQ-1, under which CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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.

Comment BIA-14: *"Please provide supporting documentation and analysis of the short-term difference in alternatives using a 1-, 3-, and 5-year time frame, etc., and update the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-14: This comment refers to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), which guide the BLM in complying with NEPA. These guidelines are not applicable to CVWD in complying with CEQA. The impact analysis describes short-term impacts associated with ground-disturbing activities and long-term impacts associated with the continued operation of the Whitewater River Groundwater Replenishment Facility over the term of the proposed right-of-way agreement. Analyzing operational impacts using 1-, 3-, and 5-year time frames is not practical given the uncertain and irregular timing and volume/quantity of water deliveries each year.

Comment BIA-15: *"Please provide supporting documentation and analysis on the locale effects that take place, etc., and update the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-15: Refer to the response to BIA-14 regarding the reference to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA. The proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Whitewater River Groundwater Replenishment Facility consistent with the *Coachella Valley Water Management Plan* (2010). Refer also to the response to BIA-4 for additional information regarding elevated TDS concentrations and groundwater salinity.

Comment BIA-16: *"The discussion is clearly missing or misrepresented in the DEIR. The DEIR states, numerous times, the impacts from 'CEQA Proposed Project' and 'Reduced Total Volume Alternative' are the same for long term impacts… Please provide supporting documentation and analysis on the short-term impacts as directed above in H-1790-1, etc., and updated the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-16: This comment refers to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA (40 CFR §1502.16), which guide the BLM in complying with NEPA (refer to the response to BIA-14). Section 5.4, *Environmentally Superior Alternative* considers each of the alternatives that was considered for analysis in the EIR and identifies an environmentally superior alternative pursuant to CEQA Guidelines Section §15126.6(e)(2). This discussion describes that Alternative 2 (Amendment Area Only / Decrease Operations Alternative) would reduce, but would not avoid the TDS impact described for the proposed Project. Refer also to the response to BIA-4 for additional information regarding elevated TDS concentrations and groundwater salinity.

Comment BIA-17: *"Please provide supporting documentation and analysis on the short-term impacts, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-17: Refer to the response to BIA-2.

Comment BIA-18: *"Please provide supporting documentation and analysis on the short-term impacts of the alternatives, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-18: Refer to the response to BIA-7 regarding Colorado River water deliveries and BIA-8 regarding the Advanced Delivery Agreement.

Comment BIA-19: *"Colorado River Water Treatment is a mitigation measure…The DEIR should explore the possibility of some portion of the Colorado River water could be*

desalinized year-round and be supplemented with ground water to keep the plant running when continuously when Colorado River water is not available."

Response to Comment BIA-19: As described in Section 2.8.2, *Alternatives Considered but Eliminated*, desalination of Colorado River water was considered as an alternative. This alternative was considered to be infeasible for the reasons described therein. Notably desalination of Colorado River water would require the construction of a new desalination plant in the Coachella Valley. This alternative was considered in the *Supplemental EIR for the Coachella Valley Water Management Plan Update*; however, it was determined that the construction and operation of such a plant would result in several significant and unavoidable impacts.

The EIR acknowledges that the proposed continuation of groundwater replenishment activities at the Facility would continue to result in more groundwater with TDS concentrations above the recommended consumer acceptance contaminant level of 500 mg/L but below the 1,000 mg/L upper consumer acceptance contaminant level. The previous *Supplemental EIR for the Coachella Valley Water Management Plan Update* found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of Overriding Considerations for the Coachella Valley Water Management Plan was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater. The EIR requires the implementation of MM HWQ-1, under which CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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.

Comment BIA-20: *"The DEIR fails to discuss effects of the ongoing drought and climate change. An in-depth analysis of the reliability of the SWP and Colorado River water supply should be included in the DEIR."*

Response to Comment BIA-20: Climate change is discussed in Section 3.6, *Greenhouse Gas Emissions*, including an overview of global climate changes and its primary drivers as well as a describing of emissions at the Federal, State, and local levels. Impact GHG-1 discloses operational emissions associated with the Whitewater River Groundwater Replenishment Facility and assesses the consistency of the proposed Project with the *City of*

Palm Springs Climate Action Plan, *Sustainable City Plan*, and *Climate Action & Adaptation Plan*, as well as other regional and state-wide plans, policies, and regulations. For example, as described therein:

> *"Groundwater replenishment ensures the region's resiliency to the effects of climate change by providing adequate water storage in times of drought and associated water shortages and reduces the impacts from aquifer overdraft, such as land subsidence and the associated damage to public infrastructure. Based on the above, the proposed Project would be consistent with the AB 32, SB 32, SB 375, and Executive Order S-13-08. Therefore, the proposed Project would be consistent with applicable plans, policies, and regulations and impacts would be less than significant and no mitigation measures would be required."*

Comment BIA-21: *"A recent report from Reclamation showed an increase in the Colorado River salt load. The lack of disclosure and analysis of measured salinity levels in Colorado River water would show this trend. This data and subsequent analysis are critical components that are missing in the DEIR and would influence the decision-making process."*

Response to Comment BIA-21: The comment states that a recent report from the U.S. Bureau of Reclamation (uncited) showed an increase in the Colorado River salt load and claims that there is a lack of disclosure and analysis of measured salinity levels. Colorado River water salinity levels have actually decreased as a result of programs implemented by the Salinity Forum. The latest Plan of Implementation approved by the Salinity Forum anticipates additional salinity reduction from implementation of additional programs. Nevertheless, the EIR acknowledges that the proposed continuation of groundwater replenishment activities at the Facility would continue to result in more groundwater with TDS concentrations above the recommended consumer acceptance contaminant level of 500 mg/L (refer to Pages 3.7-19 to 3.7-21). The previous *Supplemental EIR for the Coachella Valley Water Management Plan* found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of Overriding Considerations for the Coachella Valley Water Management Plan was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater. Refer to the response to BIA-19 regarding the implementation of MM HWQ-1.

Comment BIA-22: *"Based on the above information, the BIA would like the district to incorporate the comments into the DEIR and make the revised document available for at least a 30-day public comment period."*

Response to Comment BIA-22: For the reasons described in the responses to BIA-1 through -22 and pursuant to CEQA Guidelines 15088.5, recirculation of the Draft EIR is not required.

10.0 MITIGATION MONITORING AND REPORTING PROGRAM

The California Environmental Quality Act (CEQA) requires that when a lead agency certifies an Environmental Impact Report (EIR), it shall prepare a monitoring or reporting program for all required mitigation measures (CEQA Guidelines Section 15097). This Mitigation Monitoring and Reporting Program (MMRP) describes the monitoring and reporting program for mitigation measures adopted by the Coachella Valley Water District (CVWD) to avoid or substantially reduce potentially significant impacts related to the proposed Project. CVWD and its contractors are required to implement the adopted mitigation measures for the proposed Project in accordance with the MMRP. This MMRP contains a checklist and description of all adopted mitigation measures, including the responsible parties, timing, and completion criteria.

10.1 PROGRAM ADMINISTRATION

The MMRP shall be administered by CVWD. The MMRP shall be maintained by the designated CVWD Project Manager and be available for inspection upon request at CVWD offices.

10.2 MITIGATION MONITORING REQUIREMENTS

Table 10-1 provides a summary of the mitigation measures by resource area. Pursuant to CEQA Guidelines Sections 15097 and 15126.4, the following mitigation measures have been incorporated into the proposed Project and would be implemented during operation and maintenance of the Whitewater Groundwater Replenishment Facility.

Table 10-1. Mitigation Monitoring and Reporting Program

Mitigation Measure	Monitoring and Reporting Actions	Monitoring Timing	Monitoring Frequency	Responsible Party
Section 3.3, Cultural and Tribal Cultural Resources				
Mitigation Measure CR-1: Inadvertent Discoveries: If any previously unknown archaeological resource is discovered during operation and maintenance activities, all activity in the immediate vicinity of the find shall cease until it can be evaluated by a Qualified Archaeologist. If the find is determined to be potentially significant, the Qualified Archaeologist, in consultation with appropriate Native American tribe(s) (if the find is a prehistoric or Native American resource), shall develop a treatment plan. All work in the immediate vicinity of the unanticipated discovery shall cease until the Qualified Archaeologist has evaluated the discovery, or the treatment plan has been implemented. If the Qualified Archaeologist determines that data recovery is necessary, CVWD shall prepare a Phase III Archaeological Data Recovery Plan to mitigate potential impacts and shall be responsible for curating the find in a facility meeting the standards described in 36 CFR Part 79.	If resources are unearthed during construction, confirm work halted, qualified archaeologist was consulted on eligibility, and appropriate treatment measures and no-work buffers implemented.	During operation and maintenance activities	Continuously	CVWD
	Consult on finding and implement treatment measures, if applicable	During operation and maintenance activities	During operation and maintenance activities	CVWD
Section 3.7, Hydrology and Water Quality				
Mitigation Measure HWQ-1: Monitor Groundwater Drinking Wells and Ensure Health-Based Water Quality Standards are Met if exceeded due to Facility Recharge Activities: CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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 operation	During operation	CVWD
	Consult on finding and implement treatment measures, if applicable	During operation and maintenance activities	During operation and maintenance activities	CVWD

9.0 RESPONSE TO COMMENTS ON THE DRAFT EIR

9.1 INTRODUCTION

In accordance with California Environmental Quality Act (CEQA) Guidelines Section 15088, the Coachella Valley Water District (CVWD), as the Lead Agency, has reviewed all of the comments received during the 45-day public comment period for the Draft Environmental Impact Report (EIR). The comments on the Draft EIR include issues that warrant clarification; however, none of these clarifications constitute significant new information or substantial changes to the proposed Project as defined by CEQA Guidelines Section 15088.5.

The Draft EIR was made available for a 45-day review period between August 20, 2021 and October 4, 2021. During this period, one (1) written comment letter was received (see Table 9-1). The body of this letter, provided by the Bureau of Indian Affairs (BIA), has been separated into individual comments, which have been numbered. This results in a numbering system whereby the first comment in the letter is depicted as BIA-1, the second comment in the letter is depicted as BIA-2, and so on. The complete copy of this comment letter is included in Appendix K.

Table 9-1. Comment on the Draft EIR

Comment ID	Name of Commenter	Date Received	Number of Comments
Federal Agencies			
BIA	Amy Dutschke, Regional Director Bureau of Indian Affairs	October 5, 2021	BIA-1 through -22

9.2 RESPONSE TO COMMENTS

Comment BIA-1: *"The BIA recommends an in-depth discussion of the* [Antidegradation] *policy and the effects of the salinity plume over time and space (geography) should be added to the Draft EIR, as well as an assimilative capacity study based upon total salt loading."*

Response to Comment BIA-1: The Antidegradation Policy specifically applies to regulation of the disposal of waste to high-quality surface waters and groundwaters of the State. Given that the Whitewater River Groundwater Replenishment Facility is a domestic water supply utility and given that the proposed right-of-way grant and continued operation and maintenance of the facility would not constitute a waste / wastewater discharge project, a detailed analysis of consistency with the Antidegradation Policy is not required. There would be no disposal of waste to high-quality surface waters and groundwaters of the State.

As discussed the Regulatory Framework and Significance Criteria subsection in Section 3.7, *Hydrology and Water Quality*, CVWD's analysis in the EIR is appropriately focused on water quality parameters used to guide CVWD's compliance with drinking water standards. The EIR fully acknowledges that *"Colorado River water used for direct delivery and recharge in the Coachella Valley has higher Total Dissolved Solids (TDS) concentrations on average than most of the groundwater within the Subbasin."* This is supported by water samples acquired from the Metropolitan Water District of Southern California (Metropolitan), which indicate that the Colorado River water used for groundwater recharges currently has TDS ranging from 540 to 570 milligrams per liter (mg/L). Further, Impact HWQ-2 discloses that continued operation of the Whitewater River Groundwater Replenishment Facility would *"…increase TDS in some groundwater to levels up to that found in delivered Colorado River water. This in turn could cause groundwater produced from Coachella Valley wells in the vicinity of the Facility to contain TDS levels above the 500 mg/L recommended consumer acceptance contaminant level for drinking water."*

With regard to the request for a Assimilative Capacity Study, such studies are intended to evaluate whether individual recycled water use projects would affect water quality. The proposed Project is not a recycled water use project and therefore an Assimilative Capacity Study is not required. Nevertheless, an Assimilative Capacity Study was prepared as a part of the 2015 SNMP. This study fund that planned recycled water projects within the West Whitewater River Management Zone are consistent with the Recycled Water Policy (CVWD 2015). Please see Response to Comment BIA-3 for additional discussion regarding BIA's comment regarding total salt loading. Please also see Response to Comment BIA-4 for additional discussion regarding salinity concentrations throughout the Basin.

Comment BIA-2: *"The Bureau of Indian Affairs (BIA) suggested an alternative that reduce the annual maximum recharge quantity of Colorado River water… The authors of the DEIR eliminated the 'Reduced Total Volume Alternative' based on omissions of facts, misleading presentations of the facts and bias towards the CEQA Proposed Project.'"*

Response to Comment BIA-2: The scoping letter provided by the BIA states, *"As the Coachella Valley is a terminal groundwater system, the [EIR] should address the historical recharge quantities and total TDS loading during the past ROW agreement (1984 to 2014) and the proposed maximum of 511,000 acre-feet per year. A much lower annual maximum alternative(s) should be considered and evaluated."* As requested by the BIA during scoping, CVWD included all requested analysis in the Draft EIR.

The comment on the Draft EIR correctly describes that a Reduced Total Volume alternative, involving a maximum recharge of 220,000 acre-feet per year (AFY) of water, was considered but dismissed. As described in Section 2.8.2, *Alternatives Considered but Eliminated*:

> *"This alternative was rejected for several reasons including the fact that reduced groundwater recharge at the Facility would result in greater environmental impacts related to a reduced capacity for the Facility to counteract ongoing groundwater overdraft in the Coachella Valley, potential inconsistency with CVWD's Water Management Plan targets for replenishment (CVWD 2010), and potential disproportionate impacts on environmental justice communities in the West Whitewater subbasin in the vicinity of the Facility due to increased water rates due to continuing overdraft (BLM 2021)."*

Moreover, the Reduced Total Volume alternative does not meet several project objectives. For example, as noted above, the alternative would not meet the project objective of eliminating long-term groundwater overdraft, nor would it deliver an amount of water to the Facility consistent with project objectives. Additionally, this alternative would not minimize adverse environmental impacts. Notably, reducing (or eliminating) overdraft conditions helps to prevent downward migration of higher salinity shallow and perched groundwater, and it helps prevent saline water under the Salton Sea from intruding into groundwater in the Coachella Valley (refer to Section 3.9, *Cumulative Impacts*). The Reduced Total Volume alternative would not reduce long-term groundwater overdraft to the same extent as the proposed Project. This alternative would result in less groundwater recharge at the Facility, and would thus result in greater environmental impacts related to groundwater overdraft in the Coachella Valley (refer to Section 2.8.2, *Alternatives Considered but Eliminated*).

Nevertheless, the description of Alternative 2: Amendment Area Only / Decrease Operations Alternative does analyze a reduction in maximum recharge in the event that the Bureau of Land Management (BLM) does not issue the requested right-of-way grant for the renewal area. Analysis of groundwater supply and groundwater quality issues are provided in Section 5.3.8, *Hydrology and Water Quality*.

Comment BIA-3: *"Please provide supporting documentation for the tons of salt removed each year of operation, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-3: While the use of "tons of salt" may provide the public with a physical reference point, it does not demonstrate whether or not increasing salinity from recharge using Colorado River water would be in compliance with the established Consumer Maximum Contaminant Level Ranges for TDS. Tons of salt has no regulatory definition or established levels on which to base an assessment of impacts to groundwater. Therefore, CVWD's analysis in the EIR is focused on water quality parameters that guide CVWD's compliance with drinking water standards. This use of TDS concentration rather than tons of salt remains appropriate from an impact assessment perspective in compliance with CEQA Section 15064 (refer also to the response to BIA-1).

Comment BIA-4: *"Please provide additional figures and text focused on the salinity plume showing the Tribal Lands, major cities, major roads, and well locations so the public and decision makers can see where the impacts to the land and people will occur as a result of this project and updated the DEIR to reflect this information."*

Response to Comment BIA-4: As described in the EIR and the responses to BIA-1 and -3, CVWD's assessment of water quality impacts is based on compliance with established regulations and focuses on the potential for increases in TDS concentrations associated with recharge using Colorado River water. The EIR acknowledges that *"Colorado River water used for direct delivery and recharge in the Coachella Valley has higher TDS concentrations on average than most of the groundwater within the Subbasin*." The EIR discusses variation in extent of subsurface TDS concentrations associated with groundwater replenishment activities both in area and depth within the aquifer with TDS decreasing away from the Facility and deeper in the aquifer.

With regard to the requested figures and text, the presence of elevated TDS concentrations beneath a specific land area, property, political boundary, or cultural feature does not provide a basis to define an impact. As described in the EIR, the primary impacts are to the water quality in the aquifer and pumping/delivery of groundwater with elevated TDS concentrations for beneficial uses (e.g., domestic, commercial, and industrial). The water quality impacts to the aquifer would be the exact same if the elevated TDS concentrations were located beneath a remote area with no development (e.g., cities, roads, tribal lands) in accordance with the regulatory standards identified in Section 3.7.2, *Regulatory Framework*.

The TDS concentrations in water delivered to customers in the service area is a function of which wells are pumped, the screening depths of the wells, and the duration of pumping from a given location. The location of elevated TDS concentrations underneath a customer's house or business does not necessarily correlate to the potential effects on those customers. Properties that do not overlie areas with elevated TDS concentrations could still be affected by elevated TDS. Further, the 2010 Coachella Valley Water Management Plan Update, which is referenced extensively in the EIR, states that recharge at the Facility accounts for only about 36 percent of the salt loading in the Whitewater River Subbasin from imported water. Thus, the potential extent of elevated TDS concentrations to water users are not solely attributable to the Facility or the proposed Project.

Comment BIA-5: *"There is no mention of the alluvial flooding and downcutting in the DEIR concerning the long-term loss of flood plain processes and degradation of the flood plain habitat."*

"Please provide supporting documentation and analysis of the channelization of the Whitewater River in the areas between the MWD outlet to the facility covered by the

Whitewater Flood Plain Conservation Plan, recharge effects of the project on the Garnet Hill subarea, etc., and updated the DEIR to reflect this information."

Response to Comment BIA-5: Floodplains are addressed in Section 3.7, *Hydrology and Water Quality*. As described on Page 3.7-12, *"CVWD operates and maintains approximately 207 miles of stormwater projects to protect an approximately 590-square-mile area from flooding. These stormwater projects include the 70-mile-long [Whitewater River Stormwater Channel / Coachella Valley Stormwater Channel] WRSC/CVSC and its tributaries…"* Additionally, *"CVWD conducts ongoing stormwater management planning and construction activities, in coordination with other agencies and jurisdictions, to provide flood protection within its service area."* Further, normal operations of the Facility (i.e., non-storm events) when the flow rate is equal to or less than 800 cubic feet per second (combined natural and imported flows) are suspended when stormwater flows exceed 400 cubic feet per second which effectively decouples operation of the Facility from any downcutting of the existing channel during large flood events (refer to Pages 2-16 to 2-17).

As described in Impact HWQ-4 and -5 the implementation of the proposed Project would not result in significant impacts with respect to flooding. CVWD would continue to operate in its capacity as the flood control agency managing the WRSC. Because the continued operation would not alter the existing drainage pattern of the WRSC, would not contribute new flood flows, and would not redirect any existing flood flows, the proposed Project would have a less than significant impact related to flood control and no mitigation measures would be necessary.

Garnet Hill is a subarea of the Whitewater Subbasin benefitting from groundwater replenishment at the White Water Groundwater Replenishment Facility. Therefore, any potential impacts assessed for the Whitewater River Subbasin include those for the Garnet Hill Subarea. As described in Impact HWQ-4 and -5, the implementation of the proposed Project would not result in significant impacts with respect to flooding or the alteration of the existing channel. Specifically, the proposed Project would maintain the channel as it exists as part of the current environmental baseline.

Comment BIA-6: *"Please provide supporting documentation and analysis of the SWP actual deliveries (to MWD) and the expected trend this water supply will yield in the future, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-6: The comment describes State Water Project (SWP) deliveries and asserts that the maximum SWP contract is 194,000 acre-feet per year (AFY) and claims that number cannot be found in the EIR. However, Page 2-17 states, "*CVWD and DWA request their full Table A SWP water allocation amounts from DWR each year, for a combined total of 194,100 acre-feet per year, and continue to exchange their SWP water for*

Colorado River water for delivery at the Facility through an exchange agreement with Metropolitan." The EIR goes on to describe that:

> *"…the entire allocation of SWP water is typically not delivered or guaranteed and may vary due to SWP limitations such as weather conditions (e.g., drought) that may be exacerbated by climate change, increased demand, restrictions on water export from the Sacramento-San Joaquin Delta to protect the federally endangered Delta smelt (Hypomesus transpacificus), and other factors. In addition, depending on availability, CVWD and DWA may receive water unrelated to their SWP allocation, which is also delivered through the Colorado River Aqueduct as part of the exchange agreement with Metropolitan in the form of Colorado River water."*

Colorado River Exchange Water delivered annually to the Whitewater River Groundwater Replenishment Facility is shown in Table 2-1. The largest delivery occurred in 2017 with 385,994 acre-feet of imported water. As stated in Section 2.6.1, *Project Background*, Colorado River Exchange Water deliveries vary year-to-year based on regulatory restrictions and operational considerations within the constraints of the Advanced Delivery Agreement with Metropolitan.

The proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation of CVWD's existing Whitewater River Groundwater Replenishment Facility consistent with the *Coachella Valley Water Management Plan* (2010). The proposed Project thus has no effect on the availability of SWP water or other water delivered through the Colorado River Aqueduct. The right-of-way grant would simply allow CVWD to continue groundwater replenishment at the Facility by delivering Colorado River water at a maximum rate of 511,000 acre-feet in any given year.

Comment BIA-7: *"Please provide the actual full contract quantity by year, a discussion of other water delivered by the SWP then exchanged by MWD with Colorado River water, etc., and updated the DEIR to reflect this information."*

Response to Comment BIA-7: Colorado River Exchange Water delivered annually to the Whitewater River Groundwater Replenishment Facility is shown in Table 2-1. The largest delivery occurred in 2017 with 385,994 acre-feet of imported water. As stated in Section 2.6.1, *Project Background*, Colorado River Exchange Water deliveries vary year-to-year based on regulatory restrictions and operational considerations within the constraints of the Advanced Delivery Agreement with Metropolitan. As stated above in the response to BIA-6, the proposed Project is generally limited to a real estate action that would allow CVWD to continue groundwater replenishment activities at the Facility consistent with ongoing activities as defined by existing water delivery agreements.

Comment BIA-8: *"Please provide supporting documentation and analysis of the water balance between Actual SWP deliveries and water delivered by MWD showing the cumulative advanced deliveries (banked water), etc., distinguishing between Table A, Advanced, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-8: As described on Page 2-17, CWVD and the Desert Water Agency (DWA) have an Advanced Delivery Agreement with Metropolitan. The EIR goes on to describe that:

> *"The Advance Delivery Agreement established a key asset in Metropolitan's water storage portfolio, the Advance Delivery Account, with a storage capacity of up to 800,000 acre-feet. In wet years, deliveries often exceed available SWP supplies, and Metropolitan builds the storage balance. Metropolitan draws upon this storage balance in dry years, when needed to meet Metropolitan service area demands. Metropolitan also draws upon this balance, making fewer deliveries than available DWA and CVWD SWP supplies, in years when Metropolitan is rebuilding depleted storage in other surface water and groundwater storage assets. Total storage in the Advance Delivery Account has ranged from a high of 552 thousand acre-feet (TAF) during 1987 to a low of 7 TAF during 2009. Within the calendar year, maximum deliveries to the Facility were 386 TAF, with 245 TAF being credited to the Advance Delivery Account during 2017, a wet year, where the account played a key role in capturing abundant water supplies for future dry years. The maximum withdrawal from the account within a calendar year was 120 TAF during 2016, when Metropolitan was rebuilding depleted surface water storage subsequent to the historic 2014-2015 drought."*

The EIR evaluates the potential impacts of the total volume of Colorado River water delivered to the Facility for each alternative. Whether that Colorado River water is SWP exchange water or Metropolitan advanced deliveries does not alter the environmental effects. The allocation of water between different categories is subject to contracts and agreements among the various water agencies. The proposed Right-of-Way agreement between BLM and CVWD would not alter the terms of those contracts. While the advanced deliveries might result in additional volumes of imported water being recharged at the Facility, the recharge capacity of the Facility remains the same because no change to the physical parameters of the Facility is proposed. The environmental analysis presented in the EIR includes the potential effects of delivery of the entire capacity volume, no matter the contractual source. It would not be appropriate for the EIR to consider an alternative that would violate or require re-negotiation of the terms of existing contracts.

Comment BIA-9: *"Please provide supporting documentation and analysis of the short-term differences between 'CEQA Proposed Project' and 'Reduced Total Volume Alternative,'*

with an example such as, compare the annual impact over a five-year period where the deliveries the first 2 years are at 511,000 ac-ft/year and 3 years of no deliveries and compare to 5 years where 200,000 ac-ft per year are delivered, etc., and update the DEIR to reflect this information."

Response to BIA-9: The EIR thoroughly analyzes a reduced total volume alternative in Section 5, *Alternatives*. However, the EIR finds that *"[t]he No Project Alternative and Alternative 2 would not avoid the TDS impact described for the proposed Project (refer to Impact HWQ-2) and would result in significant impacts to groundwater related to significant overdraft and potential land subsidence (CVWD 2012, 2015)…"* For these reasons the No Project Alternative and Alternative 2 were considered but determined not to be environmentally superior.

The proposed recharge scenarios in the comment – 2 years at 511,000 AFY followed by three years of no deliveries versus 5 years at 200,000 AFY – are speculative and would not be consistent with the pattern of past deliveries.

Comment BIA-10: *"Please provide all public documentation concerning the rejection and subsequent requested rewrite of the SNMP, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-11: Please refer to the response to BIA-1 regarding salinity concerns associated with Colorado River water. With respect to the 2015 SNMP, the EIR does not dismiss the plan. The EIR uses baseline information related to water quality and past and future salt loading (i.e., TDS levels) from the plan; however, given that the plan was not accepted by the Colorado River RWQCB the EIR does not assess consistency with or otherwise reference the policies or management actions in the plan.

In February 2020, the Colorado River RWQCB provided a letter to the agencies with an assessment and recommendations regarding the 2015 SNMP, and encouraged the agencies to restart the development of the plan. The Coachella Valley water and wastewater agencies, including CVWD, DWA, Indio Water Authority (IWA), Coachella Water Authority and Coachella Sanitary District, Myoma Dunes Mutual Water Company, Valley Sanitary District, Mission Springs Water District, and City of Palm Springs, agreed to prepare a Development Workplan to describe a scope of work to update the 2015 SNMP. The agencies also agreed to prepare a Groundwater Monitoring Program Workplan to define an updated monitoring network.

The Development Workplan was submitted to the Colorado River RWQCB in May 2021 and accepted it in October 4, 2021. The Groundwater Monitoring Program Workplan was submitted to the Colorado River RWQCB in December 2020, and approved it in February

2021. The agencies have begun the process of updating the 2015 SNMP in accordance with the Development Workplan approved by the Colorado River RWQCB.

Comment BIA-11: *"On March 1st, 2016, the BIA raised concerns about salt loading from the use of the Colorado River water to the Bureau of Land Management (BLM) staff and management. Specific to concerns was the physical quantity (tons per year) of salt imported into the Coachella Valley ground water supply and the accelerated loading due to recharge amounts higher than wat was expressed in the EA for the previous ROW."*

Response to Comment BIA-11: While the comment states the BIA raised concerns about salt loading from the use of Colorado River water to BLM staff and management, CVWD was not involved in these conversations. However, the EIR does address the scoping comments provided by BIA. (See Table 1-1 for a summary of scoping comments and associated responses. Additionally, see Appendix A for the complete comment letter received from BIA during the scoping period.) Additionally, the EIR identified and analyzed alternatives that would limit infiltration at the Whitewater River Groundwater Replenishment Facility, including the No Project Alternative and Alternative 2, both of which were carried forward for analysis. With regard to the request for an analysis of recharge utilizing tons of salt per year, please refer to response BIA-3.

Comment BIA-12: *"October 24th, 2018, an alternative to limit recharge to the five-year average was discussed in detail. This alternative is not included in the DEIR as an alternative discussed but dismissed."*

Response to Comment BIA-12: Refer to the responses to BIA-2 and -11.

Comment BIA-13: *"The CVWD to contribute [sic] a proportional share to activities to reduce the quantity of salt in the Colorado River by 340,000 tons per year… Please provide supporting documentation and analysis of the cost and the effectiveness of this mitigation measure, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-13: No such mitigation is required by the EIR. The EIR requires the implementation of MM HWQ-1, under which CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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.

Comment BIA-14: *"Please provide supporting documentation and analysis of the short-term difference in alternatives using a 1-, 3-, and 5-year time frame, etc., and update the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-14: This comment refers to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508), which guide the BLM in complying with NEPA. These guidelines are not applicable to CVWD in complying with CEQA. The impact analysis describes short-term impacts associated with ground-disturbing activities and long-term impacts associated with the continued operation of the Whitewater River Groundwater Replenishment Facility over the term of the proposed right-of-way agreement. Analyzing operational impacts using 1-, 3-, and 5-year time frames is not practical given the uncertain and irregular timing and volume/quantity of water deliveries each year.

Comment BIA-15: *"Please provide supporting documentation and analysis on the locale effects that take place, etc., and update the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-15: Refer to the response to BIA-14 regarding the reference to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA. The proposed Project is generally limited to a real estate action (i.e., the requested issuance of a right-of-way by the BLM) that would facilitate the continued operation CVWD's existing Whitewater River Groundwater Replenishment Facility consistent with the *Coachella Valley Water Management Plan* (2010). Refer also to the response to BIA-4 for additional information regarding elevated TDS concentrations and groundwater salinity.

Comment BIA-16: *"The discussion is clearly missing or misrepresented in the DEIR. The DEIR states, numerous times, the impacts from 'CEQA Proposed Project' and 'Reduced Total Volume Alternative' are the same for long term impacts… Please provide supporting documentation and analysis on the short-term impacts as directed above in H-1790-1, etc., and updated the DEIR to reflect this information. Please note that BLM policies do not specifically apply to CEQA, but the sound principals apply to any environment analysis, CEQA included."*

Response to Comment BIA-16: This comment refers to BLM H-1790-1 – National Environmental Policy Act Handbook and the Council on Environmental Quality Regulations for Implementing NEPA (40 CFR §1502.16), which guide the BLM in complying with NEPA

(refer to the response to BIA-14). Section 5.4, *Environmentally Superior Alternative* considers each of the alternatives that was considered for analysis in the EIR and identifies an environmentally superior alternative pursuant to CEQA Guidelines Section §15126.6(e)(2). This discussion describes that Alternative 2 (Amendment Area Only / Decrease Operations Alternative) would reduce, but would not avoid the TDS impact described for the proposed Project. Refer also to the response to BIA-4 for additional information regarding elevated TDS concentrations and groundwater salinity.

Comment BIA-17: *"Please provide supporting documentation and analysis on the short-term impacts, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-17: Refer to the response to BIA-2.

Comment BIA-18: *"Please provide supporting documentation and analysis on the short-term impacts of the alternatives, etc., and update the DEIR to reflect this information."*

Response to Comment BIA-18: Refer to the response to BIA-7 regarding Colorado River water deliveries and BIA-8 regarding the Advanced Delivery Agreement.

Comment BIA-19: *"Colorado River Water Treatment is a mitigation measure…The DEIR should explore the possibility of some portion of the Colorado River water could be desalinized year-round and be supplemented with ground water to keep the plant running when continuously when Colorado River water is not available."*

Response to Comment BIA-19: As described in Section 2.8.2, *Alternatives Considered but Eliminated*, desalination of Colorado River water was considered as an alternative. This alternative was considered to be infeasible for the reasons described therein. Notably desalination of Colorado River water would require the construction of a new desalination plant in the Coachella Valley. This alternative was considered in the *Supplemental EIR for the Coachella Valley Water Management Plan Update*; however, it was determined that the construction and operation of such a plant would result in several significant and unavoidable impacts.

The EIR acknowledges that the proposed continuation of groundwater replenishment activities at the Facility would continue to result in more groundwater with TDS concentrations above the recommended consumer acceptance contaminant level of 500 mg/L but below the 1,000 mg/L upper consumer acceptance contaminant level. The previous *Supplemental EIR for the Coachella Valley Water Management Plan Update* found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of Overriding

Considerations for the Coachella Valley Water Management Plan was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater. The EIR requires the implementation of MM HWQ-1, under which CVWD shall continue to monitor the quality of groundwater produced from drinking water wells located near the existing Facility to ensure that all recognized health-based drinking water standards are met. If monitoring demonstrates that groundwater pumped from these wells exceeds any health-based drinking water standards due to Facility recharge activities, CVWD shall 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.

Comment BIA-20: *"The DEIR fails to discuss effects of the ongoing drought and climate change. An in-depth analysis of the reliability of the SWP and Colorado River water supply should be included in the DEIR."*

Response to Comment BIA-20: Climate change is discussed in Section 3.6, *Greenhouse Gas Emissions*, including an overview of global climate changes and its primary drivers as well as a describing of emissions at the Federal, State, and local levels. Impact GHG-1 discloses operational emissions associated with the Whitewater River Groundwater Replenishment Facility and assesses the consistency of the proposed Project with the *City of Palm Springs Climate Action Plan*, *Sustainable City Plan*, and *Climate Action & Adaptation Plan*, as well as other regional and state-wide plans, policies, and regulations. For example, as described therein:

> *"Groundwater replenishment ensures the region's resiliency to the effects of climate change by providing adequate water storage in times of drought and associated water shortages and reduces the impacts from aquifer overdraft, such as land subsidence and the associated damage to public infrastructure. Based on the above, the proposed Project would be consistent with the AB 32, SB 32, SB 375, and Executive Order S-13-08. Therefore, the proposed Project would be consistent with applicable plans, policies, and regulations and impacts would be less than significant and no mitigation measures would be required."*

Comment BIA-21: *"A recent report from Reclamation showed an increase in the Colorado River salt load. The lack of disclosure and analysis of measured salinity levels in Colorado River water would show this trend. This data and subsequent analysis are critical components that are missing in the DEIR and would influence the decision-making process."*

Response to Comment BIA-21: The comment states that a recent report from the U.S. Bureau of Reclamation (uncited) showed an increase in the Colorado River salt load and

claims that there is a lack of disclosure and analysis of measured salinity levels. Colorado River water salinity levels have actually decreased as a result of programs implemented by the Salinity Forum. The latest Plan of Implementation approved by the Salinity Forum anticipates additional salinity reduction from implementation of additional programs. Nevertheless, the EIR acknowledges that the proposed continuation of groundwater replenishment activities at the Facility would continue to result in more groundwater with TDS concentrations above the recommended consumer acceptance contaminant level of 500 mg/L (refer to Pages 3.7-19 to 3.7-21). The previous *Supplemental EIR for the Coachella Valley Water Management Plan* found that overall impacts to water quality associated with groundwater replenishment efforts – including the groundwater replenishment efforts at the Facility, which would continue under the proposed Project – would be potentially significant. A Statement of Overriding Considerations for the Coachella Valley Water Management Plan was adopted for significant irreversible environmental change where drinking water standards, including recommended aesthetic thresholds, may be exceeded in some groundwater. Refer to the response to BIA-19 regarding the implementation of MM HWQ-1.

Comment BIA-22: *"Based on the above information, the BIA would like the district to incorporate the comments into the DEIR and make the revised document available for at least a 30-day public comment period."*

Response to Comment BIA-22: For the reasons described in the responses to BIA-1 through -22 and pursuant to CEQA Guidelines 15088.5, recirculation of the Draft EIR is not required.