INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
for
Oeste Basins Groundwater Recharge Project
Piñon Hills, CA

Lead Agency:
Mojave Water Agency
13846 Conference Center Drive
Apple Valley, CA 92307

Prepared by:

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August 2023

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LIST OF ACRONYMS

Acronym	Definition
AB 32	Assembly Bill 32
AB 52	Assembly Bill 52
Aft/yr	Acre Feet Per Year
AMSL	Above Mean Sea Level
AQMP	Air Quality Management Plan
APN	Assessor Parcel Number
BMPs	Best Management Practices
BUOW	Burrowing Owl
CAA	Clean Air Act
CARB	California Air Resources Board
CBC	California Building Codes
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CESA	California Endangered Species Act
CGP	Construction General Permit
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CO	Carbon Monoxide
County	San Bernardino County
dB	Decibel
dBA	A-Weighted Decibels
DTSC	Department of Toxic Substance Control
EIA	Energy Information Administration
EPA	Environmental Protection Agency
ERIS	Environmental Risk Information Service
ESA	Endangered Species Act
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
Form	Environmental Checklist Form
GCC	Global Climate Change
GHG	Greenhouse Gas
GWh	Gigawatt-Hours
HCP	Habitat Conservation Plan
HSC	Health and Safety Code
kWh	Kilowatt-Hours
LED	Light Emitting Diode
LEQ	Equivalent Sound Level
LOS	Level of Service
LST	Localized Significance Threshold
MDAQMD	Mojave Desert Air Quality Management District
MBTA	Migratory Bird Treaty Act
MGS	Mohave Ground Squirrel
MLD	Most Likely Descendent
MRZ	Mineral Resources Zone
$MTCO_2e$	Metric Tons Carbon Dioxide Equivalent
MWA	Mojave Water Agency

NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NO_2	Nitrogen Dioxide
NOI	Notice of Intent
NOx	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
O_3	Ozone
OPR	Office of Planning and Research
Pb	Lead
PF	Public Facilities
PM-2.5	Particulate Matter Less Than 2.5 Microns in Diameter
PM-10	Particulate Matter Less Than 10 Microns in Diameter
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB 100	Senate Bill 100
SBCFD	San Bernardino County Fire
SCAG	Southern California Association of Governments
SCE	Southern California Edison
SCAQMD	South Coast Air Quality Management District
SF	Square Feet
SO_2	Sulfur Dioxide
SP	Service Populations
SRA	Source Receptor Area
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TIA	Traffic Impact Analysis
VMT	Vehicle Miles Traveled
WQMP	Water Quality Management Plan
USDA	US Department of Agriculture
USFWS	US Fish & Wildlife Service
USGS	US Geological Survey
VOC	Volatile Organic Compounds

1 PURPOSE AND SCOPE

The Mojave Water Agency (MWA) proposes to construct two approximately 4.5-acre basins for groundwater recharge within a 10-acre vacant parcel (APN 3099-081-01) located on the south side of Cayucos Drive, approximately 0.36 mile west of Oasis Road and approximately 0.45 mile east of 263rd Street East, and the associated piping to be located within an adjacent 0.03-acre area within the Department of Water Resources right-of-way (Proposed Project), within the unincorporated area of San Bernardino County known as Piñon Hills (Project Site). The Proposed Project is designed to draw approximately 3,000 acre-feet/year (Aft/yr) of State Water Project (SWP) water from the California aqueduct for groundwater recharge and storage in the Oeste groundwater subbasin.

The Proposed Project is a project under the California Environmental Quality Act (Public Resource Code § 21000 et seq.: "CEQA"). The primary purpose of CEQA is to inform the public and decision makers as to the potential impacts of a project and to allow an opportunity for public input to ensure informed decision-making. CEQA requires all state and local government agencies to consider the environmental effects of projects over which they have discretionary authority. CEQA also requires each public agency to mitigate or avoid any significant environmental impacts resulting from the implementation of projects subject to CEQA.

Pursuant to Section 15367 of the Guidelines for Implementation of the California Environmental Quality Act ("State CEQA Guidelines"), the MWA is the lead agency for the Proposed Project. The lead agency is the public agency that has the principal responsibility for conducting or approving a project. The MWA, as the lead agency for the Proposed Project, is responsible for preparing environmental documentation in accordance with CEQA to determine if approval of the discretionary actions requested and subsequent development and operation of the Proposed Project would have a significant impact on the environment.

In accordance with the CEQA (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the Proposed Project to determine any potential significant impacts upon the environment that would result from construction and long-term operation of the Proposed Project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the Proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

A Lead Agency may prepare a Mitigated Negative Declaration for a project that is subject to CEQA when an Initial Study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the Applicant before the proposed Negative Declaration and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment (Public Resources Code Section 21064.5).

This Initial Study has been prepared for the Proposed Project, in conformance with Section 15070(b) of the State CEQA Guidelines. This Initial Study analyzes potentially significant impacts associated with the Proposed Project and incorporates mitigation measures into the Proposed Project as necessary to

eliminate the potentially significant effects of the Proposed Project or to reduce the effects to a level of less than significant.

1.1 CONTENT AND FORMAT OF THE INITIAL STUDY

The Initial Study is organized as follows:

- **Section 1 – Purpose and Scope.** This section introduces the scope of the Proposed Project and the MWA's role in the project, as well as a brief summary of findings.
- **Section 2 – Project Summary and Environmental Determination.** This section summarizes the Proposed Project and actions to be undertaken by the MWA. This section also provides the determination of the environmental document to be approved by the MWA.
- **Section 3 – Project Description.** This section details the Proposed Project components and general environmental setting.
- **Section 4 – Environmental Impacts**. This section contains the Environmental Checklist Form (Form), as suggested in Section 15063(d)(3) of the State CEQA Guidelines, as amended, and includes a series of questions about the project for each of the listed environmental topics. The Form evaluates whether or not there would be significant environmental effects associated with the development of the project and provides mitigation measures, when required, to reduce impacts to a less than significant level. The Form requires an analysis in 20 subject categories as well as Mandatory Findings of Significance.
- **Section 5 – List of Preparers.** This section identifies the names and affiliations of the individuals who contributed to the preparation of the environmental evaluation.
- **Section 6 – References.** This section identifies the references used in the preparation of this Initial Study.

1.2 INITIAL STUDY SUMMARY OF FINDINGS

Based on the analysis in Section 4, there were no environmental factors that could potentially affect ("Potentially Significant") the environment. Mitigation measures were identified to reduce some impacts to Less Than Significant. Therefore, the determination, based on the Initial Study, is that a **Mitigated Negative Declaration** would be prepared.

1.3 DOCUMENTS INCORPORATED BY REFERENCE

The following reports and/or studies are applicable to development of the Project Site and are hereby incorporated by reference:

- *County of San Bernardino 2007 General Plan*. Prepared by URS, as amended April 24, 2017, Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf

- *2020 Urban Water Management Plan, Mojave Water Agency,* (UMP) prepared by Tully & Young, adopted May 27, 2021.

1.4 CONTACT PERSON

Any questions about the preparation of the Initial Study, its assumptions, or its conclusions should be referred to the following:

Mojave Water Agency
Attn: Matthew Johnson, Senior Water Resources Specialist
13846 Conference Center Drive
Apple Valley, CA 92307
Phone: (760) 946-7032
Email: mjohnson@mojavewater.org

2 PROJECT SUMMARY AND ENVIRONMENTAL DETERMINATION

2.1 PROJECT SUMMARY

1.	**Project Title:**	Oeste Basin Groundwater Recharge Project
2.	**Lead Agency Name:** **Address**	Mojave Water Agency 13846 Conference Center Drive, Apple Valley, CA 92307
3.	**Contact Person:**	Matthew Johnson, Senior Water Resources Specialist (760) 946-7032 mjohnson@mojavewater.org
5.	**Project Location:**	Cayucos Drive, approx. 0.36 mile west of Oasis Road and within Dept of Water Resources Right-of-Way Assessor Parcel No 3099-081-01 *Mescal Creek* USGS Quad; T5N, R7W, Sect. 30 Latitude 34°29'13.14"N, Longitude 117°39'3.41"W
4.	**Project Sponsor's Name:** **Address**	Mojave Water Agency Attn: Matthew Johnson 13846 Conference Center Drive Apple Valley, CA 92307
6.	**General Plan Designation:**	Phelan/Piñon Hills/Rural Living (PH/RL)
7.	**Zoning Designation:**	Phelan/Piñon Hills/Rural Living (PH/RL)
8.	**Description of Project:**	The Mojave Water Agency (MWA) proposes to construct two approximately 4.5-acre basins for groundwater recharge within a 10-acre vacant parcel located on the south side of Cayucos Drive, approximately 0.36 mile west of Oasis Road, within Assessor's Parcel Number (APN) 3099-081-01 and the associated basin piping in an adjacent 0.03-acre area within the Department of Water Resources right-of-way, within the unincorporated area of San Bernardino County known as Piñon Hills. The Proposed Project is designed to draw approximately 4,000 acre-feet/year of State Water Project water from the California aqueduct in wet years for groundwater recharge and storage in the Oeste groundwater subbasin.

9. Surrounding Land Uses:

Surrounding land uses are identified in **Table 1*: Surrounding Land Use*.**

Table 1: Surrounding Land Use

Direction	Land Use Description
North	Cayucos Drive, vacant
East	Vacant
South	Aqueduct Road/Dept of Water Resources California Aqueduct, vacant
West	Vacant

10. Other Public Agencies Whose Approval is Required:

The following discretional approvals are required for the Project:

Federal Agencies

- None

State Agencies:

- California Dept of Water Resources – Encroachment Permit
- California Dept of Fish and Wildlife – Joshua Tree removal permit/authorization

11. California Native American Consultation:

On November 9, 2022, the Mojave Water Agency notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end on December 9, 2022, in accordance with AB52. The results of the consultation are as follows:

- Mr. Raymond Huaute Cultural Resources Specialist Morongo Band of Mission Indians. Result: No response provided.
- Ms. Jill McCormick Historic Preservation Officer Quechan Tribe of the Fort Yuma Reservation. Result: No response provided.
- Ms. Donna Yocum Chairperson San Fernando Band of Mission Indians. Result: No response provided.
- Ms. Jessica Mauck Cultural Resources Management Department Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians). Result: No response provided.
- Mr. Mark Cochrane Co-Chairperson Serrano Nation of Mission Indians. Result: No response provided

2.2 ENVIRONMENTAL ANALYSIS AND DETERMINATION

In accordance with the CEQA (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the Proposed Project to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. This Initial Study is based on an Environmental Checklist Form (Form), as suggested in Section 15063(d)(3) of the State CEQA

Guidelines, as amended, and includes a series of questions about the project for each of the listed environmental topics. The Form evaluates whether or not there would be significant environmental effects associated with the development of the project and provides mitigation measures, when required, to reduce impacts to a less than significant level.

In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the Proposed Project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the Proposed Project.

Earlier analyses may be used where, pursuant to the Program EIR or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. (Section 15063[c] [3][D]. In this case, a brief discussion should identify the following:

a) Earlier analyses used where they are available for review.

b) Which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards and whether such effects were addressed by mitigation measures based on the earlier analysis.

c) The mitigation measures that were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project for effects that are "Less than Significant with Mitigation Measures Incorporated.

References and citations have been incorporated into the checklist references to identify information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document, where appropriate, include a reference to the page or pages where the statement is substantiated.

Source listings and other sources used, or individuals contacted are cited in the discussion.

The explanation of each issue should identify:

a) The significance criteria or threshold, if any, used to evaluate each question

b) The mitigation measure identified, if any, to reduce the impact to less than significant.

2.2.1 Terminology Used in This Analysis

Section 4 provides a discussion of the potential environmental impacts of the Project. The evaluation of environmental impacts follows the questions provided in the Checklist provided in the CEQA Guidelines. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

Once the Lead Agency has determined that a particular physical impact may occur, the checklist answers indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant, described as follows:

- **No Impact.** A designation of no impact is given when no adverse changes in the environment are expected. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to the project (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

- **Less Than Significant.** A less than significant impact would cause no substantial adverse change in the environment.

- **Less Than Significant with Mitigation**. This applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." Mitigation measures are identified and explain how they reduce the effect to a less than significant level (mitigation measures may be cross-referenced).

- **Potentially Significant.** A significant and unavoidable impact would cause a substantial adverse effect on the environment and no feasible mitigation measures would be available to reduce the impact to a less-than-significant level.

2.2.2 Environmental Factors Potentially Affected

Based on the analysis in Section 4, the environmental factors below would be potentially affected by the Proposed Project. The factors checked below were found to either be "Potentially Significant" but where mitigation measures were identified to reduce potential impacts to less than significant.

☐ Aesthetics	☐ Agriculture and Forestry Resources	☐ Air Quality
☒ 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	☐ Wildfire	☐ Mandatory Findings of Significance

2.2.3 Determination

On the basis of this initial evaluation, the following finding is made:

	The Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	Although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
	The Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	The Proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	Although the Proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the Proposed Project, nothing further is required.

Signature Date

Name Title

3 PROJECT DESCRIPTION

3.1 BACKGROUND

MWA was founded in 1960 to manage the Mojave area water supply due to concerns over declining groundwater levels. Governed by an elected Board of Directors, the MWA was created for the explicit purpose of doing "any and every act necessary, so that sufficient water may be available for any present or future beneficial use of the lands and inhabitants within the Agency's jurisdiction' as stated in the MWA law chapter 97-1.5."

The MWA is one of 29 State Water Project (SWP) contractors, serving as the regional imported supplemental (SWP) water provider for approximately 4,900 square miles in San Bernardino County, including Barstow, Lucerne Valley, the Victor Valley, Yucca Valley, and surrounding communities. To best manage the Mojave River Watershed and associated groundwater basins (Mojave Basin), the Mojave Basin Judgement (adjudication) and the court divided the service area into five separate "subareas". These subareas are based on hydrologic divisions defined by various hydrologic, geologic, engineering, and political considerations. The subareas are: 1) Oeste; 2) Este; 3) Alto; 4) Centro, and 5) Baja. The Morongo Basin/Johnson Valley Area is the sixth actively managed subarea within the Agency's service area.

SWP water is an important imported supplemental water supply source for the MWA service area. MWA currently has a contract for up to 85,800 acre-feet per year (AFY), although the water allotment varies annually based on SWP available supply. According to the most recent Urban Water Management Plan (UWMP), the imported supplemental SWP water is one of four sources of water for the groundwater basins within MWA's service area. Other sources include natural local surface water flows, return flow from pumped groundwater not consumptively used, and wastewater imports from outside the MWA service area. Natural surface supply, return flow, wastewater imports, and SWP imports are used to recharge the groundwater basins.

The MWA operates groundwater recharge facilities to supplement native groundwater supplies in areas where the natural supply is insufficient to meet water usage. The recharge area operates by spreading imported supplemental SWP supplies on the surface of the recharge area where the water then percolates down through the soils into the underlying groundwater basin. MWA maintains and operates recharge facilities in various areas of the management subareas.

According to the MWA Water Master 2021 Report and 2015 Urban Water Management Plan, local water demand is expected to increase with forecasted population growth. Local groundwater elevations in Oeste have been stable or slightly declining for the last 20 years as verified production has been higher than the safe yield of the groundwater basin. To alleviate current deficits in groundwater supply and support future population expansion in the area, groundwater recharge will be a pivotal tool.

Currently, the Oeste Subarea does not have groundwater recharge facilities. Therefore, the MWA proposes to construct two, approximately 4.5-acre basins to draw approximately 4,000 Aft/yr of SWP water from the California aqueduct for groundwater recharge and storage in the Oeste groundwater subbasin.

3.2 PROJECT LOCATION

The Project Site is located within the unincorporated area of San Bernardino County known as Piñon Hills, approximately 0.88 mile south of SR-18 and approximately 3.6 miles east of SR-138 (**Figure 1 – *Regional Vicinity Map***). Specifically, the Project would occur within a 10-acre vacant parcel (APN 3099-081-01) located on the south side of Cayucos Drive, approximately 0.36 mile west of Oasis Road and approximately 0.45 mile east of 263rd Street East, and the associated piping to be located within an adjacent 0.03-acre area within the Department of Water Resources right-of-way (**Figure 2 – *Project Location Map-Aerial***). The Project is located at approximately Latitude 34°29'13.14"N, Longitude 117°39'3.41"W and can be found within the U.S. Geological Survey (USGS) *Mescal Creek* 7.5' Topographic Map, within Section 30, Township 5 North, Range 7 West (**Figure 3 – *USGS Topographic Map***).

3.3 ENVIRONMENTAL SETTING

The Mojave Desert is found at elevations of 2,000 to 5,000 feet above mean sea level and is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Climatological data obtained for the Project Site indicates the annual precipitation averages 6.18 inches per year. Almost all of the precipitation in the form of rain occurs in the months between October and April, with hardly any occurring between the months of May and September. The wettest month is February, with a monthly average total precipitation of 1.22 inches. The average minimum and maximum temperatures for the region are 45.7 and 78.9 degrees Fahrenheit (°F) respectively with December and January (monthly average 41° F) being the coldest months and July being the hottest (monthly average 100° F).

The Project Site's elevation ranges from approximately 3,468 to 3,485 feet above mean sea level. The site slopes gently northward away from the adjacent Aqueduct and is relatively flat outside of the Aqueduct and a series of swales sheet flow across the site.

The Project Site supports undeveloped land varying between undisturbed to heavily disturbed. Dirt trails and unofficial off-road vehicle access roads, that connect to a network of larger trails and roads in the area, traverse the Project Site. In addition, the northern boundary has been impacted by illegal dumping. Portions of the Project Site that occur within the California Aqueduct are fully developed.

In December 2021, the MWA and Hargis and Associates drilled two exploratory boreholes and constructed two monitoring wells in the northeastern portion of the site to determine the potential for recharge water to infiltrate through surficial sediments and reach the water table. The results indicated that the Project Site is suitable for infiltration.

3.4 PROJECT CHARACTERISTICS - CONSTRUCTION

The MWA proposes to construct two, approximate 4.5-acre groundwater recharge basins on its 10-acre parcel in the Piñon Hills area. The proposed Project will also install four 8-inch diameter flexible suction hoses into the aqueduct that will feed a new 16-inch pipe that will be installed underground from the aqueduct to the recharge basin. It is anticipated that the site will percolate SWP water into the ground at approximately 2 ft per day and 9 acres of the recharge area will be in use approximately 60 percent of the time allowing a total of approximately 3,900 Aft/yr to be recharged into the proposed groundwater basin (**Figure 4 – *Site Plan***).

The initial site clearing is estimated to occur over one month, between the hours of 7 am and 4 pm, with the Project completed within three months. Work will likely take place during the summer of 2023. This is typically when there is a low chance of occurrence of strong weather and local wildlife interfering with the construction operations.

The number of construction personnel will vary based on the work for the Project that is completed that day. It is anticipated that the Project will utilize five employees daily over the three-month construction period.

3.4.1 Construction Methods - Basins

Construction would be undertaken by an MWA contractor. The Project is anticipated to remove approximately 80,409 cubic yards of fill to create the new basin. It is anticipated that the contractor would remove the material and stockpile it on a site located within a 5-mile radius of the Project Site, where the soil would be available for reuse by private and public entities.

3.4.2 Construction Methods – Pipeline and Vault

A 3-foot-deep trench would be excavated using a backhoe, for approximately 430 feet, from the south edge of the southern basin to the new turnout facility that would be installed at the aqueduct. The turnout equipment consists of four 8-inch diameter suction hoses and pipe and would be installed within the aqueduct right of way. Pavement would be installed over the suction pipe within the existing paved area of the DWR access road. A concrete vault to house the flow meter will be installed at the suction hoses in the DWR right-of-way.

3.4.3 Potential Construction Equipment

Project construction will require the use of heavy equipment. While the final types and numbers of construction equipment will be determined by the construction contractor, the types of equipment that may be utilized are identified in **Table 2: *Equipment Assumptions***.

Table 2: Equipment Assumptions

Equipment Type	Numbers of Equipment	Duration
Bulldozer – CAT D3	1	1 months
Backhoe – CAT 416	1	3 months
Scraper – CAT 637 E	1	3 months
Loader – CAT 938M	1	3 months
Skip loader – CAT 415F2 IL	2	3 months
Water Truck	1	3 months
Compactor – CASE PT240D	1	1 month
Dirt Haul Trucks – approx. 80,409 CY	TBD by contractor	2 weeks

3.4.4 Right-of-Way Acquisition

The area to be potentially affected by the Project includes approximately 0.03 acre within the DWR right-of-way and aqueduct. The Project would require the acquisition of a permanent easement within the DWR right-of-way as well as a temporary construction easement DWR. Since the proposed construction is not located within an existing roadway, it would not require relocation of existing utilities (water, sewer, cable, telephone, gas, electric utilities, etc.).

3.4.5 Construction Staging and Access

The MWA will coordinate and identify the staging area within the Project Site. It is anticipated that the construction staging would occur directly on the Project Site, and/or on the adjacent roadway of Cayucos Drive.

3.4.6 Construction Timing

The Project is anticipated to be constructed as soon as permits are received and take approximately three months to complete. Tentatively, it is anticipated that work would begin in early summer 2024 and end in late summer 2024.

3.4.7 Best Management Practices/Avoidance and Minimization Measures

The MWA and its contractor will follow conditions and guidelines for best management practices with respect to construction:

- **Migratory Bird Treaty Act (MBTA) Compliance.** Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to Project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity and duration of disturbance. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

- **Stormwater Management.** Because the Proposed Project would disturb more than 1 acre, the Proposed Project is regulated under the construction general permit (CGP, Order No. 2009-009-DWQ) and its subsequent revisions (Order No. 2012-0006-DWQ) issued by the State Water Resources Control Board (SWRCB). Projects obtain coverage under the CGP by developing and implementing a Stormwater Pollution Prevention Plan (SWPPP) that estimates sediment risk from construction activities to receiving waters and specifies best management practices that would

be implemented as a part of the Proposed Project's construction phase to minimize pollution of stormwater prior to and during grading and construction. The Proposed Project is required to prepare a SWPPP and associated BMPs in compliance with the CGP during grading and construction. The SWPPP would specify BMPs that would be implemented for the Proposed Project to protect the water quality of receiving waters. Other construction BMPs that may be incorporated into the Proposed Project's SWPPP and implemented during the construction phase include but are not limited to:

- Installation of perimeter silt fences and perimeter sandbags and/or gravel bags
- Stabilized construction exits with rumble strip(s)/plate(s)
- Installation of storm drain inlet protection on affected roadways
- Installation of silt fences around stockpile and covering of stockpiles
- Stabilization of disturbed areas where construction ceases for a determined period of time (e.g., one week) with erosion controls
- Installation of temporary sanitary facilities and dumpsters
- Adherence to the BMPs in the SWPPP would reduce, prevent, minimize, and/or treat pollutants and prevent degradation of downstream receiving waters; reduce or avoid contamination of urban runoff with sediment; and reduce or avoid contamination with other pollutants such as trash and debris, oil, grease, fuels, and other toxic chemicals.

3.4.8 Operations Scenario

Once constructed, it is anticipated that the Oeste Recharge Basins will be included in the MWA's routine maintenance of its recharge facilities. This includes inspections after major rain events, or annually at a minimum.

Maintenance activities may include but not be limited to the following for the facility:

- **Access Roads:** Maintenance activities include clearing encroaching vegetation, filling ruts and potholes, grading, resurfacing (with similar materials), and repairing washouts. Vegetation control usually occurs annually and other activities usually occur every 2 to 3 years.

- **Basin and outfalls:** General maintenance includes periodic grading of the bottoms of the basins to ensure percolation, and cleaning at the drain outfalls.

- **Fuel Modification Maintenance**. Fuel modification can be in the form of manual, mechanical, or chemical vegetation control of dry or invasive vegetation that is within 50 feet of the boundaries of the apron, and along the new side slopes.

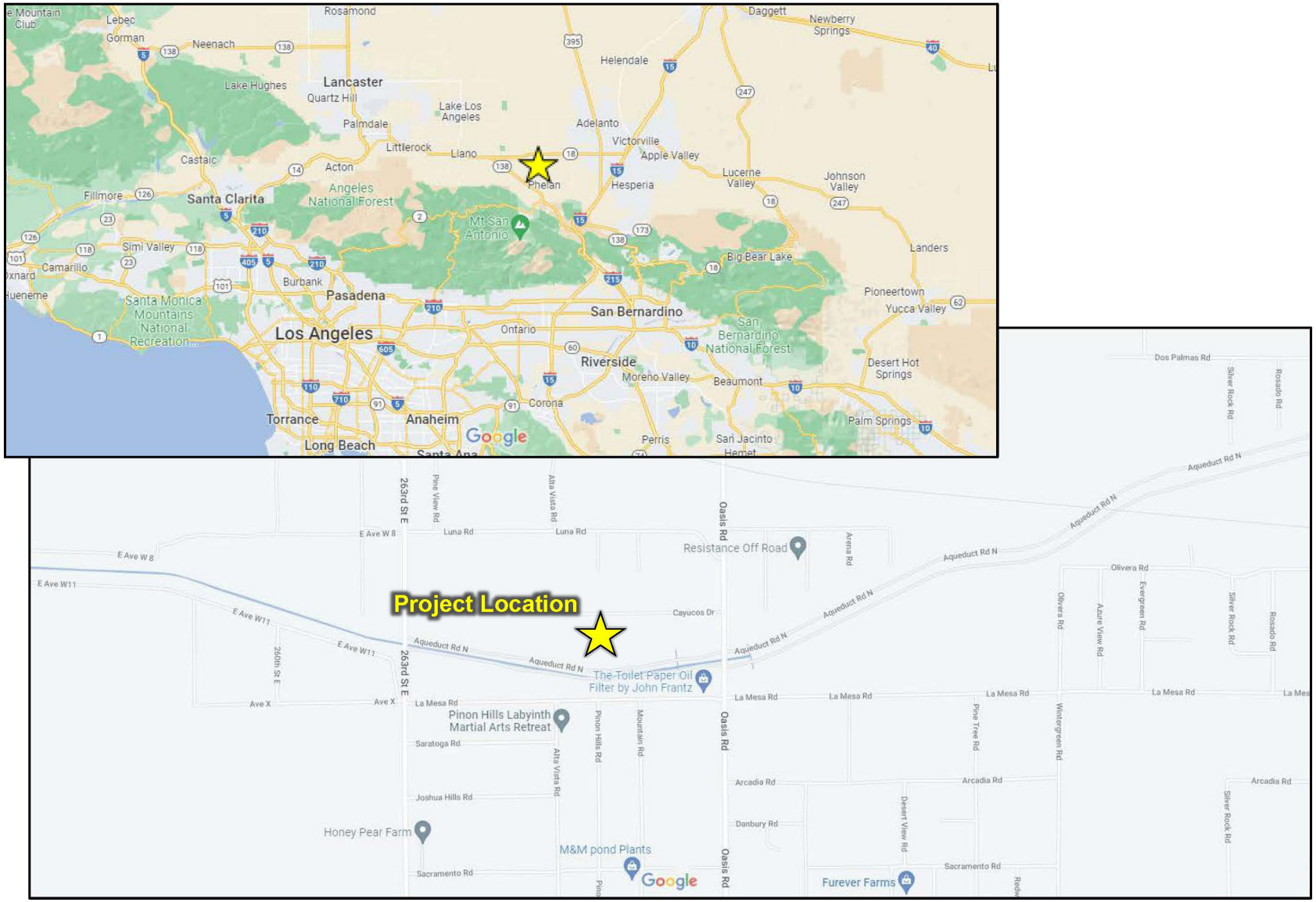
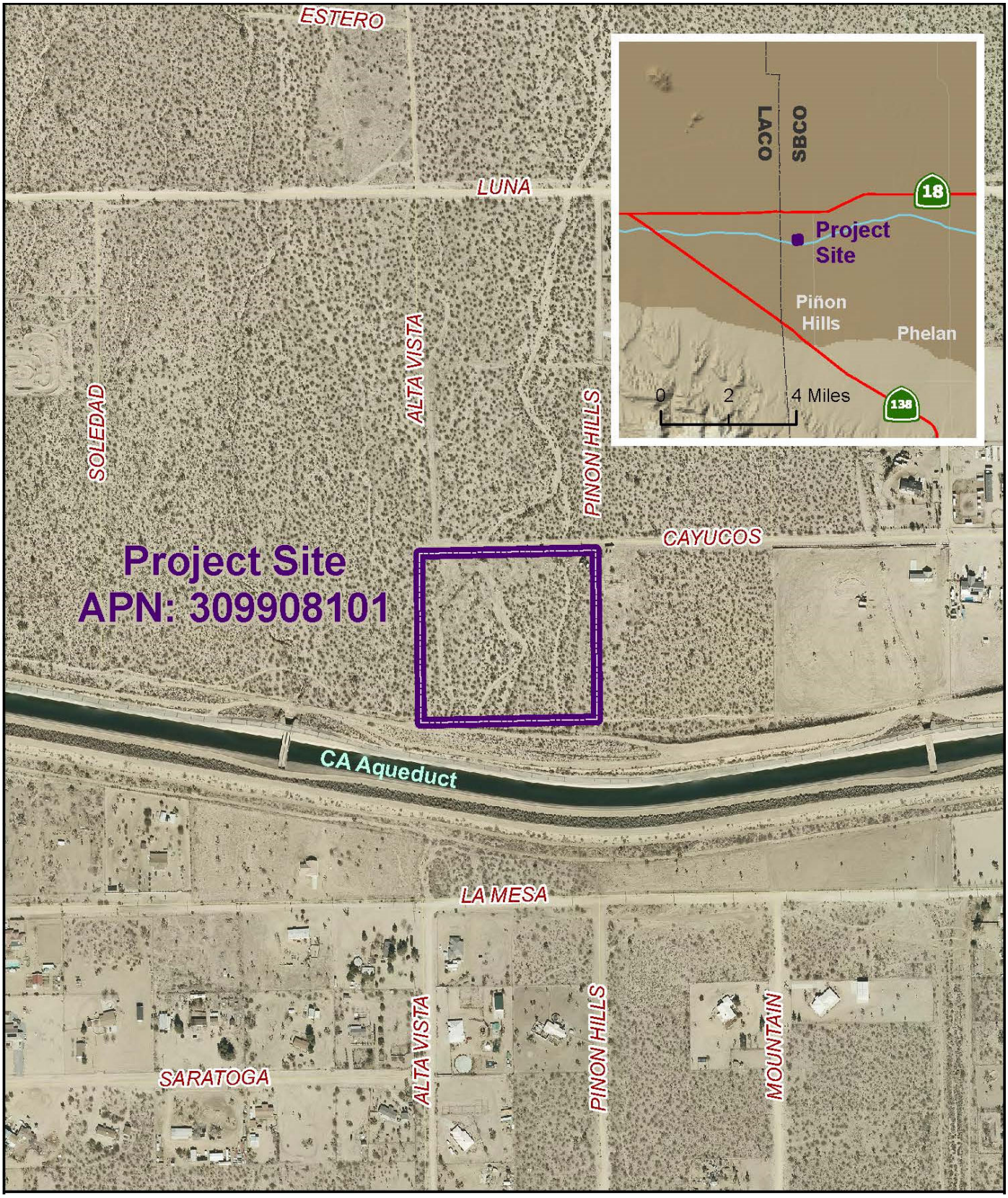


Figure 1: Regional Vicinity Map
Source: *Google Maps*



Not to Scale

Figure 2: Project Location Map - Aerial

Source: *Mojave Water Agency*

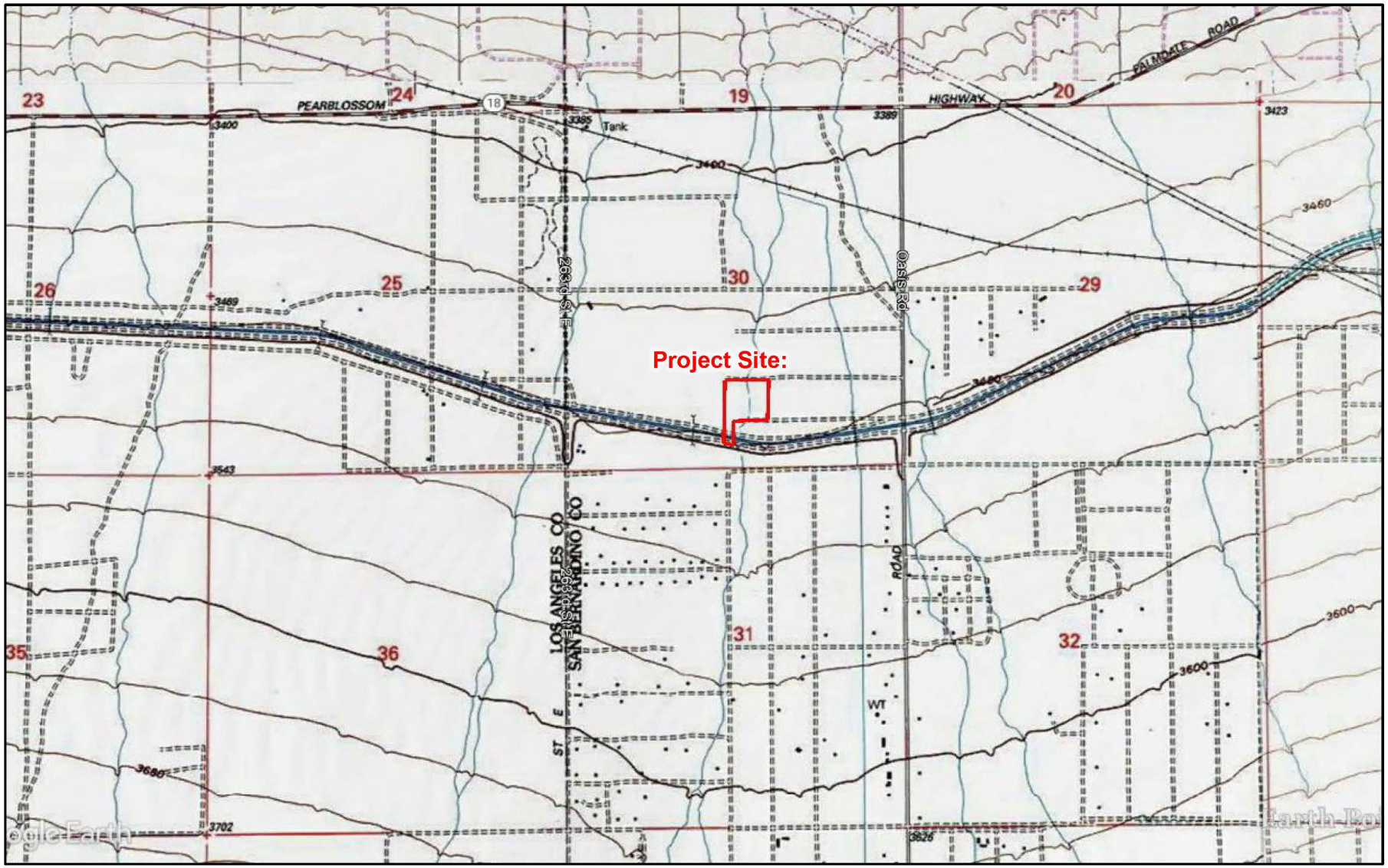
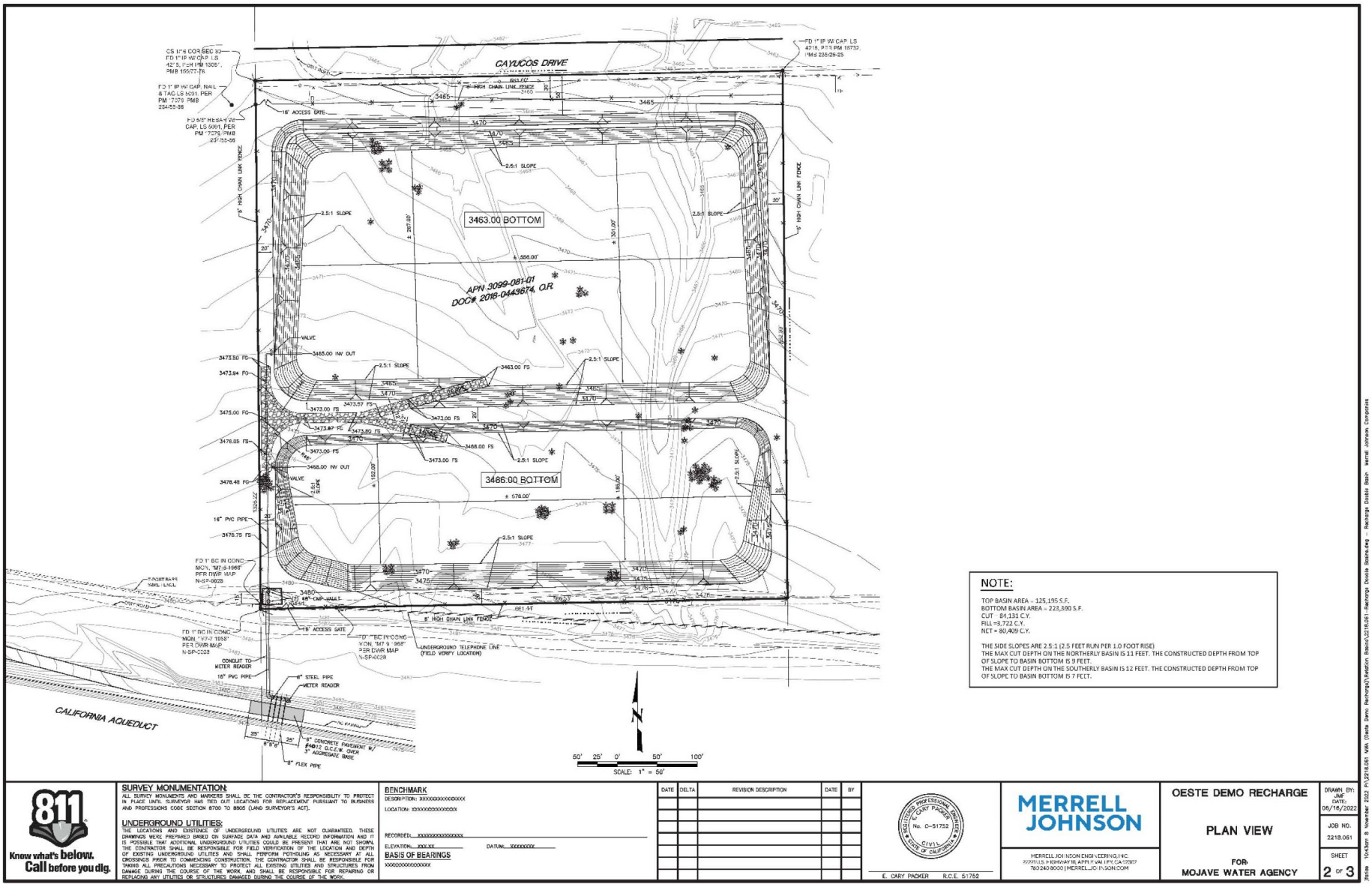


Figure 3: USGS Topographic Map

Source: *Google Earthpoint Topo*



Not to Scale

Figure 4: Site Plan

Source: *Mojave Water Agency*

4 ENVIRONMENTAL IMPACTS

4.1 AESTHETICS

4.1.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
I. AESTHETICS: Except as provided in Public Resources Code Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Discussion

a) Have a substantial adverse effect on a scenic vista?

No Impact. The CEQA Guidelines do not provide a definition of what constitutes a "scenic vista" or "scenic resource" or a reference as to from what vantage point(s) the scenic vista and/or resource, if any, should be observed. Scenic resources are typically landscape patterns and features that are visually or aesthetically pleasing and that contribute affirmatively to the definition of a distinct community or region such as trees, rock outcroppings, and historic buildings.

A scenic vista is generally identified as a public vantage viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Common examples may include a public vantage point that provides expansive views of undeveloped hillsides, ridgelines, and open space areas that provide a unifying visual backdrop to a developed area.

The San Bernardino County General Plan does not designate any scenic vistas or protected viewsheds in the Project area. Views of the surrounding foothills of the San Bernardino Mountains to the south of the Project Site are available from public vantage points along Cayucos Drive and Oasis Road. The Project site is currently vacant and generally undeveloped.

The Proposed Project would change the visual character of the Project Site, which is currently vacant and undeveloped, by clearing vegetation from the land and adding ground-level water recharge basins. The Project would not impede views of the mountains along the public way because the Project would be located at the ground surface level.

The Project Site is not a scenic vista nor are there designated scenic vistas in the vicinity where the Project would interrupt the views from any scenic vista. Therefore, there is no impact, and no mitigation would be required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The Project Site is not within a state scenic highway. Therefore, no impacts associated with scenic resources within a state scenic highway would occur, and no mitigation would be required.

c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

No Impact. The Project is located in a rural, unincorporated area where large lot rural residential exists to the east and south. The Project is to install groundwater recharge basins which would not extend above ground surface. Therefore, the Project would not substantially degrade the existing visual character or quality of public views of the site and its surroundings. As such, there would be no impact, and no mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

No Impact. Impacts from light are typically associated with the use of artificial lighting at nighttime. Glare typically occurs during the day, generally caused by a reflection of sunlight on highly polished surfaces, such as windows, generally associated by mid- to high-rise buildings with exterior facades that are comprised of highly reflective glass or mirror-like materials. Nighttime glare is primarily associated with bright point source light that contrasts with the surrounding ambient lighting.

The Project does not propose lighting for operations. Construction would occur during daylight hours. Therefore, the Project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. There would be no impacts, and no mitigation is required.

4.1.2 Mitigation Measures:

No mitigation measures associated with impacts to Aesthetics apply to the Proposed Project.

4.1.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Aesthetics.

4.2 AGRICULTURE AND FORESTRY RESOURCES

4.2.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
II. AGRICULTURE AND FORESTRY RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB). Would the project:				
a) Convert Prime Farmland, Unique Farmland or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?				X
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?

No Impact. According to the California Department of Conservation Farmland Mapping and Monitoring Program, the Project site is identified as Grazing Land. Therefore, there would be no potential impacts associated with conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use, and no mitigation would be required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. No part of the Project site or its surroundings are designated as agricultural use nor is it subject to any Williamson Act contracts. No impacts would occur, and no mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. No part of the Project site or its surroundings are designated as timberland. No impacts would occur, and no mitigation is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. There is no designated forest land on the Project site, and the Proposed Project would therefore not affect forests during construction or operations. No impacts would occur, and no mitigation is required.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to nonagricultural use or the conversion of forest land to non-forest use?

No Impact. The proposed Project includes the construction of a new emergency operations building consistent with the land use designation and zoning of the Project Site. As discussed under Thresholds II.2 (b) through II.2(d), the Proposed Project would not involve other changes in the existing environment that would result in conversion of Farmland to non-agricultural use or the conversion of forest land to non-forest land. Therefore, there would not be potentially significant impacts associated with changes in the environment which could result in conversion of farmland to non-agricultural use, and no mitigation would be required.

4.2.2 Mitigation Measures

No mitigation measures associated with impacts to Agriculture and Forestry Resources apply to the Proposed Project.

4.2.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Agriculture and Forestry Services, and no mitigation would be required.

4.3 AIR QUALITY

An air quality analysis was prepared to evaluate whether the estimated criteria pollutants generated from the Project would cause a significant impact to the air resources in the Project area (**Appendix A – *Oeste Basins Air Quality, Greenhouse Gas, and Energy Impact Study Mojave Water Agency, Piñon Hills, CA,* prepared by MD Acoustics, March 14, 2023**).

4.3.1 Regulatory Setting

Air pollutants are regulated at the national, state, and air basin level; each agency has a different level of regulatory responsibility. The United States Environmental Protection Agency (EPA) regulates at the national level under the Clean Air Act (CAA) of 1970. The California Air Resources Board (CARB) regulates at the state level. The State is currently divided into 15 air basins, and each air basin is regulated on a regional level.

There are six common air pollutants, called criteria pollutants, which were identified from the provisions of the CAA of 1970.

- Ozone (O_3)
- Nitrogen Dioxide (NO_2)
- Lead
- Particulate Matter (PM10 and PM2.5)
- Carbon Monoxide (CO)
- Sulfur Dioxide (SO_2)

The EPA and the CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

The Project site is located in the unincorporated area of San Bernardino County that is part of the Mojave Desert Air Basin (MDAB), which includes the desert portion of San Bernardino County. The National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) attainment statuses for the MDAB are listed in **Table 3: *Attainment Status of MDAQMD***.

Table 3: Attainment Status of MDAQMD

Pollutant	Federal Designation	State Designation
1-Hour Ozone	--	Nonattainment
8-Hour Ozone	Nonattainment	Nonattainment
CO	Unclassified/Attainment	Attainment
PM10	Nonattainment	Nonattainment
PM2.5	Unclassified/Attainment	Nonattainment
Lead	Unclassified/Attainment	Attainment
SO2	Unclassified/Attainment	Attainment
NO2	Unclassified/Attainment	Attainment

Notes:

[1] MDAQMD = Mojave Desert Air Quality Management District

[2] Source: California Air Resources Board (2019) (https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations) and MDAQMD (https://www.mdaqmd.ca.gov/air-quality/mdaqmd-attaiment-status).

4.3.2 Environmental Setting

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada Mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses.

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time the reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate (BWh), with portions classified as dry-very hot desert (BWhh), to indicate at least three months have maximum average temperatures over 100.4° F.

The temperature and precipitation levels for Victorville, the closest monitoring station to the Project Site, shows that July is typically the warmest month and December is typically the coolest month. Rainfall in the project area varies considerably in both time and space. Almost all the annual rainfall comes from the fringes of mid-latitude storms from late November to early April, with summers being almost completely dry.

Local Air Quality

The MDAQMD maintains an air-monitoring network that measures levels of several air pollutants throughout the air basin. Since not all air monitoring stations measure all of the tracked pollutants, the

data from the following two monitoring stations, listed in the order of proximity to the Project Site were used for the study in Appendix A. The nearest air monitoring station to the project site is the Victorville monitoring station (Victorville Station) located approximately 18.5 miles east of the project site at 14306 Park Avenue, Victorville, CA. Table 5 in Appendix A presents the monitored pollutant levels within the vicinity which identifies that ozone and particulate matter (PM10) are the air pollutants of primary concern in the Project area. However, it should be noted that due to the air monitoring station distance from the project site, recorded air pollution levels at the air monitoring station reflect with varying degrees of accuracy, local air quality conditions at the project site.

4.3.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
III. AIR QUALITY: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?		X		
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?			X	

Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. According to the MDAQMD, a project would not obstruct the implementation of District rules and regulations if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan). The "one map approach" is

employed by the County of San Bernardino, as it permits the use of a single map showing both General Plan land use designations and zoning classifications. The one-map approach assures that there will always be land use consistency between the County's General Plan and its Zoning Code.

The Project Site is located within the unincorporated area of the County of San Bernardino known as Piñon Hills. The Proposed Project is within a rural residential area.

Attainment plans prepared by the various air pollution control districts throughout the state are used to develop the State Implementation Plan (SIP) for the State of California. The proposed Project is located within the MDAQMD and, thus, is subject to the rules and regulations of the MDAQMD. The MDAQMD and Southern California Association of Governments (SCAG) are responsible for formulating and implementing the air quality attainment plan (AQAP) for the Basin. Regional AQAPs were adopted in 1991, 1994, and 1997. The following SIP and AQAP are the currently approved plans for the Basin region:

- 1997 SIP for O3, PM10, and NO2
- 1995 Mojave Desert Planning Area Federal PM10 Attainment Plan; no formal action by the EPA

The MDAQMD completed the MDAQMD 2004 Ozone Attainment Plan (State and federal) in April 2004, which has been approved by the EPA.

The MDAQMD currently recommends that projects with construction-related and/or operational emissions that exceed any of the following emissions thresholds should be considered significant:

- 25 tons per year or 137 pounds per day pounds per day of VOC
- 25 tons per year or 137 pounds per day of NOx
- 100 tons per year or 548 pounds per day of CO
- 25 tons per year or 137 pounds per day of Sox
- 15 tons per year or 82 pounds per day of PM10
- 12 tons per year or 65 pounds per day of PM2.5

The Proposed Project is the construction and operation of water recharge basins over approximately 10 acres. Operational activities would include occasionally grading the basin floors and side slopes to maintain optimum recharge capacity. The Air Quality Assessment in Appendix A modeled the Project's construction and operations to determine if the Project would exceed any threshold.

Table 4: *Regional Significance – Construction Emissions* and **Table 5: *Regional Significance – Operational Emissions*** identifies that the Project would not exceed daily or annual regional thresholds.

Therefore, the Project does not conflict with or obstruct implementation of the applicable air quality plan.

Table 4: Regional Significance - Construction Emissions

Year	Pollutant Emissions					
	VOC	**NOx**	**CO**	**SO_2**	**PM10**	**PM2.5**
Daily Emissions (pounds/day)						
2023	3.11	35.90	28.50	0.15	9.11	4.68
MDAQMD Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Thresholds	No	No	No	No	No	No
Annual Emissions (tons/year)						
2023	0.08	1.13	0.80	0.00	0.24	0.10
MDAQMD Annual Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Thresholds	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2022.1
[2] On-site emissions from equipment operated on-site that is not operated on public roads. On-site grading PM10 and PM2.5 emissions show mitigated values for fugitive dust for compliance with MDAQMD Rule 403.
[3] Off-site emissions from equipment operated on public roads.
[4] Construction, architectural coatings and paving phases may overlap.

Table 5: Regional Significance - Operational Emissions

Activity	Pollutant Emissions[1]					
	VOC	**NOx**	**CO**	**SO2**	**PM10**	**PM2.5**
Daily Emissions (pounds/day)						
Area Sources[2]	0.07	0.00	0.00	0.00	0.00	0.00
Energy Usage[3]	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources[4]	0.00	0.01	0.09	0.00	0.01	0.00
Total Emissions	**0.07**	**0.01**	**0.09**	**0.00**	**0.01**	**0.00**
MDAQMD Daily Thresholds	**137**	**137**	**548**	**137**	**82**	**65**
Exceeds Threshold?	No	No	No	No	No	No
Annual Emissions (tons/year)						
Area Sources[2]	0.01	0.00	0.00	0.00	0.00	0.00
Energy Usage[3]	0.00	0.00	0.00	0.00	0.00	0.00
Mobile Sources[4]	0.00	0.00	0.00	0.00	0.00	0.00
Total Emissions	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
MDAQMD Annual Thresholds	**25**	**25**	**100**	**25**	**15**	**12**
Exceeds Threshold?	No	No	No	No	No	No

Notes:
[1] Source: CalEEMod Version 2022.1
[2] Area sources consist of emissions from consumer products, architectural coatings, and landscaping equipment.
[3] Energy usage consists of emissions from on-site natural gas usage.
[4] Mobile sources consist of emissions from vehicles and road dust.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact With Mitigation Incorporated. The MDAB has been designated by the EPA as a non-attainment area for ozone (O3) and suspended particulates (PM10). Currently, the Basin is in attainment with the ambient air quality standards for carbon monoxide (CO), lead, sulfur dioxide (SO2), nitrogen dioxide (NO2) and particulate matter (PM2.5) (refer to Appendix A). The MDAQMD also has developed regulatory standards for criteria pollutants that are considered pre-cursers to Ozone, PM10 and PM2.5 production. These include CO, nitrogen dioxide (NO_2), sulfur dioxide (SO_2).

Based on the analysis provided in Appendix A, the Proposed Project would result in short-term emissions from construction associated with site grading/preparation but would not exceed the thresholds.

Construction Impacts

Construction activities associated with the Proposed Project would result in emissions of carbon CO, volatile organic compounds (VOC), nitrogen oxides (NOx), SO2, PM10, and PM2.5, however, none are above the MDAQMD thresholds, as shown in Table 3. Therefore, potential impacts associated with construction emissions would be less than significant, and no mitigation would be required.

The Project is also required to comply with all MDAQMD rules and regulations including but not limited to idling engines during construction. Additionally, MDAQMD Rule 403 establishes fugitive dust reduction measures during site grading. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites.

To ensure that construction emissions and dust would not exceed the MDAQMD standards, **Mitigation Measure AIR-1,** located at the end of this section, to prepare a Dust Control Plan is required.

Operational Impacts

Operational activities associated with the Proposed Project would result in emissions of VOC, NOx, CO, SO_2, PM10, and PM2.5, however, none are above the MDAQMD thresholds as shown in Table 5. As identified in Table 5, potential impacts associated with operational emissions would be less than significant, and no mitigation would be required.

The Project area is out of attainment for both ozone and particulate matter. Construction and operation of cumulative projects will further degrade the air quality of the Mojave Desert Air Basin. The greatest cumulative impact on the quality of regional air cell will be the incremental

addition of pollutants mainly from increased traffic from residential, commercial, and industrial development and the use of heavy equipment and trucks associated with the construction of these projects. Air quality will be temporarily degraded during construction activities that occur separately or simultaneously. However, in accordance with the MDAQMD methodology, projects that do not exceed the MDAQMD criteria or can be mitigated to less than criteria levels are not significant and do not add to the overall cumulative impact.

Project operations would generate emissions of NOx, CO, PM10, and PM2.5, which would not exceed the MDAQMD regional thresholds and would not be expected to result in ground-level concentrations that exceed the National Ambient Air Quality Standards or the California Ambient Air Quality Standards. Therefore, the operation of the Project would not result in a cumulatively considerable net increase for non-attainment of criteria pollutants or ozone precursors.

As a result, the Project would result in a less than significant cumulative impact on operational emissions.

As demonstrated above, the Project impacts would be less than significant and not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Compliance with **Mitigation Measure AIR-1** would ensure that construction emissions would not exceed MDAQMD's thresholds.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. A sensitive receptor is defined by MDAQMD as any residence including private homes, condominiums, apartments, and living quarters, schools as defined under paragraph (b)(57), preschools, daycare centers and health facilities such as hospitals or retirement and nursing homes. Also included are long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

The MDAQMD recommends avoiding siting new sensitive land uses such as residences, schools, daycare centers, playgrounds, or medical facilities within 1,000 feet of a major transportation project (50,000 or more vehicles per day).

The Proposed Project involves the construction of a groundwater recharge basin and would not be considered a sensitive receptor. The Project is not considered a major transportation project. The Project operations is only anticipated to generate approximately one vehicle trip per month. Therefore, as the Proposed Project is not a sensitive receptor and does not generate more than 50,000 vehicles per day, a Project-specific health risk assessment is not required or warranted.

Impacts to nearby sensitive receptors are considered to be less than significant, and no mitigation is required.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Less Than Significant Impact. The objectionable odors that may be produced during the construction process are short-term in nature, and the odor emissions are expected cease upon the drying or hardening of the odor producing materials. Diesel exhaust and VOCs would be emitted during construction of the Project, which are objectionable to some; however, emissions would disperse rapidly from the Project Site and therefore should not reach an objectionable level at the nearest sensitive receptors, which are more than 0.25 mile from the Project Site. Due to the short-term nature and limited amounts of odor producing materials being utilized, no significant impact related to odors would occur during construction of the Proposed Project.

4.3.4 Mitigation Measures

MM AIR-1: Prior to MWA or its contractor beginning construction, the MWA or its contractor is required to submit a dust control plan to the MDAQMD that describes all applicable dust control measures that will be implemented at the Project Site during construction, including soil export operations, and basin facility maintenance. The dust control plan must include but not be limited to the following measures:

- Signage compliant with Rule 403 Attachment B shall be erected at each project site entrance not later than the commencement of construction.

- Use a water truck to maintain moist disturbed surfaces and actively spread water during visible dusting episodes to minimize visible fugitive dust emissions. For projects with exposed sand or fines deposits (and for projects that expose such soils through earthmoving), chemical stabilization or covering with a stabilizing layer of gravel may be used to eliminate visible dust/sand from sand/fines deposits.

- All perimeter fencing shall be wind fencing or the equivalent, with a minimum of 4 feet in height. The owner/operator shall maintain the wind fencing as needed to keep it intact and remove windblown dropout. This wind fencing requirement may be superseded by local ordinance, rule or project-specific biological mitigation prohibiting wind fencing.

- All maintenance and access vehicular roads and parking areas shall be stabilized with chemical, gravel or asphaltic pavement sufficient to eliminate visible fugitive dust from vehicular travel and wind erosion. Take actions to prevent project-related trackout onto paved surfaces, and clean any project-related trackout within 24 hours. All other earthen surfaces within the project area shall be stabilized by natural or irrigated vegetation, compaction, chemical or other means sufficient to prohibit visible fugitive dust from wind erosion.

4.3.5 Conclusion

Potential impacts of the Proposed Project associated with Air Quality would be less than significant with the implementation of **Mitigation Measure AIR-1.**

4.4 BIOLOGICAL RESOURCES

A General Biological Assessment was completed to determine potential impacts to biological services associated with the development of the Proposed Project (**Appendix B-1 - *Oeste Recharge Basins Project Mojave Water Agency, Habitat and Jurisdictional Assessment,* prepared by ELMT Consulting, July 2021** and ***Appendix B-1 - California Department of Fish and Game Mohave Ground Squirrel Guideline Report, Proposed Oeste Recharge Basin Project*, prepared by Randel Wildlife Consulting, Inc, June 2023**). The assessment included a literature review and field survey.

4.4.1 Regulatory Setting

Given the local environment, regulations governing biological resources for this Project include the following:

Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C 703-711) provides protection for nesting birds that are both residents and migrants whether they are considered sensitive by resource agencies. The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The direct injury or death of a migratory bird, due to construction activities or other construction-related disturbance that causes nest abandonment, nestling abandonment, or forced fledging would be considered a take under federal law. The US Fish & Wildlife (USFWS), in coordination with the California Department of Fish and Wildlife (CDFW) administers the MBTA. CDFW's authoritative nexus to MBTA is provided in California Fish and Game Code (FGC) Sections 3503.5 which protects all birds of prey and their nests and FGC Section 3800 which protects all non-game birds that occur naturally in the State.

Federal Endangered Species Act

The purpose of the United States Endangered Species Act (ESA) that was established in 1973 provides protections for fish, wildlife, and plants that are listed as threatened or endangered; provides for adding species to and removing them from the list of threatened and endangered species, and for preparing and implementing plans for their recovery; provides for interagency cooperation to avoid take of listed species and for issuing permits for otherwise prohibited activities; provides for cooperation with States, including authorization of financial assistance; and implements the provisions of the Convention on International Trade in Endangered Species of Wild Flora and Fauna. The USFWS administers the federal ESA.

California Endangered Species Act

The California Endangered Species Act (CESA) is a California environmental law that conserves and protects plant and animal species at risk of extinction. Originally enacted in 1970, CESA was repealed and replaced by an updated version in 1984 and amended in 1997. Plant and animal species may be designated threatened or endangered under CESA after a formal listing process by the California Fish and Game Commission. Approximately 250 species are currently listed under CESA. A CESA-listed species, or any part or product of the plant or animal, may not be imported into the state, exported out of the state, "taken" (i.e., killed), possessed, purchased, or sold without proper authorization. Implementation of CESA has

reduced and avoided impacts to California's most imperiled plants and animals, has protected hundreds of thousands of acres of vital habitat, and has led to a greater scientific understanding of California's incredible biodiversity.

The CDFW works with agencies, organizations, and other interested persons to study, protect, and preserve CESA-listed species and their habitats. CDFW also conducts scientific reviews of species petitioned for listing under CESA, administers regulatory permitting programs to authorize take of listed species, maintains an extensive database of listed species occurrences, and conducts periodic reviews of listed species to determine if the conditions that led to original listing are still present.

4.4.2 Environmental Setting

The vacant Project Site supports two plant communities: site: creosote bush scrub and Joshua tree woodland. In February of 2020, California Department of Fish and Wildlife (CDFW) accepted a petition to consider the western Joshua Tree (*Yucca brevifolia* var*. brevifolia*) as a candidate threatened species under California Endangered Species Act (CESA). Candidate species for listing receive full protection under CESA.

On October 29, 2020, the State of California Office of Administrative Law approved the adoption of Section 749.10 Title 14, California Code of Regulations (CCR), entitled Special Order Relating to the Take of western Joshua tree during the Candidacy Period. On June 27, 2023, the State legislature passed AB 122/SB 122 Western Joshua Tree Conservation Act Budget Trailer Bill which seeks to provide protection for the western Joshua Tree outside of CESA.

A total of 120 western Joshua trees in three size categories were recorded within the boundaries of the Project Site (Appendix B-1).

The Project Site does not currently support any drainages (Appendix B-1). Based on a review of historic aerials 1952 to 1968, La Montaine Creek historically flowed across the Project Site from south to north. In 1974, when the California Aqueduct is first observed in historic aerials, La Montaine Creek was cut off by the installation of the aqueduct and water flow within La Montaine Creek terminated at the aqueduct and no longer reached the Project Site. During the installation of the Aqueduct, a box culvert was installed over the Aqueduct approximately 550 feet southwest of the southwest corner of the Project Site that is an emergency outlet and only conveys flows during large flash flood events. This box culvert, over the aqueduct, diverts water away from the project site and La Montaine Creek to the northwest. In the 1994 aerial photographs, a rural residential community is first observed, which further eliminated water flows within La Montaine Creek, south of the California Aqueduct, outside of the Project footprint. The residential community, south of the aqueduct, has further reduced, if not eliminated the potential for water to reach the emergency box culvert. As a result, water flows out of the San Gabriel Mountains are not expected to flow north of the aqueduct and reach the Project Site. The historic braded channels of Montaine Creek continue to be observed onsite, but are maintained by off-road vehicle use, which has created dirt access roads in the place of the drainage features. The continued off-road vehicle activities and illegal dumping further alter the historic drainage patterns across the site.

4.4.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IV. BIOLOGICAL RESOURCES: Would the project:				
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?		X		
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?				X
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				X
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?		X		
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
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?				X

Discussion

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

Less Than Significant With Mitigation Incorporated. According to the literature review conducted as part of Appendix B-1, 29 special-status plant species and 26 special status wildlife species have the potential to occur within the Project's USGS Quadrangle *Mescal Creek*, and the adjacent

quadrangles of *El Mirage*, *Shadow Mountain SE*, and *Phelan*. No special-status plant communities were identified within these quadrangles. Special-status plant and wildlife species were evaluated for their potential to occur within the project boundaries based on habitat requirements, availability and quality of suitable habitat, and known distributions.

Sensitive Species

The Habitat Assessment in Appendix B-1 focused on species typically found within the Project region and where habitat was found on site.

Burrowing Owl (BUOW) – State: Species of Special Concern

The BUOW is currently listed as a California Species of Special Concern. It is a grassland specialist distributed throughout western North America where it occupies open areas with short vegetation and bare ground within shrub, desert, and grassland environments. Burrowing owls use a wide variety of arid and semi-arid environments with well-drained, level to gently sloping areas characterized by sparse vegetation and bare ground. The Project Site consists of flat open fields supporting exotic grassland/forbland vegetation, dominated by common weeds.

Despite a systematic search of the Project Site, no burrowing owls or sign (i.e., pellets, feathers, castings, or whitewash) were observed during the field investigation. The Project Site lacks suitable burrows (>4 inches in diameter) capable of providing roosting and nesting opportunities for burrowing owls. Further, the tall vegetation onsite limits line-of-sight opportunities favored by burrowing owl. Based on the results of the field investigation conducted as part of the Appendix B-1 survey, it was determined that the Project Site does not have the potential to support burrowing owls, and focused surveys are not recommended.

Desert Tortoise – Federal: Threatened; State-Threatened

The Mojave population of the desert tortoise was listed as Threatened on April 2, 1990 and a recovery plan was published in June 1994 (revised May 2011) to describe a strategy for recovering the Mojave population of the desert tortoise including the identification of five recovery units, recommendations for a system of Desert Wildlife Management Areas (DWMAs) within the recovery units, and development and implementation of specific recovery actions, especially within DWMAs. The establishment of recovery units and DWMAs was intended to facilitate an ecosystem approach to land management and desert tortoise recovery. Based on the 2018 Revised Recovery Plan, the survey area is located within the Western Mojave Recovery Unit but is not located within any designated DWMAs. Additionally, the survey area is not located within designated Critical Habitat for the desert tortoise and no desert tortoise have been recorded on the project site.

The Mojave population of the desert tortoise inhabits areas north and west of the Colorado River in the Mojave Desert of California, Nevada, Arizona, and southwestern Utah, and in the Sonoran Desert in California. Throughout the majority of the Mojave Desert, desert tortoises occur most commonly on gentle sloping soils characterized by an even mix of sand and gravel and sparsely vegetated low-growing vegetation where there is abundant inter-shrub space. Typical habitat for the desert tortoise has been characterized as creosote bush scrub below 5,500 feet in elevation

with a high diversity of perennial and ephemeral plants. The dominant shrub commonly associated with desert tortoise habitat is creosote bush (Larrea tridentata); however, other shrubs including burrobush (*Ambrosia dumosa*), Mojave yucca (*Yucca schidigera*), cheesebush (Ambrosia salsola), and Mojave prickly-pear (*Opuntia mojavensis*) also provide suitable habitat. The desert tortoise spends 95 percent of its life underground and will opportunistically utilize burrows of various lengths, deep caves, rock and caliche crevices, or overhangs for cover. Therefore, a moderately friable soil is required to allow for burrow construction and ensure that burrows do not collapse.

The biological study in Appendix B-1 conducted a systematic search of the Project Site, and no live tortoises, suitable burrows, or signs were observed on the Project Site during the presence/absence survey. The plant communities found on the project site and on-site topography provide suitable foraging and burrowing habitat for desert tortoises. However, adjacent and nearby development (i.e. California Aqueduct, surrounding paved highways, boundary fencing associated with surrounding residential development), the Project Site and adjacent habitats have been sufficiently fragmented to preclude sustainable desert tortoise populations from the area. In addition, decades of anthropogenic disturbance such as illegal dumping and off-road vehicle use precluded the project site from supporting desert tortoise. Based on the results of the focused survey, desert tortoise is presumed absent from the project stie.

However, out of an abundance of caution, implementation of **Mitigation Measure BIO-1,** located at the end of this section, which requires a pre-construction desert tortoise clearance survey prior to ground disturbing activities, would ensure no desert tortoise occur within the limits of disturbance.

Mohave Ground Squirrel – State: Threatened

The Mohave ground squirrel is endemic to the western Mojave Desert, California. It occupies portions of Inyo, Kern, Los Angeles, and San Bernardino counties in the western Mojave Desert. In general, the species ranges from near Palmdale on the southwest to Lucerne Valley on the southeast, Olancha on the northwest and the Avawatz Mountains on the northeast (Appendix B-1). The historical range of suitable habitat for this species has decreased by 10 to 16% due to urbanization and range-wide declines in trapping success over the last few decades suggesting that their populations are declining. This species was listed as threatened under the California Endangered Species Act in 1985.

The habitat assessment in Appendix B-1 identified that the Project Site is within the historic range of Mohave ground squirrel. Although the Project Site is located within the historic range for Mohave ground squirrel, the site is at the southernmost portion of the range. Further, the Site is not located within any core areas identified by Philip Leitner as documented in the 2010 report, "*Current Status of the Mohave Ground Squirrel: A Five-Year Update (2008-2012)*" (2015) and "*Current Status of the Mohave Ground Squirrel: An Update Covering the Period 2013-2020* (2021). Further, the Project Site is not located within or immediately adjacent to any corridors or other known populations identified by Leitner.

The Project Site and immediate vicinity are dominated by creosote bush scrub and Joshua tree woodland plant communities that are favored by Mohave ground squirrel. However, the area is heavily disturbed by off road vehicle use and illegal dumping. Adequate cover and forage for Mohave ground squirrel appeared to be limited within and around the study site. Further, no winterfat (*Eurotia lanata*), nor spiny hopsage (*Grayia spinosa*) were found on the study site which are two plant species that are considered important forage for Mohave ground squirrel.

Because the Project Site is within the known range of the Mohave Ground Squirrel, trapping in accordance with the California Department of Fish and Wildlife (CDFW) guidelines was conducted (Appendix B-2). Surveys consisted of five consecutive days of live-trapping during three predefined sessions (Session 1: 15 March–30 April; Session 2: 1–31 May; Session 3: 15 June – 15 July). Each survey session consisted of 36 live-traps spaced 35-m on center in a 6 x 6 array, baited with 4-way horse feed, and shaded to prevent heat stress. Traps were checked no less frequently than every four hours, when temperatures were between 40°–90° F. No Mohave ground squirrels were identified as a result of focused surveys of the Project Site. White-tailed antelope squirrel (*Ammospermophilus leucurus*) were reported in Appendix B-2 as the only mammalian species captured. Therefore, the Mohave ground squirrel is considered absent from the Project Site.

Western Joshua Tree – State: Candidate Threatened

Joshua tree habitats are characterized as open woodlands of widely scattered Joshua trees with a low to more or less dense community of broad-leaved evergreen and deciduous shrubs found in Desert Scrub habitats. This species is endemic to the Mojave Desert and occupies an elevation range of 1,600 and 6,660 feet above mean sea level. This species is recognized in several vegetation communities in varying densities. Known occupied communities include sagebrush scrub, desert shrub, southwestern shrubsteppe, pinyon-juniper woodland, and desert grasslands. When this species is dominant in high densities, the occupied habitat may be classified as a Joshua tree woodland, although densities are typically low due to their extensive and competitive root systems. Mature size varies greatly due to irregular branching, and large individuals can exceed 40 feet in height. Like other large members of family Agavaceae, western Joshua trees grow slowly, with estimated growth rates ranging from 2.3 to 4.6 inches per year depending on individual age and conditions. Western Joshua trees are long-lived species, with most estimates of average lifespan ranging from 150 to 300 years, although some estimates exceed 700 years. The largest known western Joshua tree exceeds 60 feet in height and is an estimated 1,000 years old. Like other long- lived plant species, seed production occurs very slowly and irregularly, although rhizome production and clonal growth can occur. Western Joshua trees are only known to be pollinated by one species, the yucca moth (*Tegeticula synthetica*).

The Project Site contains a total of 120 species, categorized as follows:

- Less Than 1 Meter in Height 33
- One Meter to less than 5 Meters in Height 75
- Greater than 5 Meters in Height 12

The western Joshua Tree is a candidate threatened species under the California Endangered Species Act and also has a special designation under the June 2023-adopted Western Joshua Tree Conservation Act. Therefore, to reduce impacts the impacts of removing 120 western Joshua

Trees from the Project Site to less than significant, implementation of **Mitigation Measure BIO-2,** located at the end of this section, is required. Mitigation Measure BIO-2 requires that the MWA obtain a permit from the CDFW to remove the trees.

Critical Habitat

Under the federal Endangered Species Act, "Critical Habitat" is designated at the time of listing of a species or within one year of listing. Critical Habitat refers to specific areas within the geographical range of a species at the time it is listed that include the physical or biological features that are essential to the survival and eventual recovery of that species. Maintenance of these physical and biological features requires special management considerations or protection, regardless of whether individuals or the species are present or not. All federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS). regarding activities they authorize, fund, or permit which may affect a federally listed species or its designated Critical Habitat. The purpose of the consultation is to ensure that projects will not jeopardize the continued existence of the listed species or adversely modify or destroy its designated Critical Habitat. The designation of Critical Habitat does not affect private landowners, unless a project they are proposing is on federal lands, uses federal funds, or requires federal authorization or permits (e.g., funding from the Federal Highways Administration or a CWA Permit from the Corps). If there is a federal nexus, then the federal agency that is responsible for providing the funding or permit would consult with the USFWS.

The Project Site is not located within any federally-designated Critical Habitat. Further, the closest Critical Habitat designation is located approximately 8.7 miles southeast of the project site for mountain yellow legged frog (*Rana muscosa*).

Therefore, with the implementation of Mitigation Measures BIO-1 and Mitigation Measure BIO-2, there would be a less than significant 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 sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. There is no riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service present on the Project Site (Appendix B-1). As such, there would be no impact, and no mitigation is required.

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?

No Impact. There are three key agencies that regulate activities within inland streams, wetlands, and riparian areas in California. The Corps Regulatory Branch regulates discharge of dredge and/or

fill materials into "waters of the United States" pursuant to Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Of the State agencies, the Regional Board regulates discharges into surface waters pursuant to Section 401 of the CWA and the California Porter-Cologne Water Quality Control Act and the CDFW regulates alterations to streambed and associated plant communities pursuant to Section 1602 of the California Fish and Game Code.

The USFWS NWI and the USGS National Hydrography Dataset were reviewed to determine if any blueline streams or riverine resources have been documented within or immediate surrounding the project site. Based on this review, two riverine resource were identified within the survey area: one identified as La Montaine Creek, which flows through the middle of the project site; and one unnamed feature that extends from the box culvert under the California Aqueduct.

Based on a review of historic aerials 1952 to 1968, La Montaine Creek historically flowed across the Project site from south to north. Then in 1974, when the California Aqueduct is first observed in historic aerials, La Montaine Creek was cut off by the installation of the aqueduct and water flow within La Montaine Creek terminated at the aqueduct and no longer reached the project site. During the installation of the Aqueduct, a box culvert was installed under the Aqueduct approximately 550 feet southwest of the southwest corner of the project site that is an emergency outlet and only conveys flows during large flash flood events. This box culvert, under the aqueduct, diverts water away from the Project Site and La Montaine Creek to the northwest. Then in the 1994 aerial photographs, a rural residential community is first observed, which further eliminated water flows within La Montaine Creek, south of the California Aqueduct, outside of the Project footprint. The residential community, south of the aqueduct, has further reduced, if not eliminated the potential for water to reach the emergency box culvert. As a result, water flows out of the San Gabriel Mountains are not expected to flow north of the aqueduct and reach the project site.

During the field survey conducted as part of the biological survey (Appendix B-1) the Project Site was assessed the site for depressions, inundation, presence of hydrophytic vegetation, staining, cracked soil, ponding, and indicators of active surface flow and corresponding physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris. Suspected jurisdictional areas were checked for the presence of definable channels, soils, and hydrology. No evidence (i.e., water staining, wrack lines, sediment deposits) of regular flows along the length of the historic drainage features was observed. Further, no ponding/standing water was observed onsite. The historic features do not support riparian vegetation or suitable habitat for special-status wildlife species and do not function as a wildlife movement corridor or linkage.

The historic braided channels of Montaine Creek continue to be observed onsite, but are maintained by off-road vehicle use, which has created dirt access roads in the place of the drainage features. The continued off-road vehicle activities and illegal dumping further alter the historic drainage patterns across the site. Without the frequent off-road vehicle use upland vegetation would be expected to establish in the historic drainages. As a result, of the installation of the California Aqueduct, development of the residential community south of the aqueduct, and off-road vehicle use, the historic drainage features onsite have been effectively cut off and no longer convey upstream water flows and would not be considered jurisdictional.

Therefore, the Project will have no impact on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service because none such habitat exists.

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?

Less Than Significant Impact With Mitigation Incorporated. A wildlife corridor is typically defined as a linear landscape element that serves as a linkage between historically connected habitats/natural areas and is meant to facilitate movement between these natural areas.

The Project Site is separated from regional wildlife corridors and linkages by existing development, roadways, and undeveloped land, and there are no riparian corridors or creeks connecting the Project Site to these areas. The undeveloped land in the immediate vicinity of the Project Site provides local wildlife movement opportunities for wildlife species moving through the immediate area. The Project Site does not function as a major wildlife movement corridor or linkage. As such, implementation of the Proposed Project is not expected to have a significant impact on wildlife movement opportunities or prevent local wildlife movement through the area since there is ample habitat adjacent to the project site to support wildlife movement opportunities. Due to the lack of any identified impacts on wildlife movement, migratory corridors or linkages or native wildlife nurseries, no mitigation is required.

However, based on habitat requirements for specific species and the availability and quality of on-site habitats, the biological report in Appendix B-1 determined that the Proposed Project Site has a moderate potential to provide suitable habitat for Costa's hummingbird (*Calypte costae*), and loggerhead shrike (*Lanius ludocivianus*).

Additionally, the vegetation on site and adjacent trees may attract birds that are protected by the MBTA. As such, implementation of **Mitigation Measure BIO-3** to perform a pre-construction nesting bird survey is required to reduce potential impacts to nesting birds protected by the MBTA.

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

Less Than Significant Impact. The Project Site is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. Therefore, impacts to local, regional, or state habitat conservation plans are not expected to occur from development of the Proposed Project, and mitigation is not required.

Certain desert plant species (i.e. silver cholla [*Cylindropuntia echinocarpa*]) Joshua trees and Mojave yuccas (*Yucca schidigera*) are regulated pursuant to Section 88.01.060 of the San Bernardino County Development Code and Section 80073 of the California Desert Native Plant Act. Therefore, impacts to these species should be avoided in all instances. In the event that avoidance is not feasible, the MWA is required to obtain a Tree or Plant Removal Permit from the

County of San Bernardino, in addition to applicable permitting for removal of the western Joshua Tree, prior to removal of any regulated tree or plant. As the MWA is required to comply with applicable regulations, no additional mitigation is required.

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?

No Impact. The Project Site is not located within an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan, or other approved local, regional, or state HCP. Therefore, impacts to any local, regional, or state HCPs are not expected to occur from development of the Proposed Project, and mitigation is not required.

4.4.4 Mitigation Measures

MM BIO-1: A pre-construction clearance survey shall be conducted prior to any ground disturbance or vegetation removal activities to ensure desert tortoise remain absent, and impacts do not occur to desert tortoise on the project site.

MM BIO-2: For any Western Joshua Trees that would be removed, the MWA shall obtain either an Incidental Take Permit (ITP) from California Department of Fish and Wildlife (CDFW) under §2081 of the California Endangered Species Act (CESA) or a permit under the Western Joshua Tree Conservation Act, whichever would be applicable at the time of the application. Mitigation would consist of either purchase of credits from an approved conservation bank at an agreed upon ratio or in accordance with the permit issued under the Western Joshua Tree Conservation Act.

MM BIO-3 Bird nesting season generally extends from February 1 through September 15 in southern California and specifically, April 15 through August 31 for migratory passerine birds. To avoid impacts to nesting birds (common and special status) during the nesting season, a qualified Avian Biologist will conduct pre-construction Nesting Bird Surveys (NBS) prior to project-related disturbance to nestable vegetation to identify any active nests. If no active nests are found, no further action will be required. If an active nest is found, the biologist will set appropriate no-work buffers around the nest which will be based upon the nesting species, its sensitivity to disturbance, nesting stage and expected types, intensity, and duration of disturbance. The nests and buffer zones shall be field-checked weekly by a qualified biological monitor. The approved no-work buffer zone shall be clearly marked in the field, within which no disturbance activity shall commence until the qualified biologist has determined the young birds have successfully fledged and the nest is inactive.

4.4.5 Conclusion

Implementation of **Mitigation Measures BIO-1** and **BIO-2** and **BIO-3** would reduce potentially significant impacts of the Proposed Project associated with Biological Resources to less than significant.

4.5 CULTURAL RESOURCES

A Cultural Resources Assessment for the Proposed Project was performed to determine potential impacts to historic and archaeological resources (**Appendix C – *Historical/Archaeological Resources Survey Report, Oeste Recharge Project,* prepared by CRM Tech, May 25, 2021**).

4.5.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
V. CULTURAL RESOURCES: Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5?			X	
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Less Than Significant Impact. Public Resources Code Section 15064.5(a) defines historical resources, which include: *A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 14 CCR, Section 4850 et seq.).*

The study in Appendix C included a records search at the South-Central Coastal Information Center (SCCIC), California State University, Fullerton, an intensive-level pedestrian field survey, a paleontological resources overview, and Sacred Lands File Search with the Native American Heritage Commission. The records search revealed that the California Aqueduct (East Branch), which was previously recorded into the California Historical Resources Inventory as Site 36-021351, was the only potential "historical resource" encountered within or adjacent to the project area. Constructed in 1966-1973 as a part of the backbone of the massive California State Water Project, the aqueduct traverses roughly 200 feet south of the main project site and across the southwestern end of the pipeline alignment.

In light of the crucial role that the California State Water Project played in the phenomenal growth of the State of California since the mid-20th century as well as the distinguished engineering

accomplishment of the project, the California Aqueduct (East Branch) as a whole has been determined eligible for listing in the California Register of Historical Resources and thus meets the definition of a "historical resource" under CEQA provisions. The proposed construction of the recharge basin, pipeline, and other associated facilities during this project, however, will not cause a substantial adverse change in the significance, integrity, and overall character of the 98-mile-long canal because most of the Project would occur outside of the California Aqueduct. The infrastructure proposed for the California Aqueduct would not significantly alter its current design, and many other facilities, such as the one similar to the Proposed Project, have occurred along the California Aqueduct (East Branch).

During the field survey, no historical resources were identified. Therefore, the Cultural Resources report in Appendix C-1 evaluated the resources against federal and State historic criteria and determined that there are no "historical resources" as defined by CEQA that exist within or adjacent to the Project Site. Therefore, potential impacts associated with an adverse change to a historical resource would be less than significant, and no mitigation would be required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact With Mitigation Incorporated. Archaeological sites represent the material remains of human occupation and activity either prior to European settlement (prehistoric sites) or after the arrival of Europeans (historical sites).

The Cultural Report in Appendix C identified that no potential markers of prehistoric human activities were found on the Project Site.

The MWA consulted with tribal entities in accordance with AB52. None of the tribal entities responded that there were potentially important Native American sites in the Project area. However, to protect unknown potential tribal archaeological resources. **Mitigation Measures CR-1**, **CR-2**, and **CR-3** are required. These measures are designed to train construction personnel as well as sets out the guidance for an unanticipated find. Implementation of Mitigation Measures CR-1, CR-2, and CR-3 would reduce potential impacts to unanticipated discoveries of archaeological resources to less than significant.

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less than Significant Impact. Based on an analysis of records and surveys of the property, it has been determined that the Project site does not include a formal cemetery or any archaeological resources that might contain interred human remains. In addition, California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98, mandate the process to be followed in the event of an accidental discovery of any human remains. Specifically, California Health and Safety Code Section 7050.5 requires that if human remains are discovered, disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner, and cause of death, and made recommendations concerning the treatment and disposition of the human remains to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98

of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Compliance with existing law would ensure that significant impacts to human remains would not occur.

Mitigation Measure CR-4 is required to protect unanticipated tribal and human archaeological resources, specifically human remains and unknown Native American burial sites. Implementation of Mitigation Measure CR-3 would reduce potential impacts to unanticipated discoveries of archaeological resources to less than significant.

4.5.2 Mitigation Measures

MM CR-1 **Worker Environmental Awareness Program (WEAP) – Cultural Resources**. A Worker Environmental Awareness Program (WEAP) training shall be developed and provided by a cultural resource specialist familiar with potential Native American and paleontological resources in the area. The WEAP training shall be presented by the cultural resource specialist to all construction personnel. For the life of the Project, each employee (including temporary contractors and subcontractors) will receive WEAP training prior to conducting any work on the site.

MM CR-2 In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Native American Heritage Commission shall be contacted, as detailed within Mitigation Measure TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

MM CR-3 If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to the applicable tribal entity for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

MM CR-4 If, at any time, evidence of human remains (or suspected human remains) are uncovered, the County Coroner must be contacted immediately and permitted to examine the find in situ. A buffer must be established around the find (minimum of 50 feet) and the consulting archaeologist must also be notified.

If the remains are determined to be of Native American origin, the Coroner will contact the Native American Heritage Commission and the Most Likely Descendant (MLD) will be named. In consultation with the MLD, the County, project proponent, and consulting archaeologist, the disposition of the remains will be determined. Any costs incurred will be the responsibility of the project proponent/property owner.

If the remains are determined to be archaeological, but non-Native American, the consulting archaeologist will oversee the removal, analysis, and disposition of the remains. Any costs incurred will be the responsibility of the project proponent/property owner.

If the remains are determined to be of forensic value, the County Coroner will arrange for their removal, analysis, and disposition. The Coroner's activities will not involve any costs to the project proponent/property owner.

If human remains are encountered during the undertaking, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a MLD. With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC.

4.5.3 Conclusion

Implementation of **Mitigation Measures CR-1, CR-2, CR-3,** and **CR-4** would reduce potentially significant impacts of the Proposed Project associated with Cultural Resources to less than significant.

4.6 ENERGY

This section describes the potential energy usage effects from implementation of the Proposed Project for both construction activities and operations, and is based on information provided in Appendix A.

4.6.1 Regulatory Setting

A full list of energy regulations is provided in the Energy Analysis in Appendix A. The discussion below provides a summary of key standards relative to this Project.

Senate Bill 100

Senate Bill 100 (SB 100) was signed into law September 2018 and increased the goal of the California RPS Program to achieve at least 50 percent renewable resources by 2026, 60 percent renewable resources by 2030, and 100 percent renewable resources by 2045. SB 100 also includes a State policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all State agencies by December 31, 2045. Under the bill, the State cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

4.6.2 Environmental Setting

California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration [EIA] 2018). California consumed 292,039 gigawatt-hours (GWh) of electricity and 2,110,829 million cubic feet of natural gas in 2017 (California Energy Commission [CEC] 2019; EIA 2018). In addition, Californians consume approximately 18.9 billion gallons of motor vehicle fuels per year (Federal Highway Administration 2019). The single largest end-use sector for energy consumption in California is transportation (39.8 percent), followed by industry (23.7 percent), commercial (18.9 percent), and residential (17.7 percent) (EIA 2018).

Most of California's electricity is generated in-state with approximately 30 percent imported from the Northwest (Alberta, British Columbia, Idaho, Montana, Oregon, South Dakota, Washington, and Wyoming) and Southwest (Arizona, Baja California, Colorado, Mexico, Nevada, New Mexico, Texas, and Utah) in 2017. In addition, approximately 30 percent of California's electricity supply comes from renewable energy sources such as wind, solar photovoltaic, geothermal, and biomass (CEC 2018). Adopted on September 10, 2018, SB 100 accelerates the State's Renewables Portfolio Standards Program by requiring electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

To reduce statewide vehicle emissions, California requires that all motorists use California Reformulated Gasoline, which is sourced almost exclusively from refineries located in California. Gasoline is the most used transportation fuel in California with 15.5 billion gallons sold in 2017 and is used by light-duty cars, pickup trucks, and sport utility vehicles (California Department of Tax and Fee Administration 2018). Diesel is the second most used fuel in California with 4.2 billion gallons sold in 2015 and is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles (CEC 2016). Both gasoline and diesel are primarily petroleum-

based, and their consumption releases greenhouse gas (GHG) emissions, including CO_2 and NO_X. The transportation sector is the single largest source of GHG emissions in California, accounting for 41 percent of all inventoried emissions in 2016 (CARB 2018).

4.6.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VI. ENERGY: Would the project:				
a) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The Project will not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation. Information from the CalEEMod 2020.4.0 Daily and Annual Outputs contained in the air quality and greenhouse gas analyses (Appendix A) were utilized to determine the potential energy demand. The CalEEMod outputs detail Project related construction equipment, transportation energy demands, and facility energy demands. Using the CalEEMod data input, the Project's construction phase would consume electricity and fossil fuels as a single energy demand, that is, once construction is completed their use would cease. The California Air Resources Board's 2017 Emissions Factors Tables show that on average aggregate fuel consumption (gasoline and diesel fuel) would be approximately 18.5 hp-hr-gal (Appendix A)

Construction Energy

The Project's estimated energy consumption during construction is provided in Appendix A (refer to Tables 12-14). In summary, the usage was estimated as follows:

- Table 12: Construction Equipment Fuel Consumption Estimates: 14,407 gallons of diesel fuel.
- Table 13: Construction Worker Fuel Consumption Estimates: 658 gallons.
- Table 14: Construction Hauling Fuel Consumption Estimates (Heavy Duty Trucks): 29,769 gallons.

Construction of the Proposed Project would require the typical use of energy resources. There are no unusual Project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). Project construction is required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Additionally, CARB has adopted the Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to diesel particulate matter and other Toxic Air Contaminants. Compliance with these measures would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary consumption of energy. Idling restrictions and the use of newer engines and equipment would result in less fuel combustion and energy consumption.

Additionally, as required by California Code of Regulations Title 13, Motor Vehicles, Section 2449(d)(3) Idling, limits idling times of construction vehicles to no more than five minutes, thereby minimizing or eliminating unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment.

Therefore, Project compliance with State regulations will reduce construction impacts to less than significant and no mitigation is required.

Operations

Energy consumption in support of or related to project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project Site) and facilities energy demands (energy consumed by building operations and site maintenance activities). This use of energy is typical for a public works operation, and no operational activities or land uses would occur that would result in extraordinary energy consumption.

The largest source of operational energy use would be vehicle operation of the Proposed Project's employees. To model the Proposed Project's energy usage, the vehicle fleet mix was used as determined in the CalEEMod output from the air quality and greenhouse gas analysis (Appendix A). Using the CalEEMod output, the Proposed Project operations is assumed that an average trip for all vehicles was 25 miles, at one vehicle per trip per month.

Table 15 in Appendix A shows that an estimated 88 gallons of fuel would be consumed per year for the operation of the Proposed Project.

Trip generation generated by the Proposed Project is consistent with other similar public facility uses of similar scale and configuration. That is, the Proposed Project does not propose uses or operations that would inherently result in excessive and wasteful vehicle trips, nor associated excess and wasteful. Therefore, there is a less than significant impact, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. Regarding federal transportation regulations, the Project Site is located in an already developed area with existing roadways. Therefore, the Project would not interfere with, nor otherwise obstruct intermodal transportation plans or projects that may be proposed pursuant to the Intermodal Surface Transportation Efficiency Act because Southern California Association of Governments is not planning for intermodal facilities in the Project Area.

Regarding the State's Renewable Energy Portfolio Standards, the Project is not proposing to construct buildings that would be required to meet or exceed the energy standards established in the California Green Building Standards Code, Title 24, Part 11 (CALGreen). CalGreen Standards require that new buildings reduce water consumption, employ building commissioning to increase building system efficiencies, divert construction waste from landfills, and install low pollutant-emitting finish materials.

Given the above, the Proposed Project would have a less than significant potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

4.6.4 Mitigation Measures

No mitigation measures associated with impacts to Energy apply to the Proposed Project.

4.6.5 Conclusion

No potentially significant impacts of the Proposed Project are associated with Energy, and no mitigation would be required.

4.7 GEOLOGY AND SOILS

A paleontological report was also prepared for the Proposed Project (**Appendix D-1 - *Due Diligence Paleontological Resources Study, Oeste Recharge Project*, CRM Tech, May 26, 2021**).

4.7.1 Environmental Setting

According to the Natural Resource Conservation Service (NRCS) Custom Soil Resource Report, the Project Site is underlain entirely by Cajon sand (2 to 9 percent slopes). Portions of the Project Site, especially within the swales and along the northern and southern boundaries of the site have been compacted and disturbed by recreational off-highway vehicle use and illegal dumping, while soils outside of these areas are relatively undisturbed. Soils underlaying portions of the site that occur within the California Aqueduct are heavily compacted and disturbed.

4.7.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VII. GEOLOGY AND SOILS: Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
• Strong seismic ground shaking?			X	
• Seismic-related ground failure, including liquefaction?				X
• Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
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- site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
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?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		X		

Discussion

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- *Rupture of a known earthquake fault, as delineated on the most recent Alquist Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.*

  Less Than Significant. The Project Site is located in Southern California, a seismically active area and susceptible to the effects of seismic activity include rupture of earthquake faults. The Project Site is not included within any Earthquake Fault Zones as created by the Alquist-Priolo Earthquake Fault Zoning Act, according to the California Department of Conservation Mapping. The nearest fault to the Project Site is the San Andres Fault Zone, is located approximately 7 miles southwest of the site. Therefore, the impact would be less than significant, and no mitigation is required.

- *Strong seismic ground shaking?*

  Less Than Significant Impact. The site is situated in an area of high regional seismicity. The nearest fault to the Project Site is the San Andres Fault Zone located approximately 7 miles southwest of the site. Since no known faults are located within or near the Project Site, surface fault rupture is not anticipated. However, severe ground shaking should be expected during the life of the Proposed Project. The Project is a water recharge basin that would be occasionally maintained by maintenance workers. Therefore, the proposed Project is not anticipated to expose people or structures to potentially substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking more than other developments in Southern California. Therefore, the impacts are less than significant, and no mitigation is required.

- *Seismic-related ground failure, including liquefaction?*

  No Impact. Liquefaction is a mode of ground failure that results from the generation of high pore-water pressures during earthquake ground shaking, causing loss of shear strength, and is typically a hazard where loose sandy soils exist below groundwater. San Bernardino County has designated certain areas as potential liquefaction hazard zones. These are areas considered at risk of liquefaction-related ground failure during a seismic event, based on mapped surficial deposits and the presence of a relatively shallow water table. According to San Bernardino County hazard maps, the site is not located within an area identified as having any liquefaction potential. Therefore, there is no impact, and no mitigation is required.

- *Landslides?*

  No Impact. Landslides are the downhill movement of masses of earth and rock and are often associated with earthquakes; but other factors, such as the slope, moisture content of the soil, composition of the subsurface geology, heavy rains, and improper grading can influence the occurrence of landslides. The Project Site's elevation ranges from approximately 3,468 to 3,485 feet above mean sea level. The site slopes gently northward away from the adjacent Aqueduct and is relatively flat outside of the Aqueduct and a series of swales sheet flow across the site. The Project Site and the adjacent parcels are relatively flat, do not contain any hills or steep slopes, and no landslides on or adjacent to the Project site would occur. Therefore, there is no impact, and no mitigation is required.

Based on the above, the Project will have a less than significant impact regarding exposure to people or structures to potential substantial adverse effects of earthquakes, ground shaking, liquefaction and landsides, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. The Natural Resource Conservation Service, the Project Site is underlain entirely by Cajon sand (2 to 9 percent slopes). Portions of the Project Site, especially within the swales and along the northern and southern boundaries of the site have been compacted and disturbed by recreational off-highway vehicle use and illegal dumping, while soils outside of these areas are relatively undisturbed. Soils underlaying portions of the site that occur within the California Aqueduct are heavily compacted and disturbed

During Project construction when soils are exposed, temporary soil erosion may occur, which could be exacerbated by rainfall.

The Project would be required to comply with the General Storm Water Permit for Construction Activity from the State Water Resources Control Board (SWRCB), which would include the implementation of a SWPPP and associated BMPs. BMPs may include a combination of erosion control measures to reduce, prevent, or minimize soil erosion from Project-related grading and construction activities, such as fiber rolls, fencing, and watering. Additionally, the Construction General Permit (CGP; Order No. 2009-0009-DWQ, or latest version) issued by the SWRCB, regulates construction activities to minimize water pollution, including sediment. With compliance with the Regional Water

Quality Control Board (RWQCB) SWPPP requirements, and installation of BMPs construction impacts related to erosion and loss of topsoil would be less than significant.

Therefore, with implementation of existing requirements, impacts related to substantial soil erosion or loss of topsoil would be less than significant.

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?*

Less Than Significant Impact. Refer to the above discussion regarding hazards associated with liquefaction and landslide hazards. As noted, there is no potential for landslide and low potential for liquefaction. Therefore, because no aspects of the Proposed Project could increase the likelihood of landslides, lateral spreading, subsidence, liquefaction, potential impacts would be less than significant, and no mitigation is required.

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?*

No Impact. Expansive soil is a soil/clay (such as montmorillonite or bentonite) that is prone to expansion or shrinkage due directly to variation in water volume. Expansive soils swell when exposed to large amounts of water and shrink when the water evaporates. This continuous cycle of wet to dry soil keeps the soil in perpetual motion causing structures built on this soil to sink or rise unevenly, often requiring foundation repair. Expansive soils are comprised primarily of minerals (incredibly fine particles) with little to no organic material and are thus incredibly viscous, proving difficult to drain.

The onsite near surface soils that would underly the proposed facility are classified by the USDA as primarily sandy type soils, which have a low shrink-swell potential. Therefore, Project impacts regarding expansive soils would be less than significant, and no mitigation is required.

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?*

No Impact. The Project does not propose to install septic tanks or alternative wastewater disposal systems. No impacts would occur, and no mitigation is required.

f) *Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Less Than Significant Impact With Mitigation Incorporated. The Project Site is flat, and there are no rock outcroppings or unique geologic features within the Project Site.

According to the paleontological report in Appendix D, older alluvium, presumably of Pleistocene age, underlies much of the Mojave Desert. Pleistocene sediments in the region were laid down by two separate depositional regimes, namely the ancestral Mojave River and the Victorville Fan (Appendix D). The Piñon Hills/Phelan area is located on the Victorville Fan, which was generally considered to have a high potential for containing nonrenewable vertebrate fossil remains. However, recent studies suggest that these sediments, while potentially fossiliferous, are not as fossiliferous as the ancestral Pleistocene-age Mojave River sediments (Appendix D).

The paleontological report in Appendix D states that the Proposed Project's potential to impact significant, nonrenewable paleontological resources appears to be low in the surface soils but high in the older native alluvium beneath the surface soils. The Proposed Project is a water recharge basin where excavations could reach greater than 10 feet in depth. At this depth, location may reach paleontologically sensitive Pleistocene or earlier soils subsurface.

Due to the variability and unknown paleontological sensitivity of the Project Site, **Mitigation Measure GEO-1,** is required to manage unanticipated discoveries of paleontological resources. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to unanticipated discoveries of paleontological resources to less than significant.

4.7.3 Mitigation Measures

MM GEO-1 **Provision for Unanticipated Buried Paleontological Resources**: A qualified cultural resource specialist or paleontologist will spot check construction excavations that would impact Late Pleistocene to Holocene units, which are generally below 10 feet in the Project area. The frequency will be determined with the cultural resource specialist and the construction contractor based on the work schedule. If evidence of subsurface paleontological resources is found during construction, excavation and other construction activity in that area shall cease and the construction contractor shall contact the County of San Bernardino Planning Director. With direction from the Planning Director, a paleontologist certified by the County of San Bernardino shall evaluate the find prior to resuming ground disturbing activities in the immediate vicinity. If warranted, the paleontologist shall prepare and complete a standard Paleontological Resources Mitigation Program for the salvage and curation of identified resources.

4.7.4 Conclusion

Implementation of **Mitigation Measure GEO-1** would reduce potentially significant impacts of the Proposed Project associated with Geology and Soils to less than significant.

4.8 GREENHOUSE GAS EMISSIONS

A Greenhouse Gas Analysis was prepared for the Project as part of the Air Quality Assessment (Appendix A).

4.8.1 Regulatory Setting

Since 1988, many countries around the world have made an effort to reduce GHG emissions since climate change is a global issue. Over the past 30 years, the United States, and the State of California, have enacted a myriad of regulations that have evolved over time aimed at reducing GHG emissions in transportation, building and manufacturing.

The Project is within the Mojave Air Basin, which is under the jurisdiction of the MDAQMD.

According to MDAQMD CEQA and Federal Conformity Guidelines, a project is significant if it triggers or exceeds the most appropriate evaluation criteria. MDAQMD would clarify upon request which threshold is most appropriate for a given project; in general, for GHG emissions, the MDAQMD significance emission threshold of 100,000 metric tons of carbon dioxide equivalent (MTCO2e) per year is sufficient. A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation.

4.8.2 Environmental Setting

Constituent gases of the Earth's atmosphere, called atmospheric GHG, play a critical role in the Earth's radiation amount by trapping infrared radiation emitted from the Earth's surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO_2), methane (CH_4), O_3, water vapor, nitrous oxide (NO_2), and chlorofluorocarbons. This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses. Transportation is responsible for 41 percent of the State's greenhouse gas emissions, followed by electricity generation. Emissions of CO_2 and NO_2 are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO_2, where CO_2 is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean. Table 6 in Appendix A provides a description of each of the greenhouse gases and their global warming potential.

For the purposes of Greenhouse Gas Analysis (Appendix A), the focus was on emissions of CO_2, CH_4, and NO_2 because these gasses are the primary contributors to Global Climate Change (GCC) from development projects. Although there are other substances such as fluorinated gases that also contribute to GCC, these fluorinated gases were not evaluated as their sources are not well-defined and do not contain accepted emissions factors or methodology to accurately calculate these gases.

4.8.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
VIII. GREENHOUSE GAS EMISSIONS: Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. The Proposed Project is anticipated to generate GHG emissions from area sources, energy usage, mobile sources, and construction equipment. GHG emissions have been calculated with the CalEEMod model based on construction and operational parameters (Appendix A).

The greenhouse gas emissions from Project construction equipment and worker vehicles are shown in Table 10 of Appendix A. The emissions are from all phases of construction. The total construction emissions amortized over a period of 30 years are estimated at approximately 16 metric tons of CO2e per year.

Operational emissions occur over the life of the project. Table 11 in Appendix A below shows that the subtotal for the Proposed Project would result in annual emissions of 0.49 MT CO2e per year without the addition of amortized construction emissions which would add an additional 16.37 MT CO2e per year. The total emissions of 16.86 MTCO2e/year would not exceed the San Bernardino County screening threshold of 3,000 metric tons per year of CO2e. As shown in Table 11 of Appendix A, the Project's total GHG emissions would also not exceed the MDAQMD annual threshold of 100,000 MTCO2e or the MDAQMD daily threshold of 548,000 pounds of CO2e.

According to the San Bernardino County thresholds of significance as identified in Appendix A, a cumulative global climate change impact would occur if the GHG emissions created from the ongoing operations would exceed 3,000 metric tons per year of CO2e. Therefore, as the Project's total emissions do not exceed 3,000 metric tons per year of CO2e, the operation of the proposed project would not create a significant cumulative impact to global climate change.

Therefore, potential impacts associated with the generation of greenhouse gas emissions would be less than significant, and no mitigation would be required.

b) Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The Proposed Project would not have the potential to conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases.

According to the County of San Bernardino Greenhouse Gas Emissions Reduction Plan, "all development projects, including those otherwise determined to be exempt from CEQA will be subject to applicable Development Code provisions, including the GHG performance standards, and state requirements, such as the California Building Code requirements for energy efficiency. With the application of the GHG performance standards, projects that are exempt from CEQA and small projects that do not exceed 3,000 MTCO2e per year will be considered to be consistent with the Plan and determined to have a less than significant individual and cumulative impact for GHG emissions." The Reduction Plan also states that "the 3,000 MTCO2e per year value was chosen as the medial value and is used in defining small projects that must include the Performance Standards as described in Attachment B of the County of San Bernardino Greenhouse Gas Emissions Reduction Plan, but do not need to use the Screening Tables or alternative GHG mitigation analysis described in Attachment D of the County of San Bernardino Greenhouse Gas Emissions Reduction Plan."

The Project's total net operational GHG emissions do not exceed the County's screening threshold of 3,000 MTCO2e per year. Therefore, the Project does not need to accrue points using the screening tables and is consistent with the GHG Plan, pursuant to Section 15183.5 of the State CEQA Guidelines. As mentioned above, the Project is expected to comply with the performance standards for commercial uses as detailed in the County of San Bernardino Greenhouse Gas Emissions Reduction Plan (Appendix A). The Proposed Project will not result in substantial emissions of greenhouse gases and will not conflict with the Green County initiatives.

4.8.4 Mitigation Measures

No mitigation measures associated with impacts on Greenhouse Gases apply to the Proposed Project.

4.8.5 Conclusion

No potentially significant impacts of the Proposed Project are associated with Greenhouse Gases, and no mitigation would be required.

4.9 HAZARDS AND HAZARDOUS MATERIALS

4.9.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
IX. HAZARDS AND HAZARDOUS MATERIALS: Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard or excessive noise to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?				X

Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less than Significant Impact. A hazardous material is a substance that is toxic, flammable/ignitable, reactive, or corrosive. Extremely hazardous materials are substances that show high or chronic toxicity, carcinogenic, bioaccumulative properties, persistence in the environment, or that are water-reactive. Improper use, storage, transport, and disposal of hazardous materials and waste may result in harm to humans, surface and groundwater degradation, air pollution, fire, and explosion.

Construction of the Proposed Project would involve the use of construction-related chemicals. These include but are not limited to hydraulic fluids, motor oil, grease, runoff, and other related fluids and lubricants. The construction activities would involve the disposal and recycling of materials, trash, and debris. With mandatory regulatory compliance with federal, State, and local laws, potential hazardous materials impacts associated with construction of the Project would be less than significant, and no mitigation is required.

Given that the operation of the Proposed Project is a water recharge basin, the need for transportation and/or storage of hazardous materials is considered to be low. In any event, operations would be required to comply with all federal, State and local laws pertaining to hazardous materials handling, transport, use and disposal. Therefore, with mandatory regulatory compliance with federal, State, and local laws, potential hazardous materials impacts associated with operations of the Project would be less than significant, and no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. Construction and operation of the Project would involve the routine transport, use, or disposal of hazardous materials on- and off-site.

Construction

Construction activities would require the temporary use of hazardous substances, such as fuel, lubricants, and other petroleum-based products for operation of construction equipment as well as oil, solvents, or paints. As a result, the Proposed Project could result in the exposure of persons and/or the environment to an adverse environmental impact due to the accidental release of a hazardous material. However, the transportation, use, and handling of hazardous materials would be temporary and would coincide with the short-term Project construction activities. Further, these materials would be handled and stored in compliance with all with applicable federal, state, and local requirements, any handling of hazardous materials would be limited to the quantities and concentrations set forth by the manufacturer and/or applicable regulations, and all hazardous materials would be securely stored in a construction staging area or similar designated location within the Project site. In addition, the handling, transport, use, and disposal of hazardous materials must comply with all applicable federal, state, and local agencies and regulations, including the Department of Toxic Substances Control (DTSC); Occupational Health and Safety Administration; Caltrans; and the County Health Department - Hazardous Materials Management Services.

With the compliance with local, state, and federal regulations short-term construction impacts associated with the handling, transport, use, and disposal of hazardous materials would be less than significant.

Therefore, because the MWA and its contractors are required to comply with federal, State, and local regulations, impacts associated with the handling, transport, use, and disposal of hazardous materials and the release of hazardous materials into the environment would be less than significant, and no mitigation would be required.

Operations

The operation of the Proposed Project may involve the use of construction equipment lubricants However, as with construction, with required compliance with federal, State, and County regulations, standards, and guidelines pertaining to hazardous materials management, there would be a less than significant hazard to the public or the environment through routine use, storage, or disposal of hazardous materials, and no mitigation would be required.

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The closest school to the Project Site is the Piñon Hills Elementary Schools located, on approximately 3 miles to the south. Therefore, the Proposed Project would not emit hazardous emissions or handle hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. As such, there are no impacts, and no mitigation is required.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Government Code Section 65962.5(a)(1) requires that DTSC "shall compile and update as appropriate, but at least annually, and shall submit to the Secretary for Environmental Protection, a list of all the following: (1) all hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (HSC)." The hazardous waste facilities identified in HSC § 25187.5 are those where DTSC has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment. This is known as the "Cortese List." This is a very small and specific subgroup of facilities, and they are not separately posted on the DTSC or Cal/EPA's website. The following databases that meet the "Cortese List" requirements were reviewed for this Project.

- Envirostore Database. There are no sites listed in the Envirostore Database within 1,000 feet of the Project site.

- Geotracker Database. Geotracker is the SWRCB's database that manages potential hazardous sites to groundwater. There are no sites listed in the Geotracker Database within 1,000 feet of the Project site.

Based on the result of the database review the Project Site is not located on any site that has been identified in accordance with Section 65962.5 of the Government Code.

Therefore, there are no impacts because the Project Site is not located on any site that has been identified in accordance with Section 65962.5 of the Government Code, therefore, no mitigation would be required.

e) For a project located within an airport land use plan or, where such a plan had not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact. The Project site is located approximately 17 miles southwest of the Southern California Logistics Airport. Therefore, the Project would not result in a safety hazard or excessive noise for people residing or working in the Project area because the Project Site is not located within the influence of an airport land use plan or, or within 2 miles of a public airport or public use airport. There would be no impacts, and no mitigation would be required.

f) Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. Development of the Project site would not interfere with any of the daily operations of the San Bernardino County emergency response plan. Access to the Proposed Project is at the end of Cayucos Drive, west of Oasis Road, and all facilities occur off-site. Overall, the Proposed Project would not impair implementation of or physically interfere with San Bernardino County emergency operations plan or evacuation plan. There would be no impacts, and no mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

No Impact. The Project is not identified by Cal Fire, Fire Hazard Severity Zones in the State Responsibility Area as being in a high fire zone. Therefore, there is no impact relative to the Project's potential exposure of people or structures to wildfire is less than significant, and no mitigation is required.

4.9.2 Mitigation Measures

No mitigation measures associated with impacts to Hazards and Hazardous Materials apply to the Proposed Project.

4.9.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Hazards and Hazardous Materials, and no mitigation would be required.

4.10 HYDROLOGY AND WATER QUALITY

Under the "Mojave Basin Area Adjudication" [1996] the MWA was designated as Watermaster for five distinct sub-areas based on hydrologic divisions defined by various hydrologic, geologic, engineering, and political considerations. The subareas are: 1) Oeste; 2) Este; 3) Alto; 4) Centro, and 5) Baja Within these sub-areas, the MWA management strategy focuses on water conservation, groundwater basin health, water supply management, and water allocation.

The MWA routinely studies groundwater quantity and quality. In July 2009, California State University Fullerton, Dept of Geological Sciences, in conjunction with the MWA published a hydrogeologic report for the Oeste Hydrologic Sub-Area Hydrogeologic Report (DGS, July 2009). The full report is provided on the MWA website: https://www.mojavewater.org/data-maps/studies-reports/, under the heading, "Oeste Hydrologic Sub-Area Hydrogeologic Report."

In January 2022, the MWA drilled a pilot well at the Project Site to identify the subsurface conditions.

4.10.1 Regulatory Setting

Water quality standards are designed to protect the public. Standards are developed based on the intended use of the water (drinking, agriculture, industrial use, etc.). National Primary Drinking Water Regulations (NPDWR's or primary standards) are legally enforceable standards that apply to public water systems. Primary standards protect public health by limiting the levels of contaminants in drinking water. National Secondary Drinking Water Regulations (NSDWR's or secondary standards) are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (taste, odor, or color) in drinking water. The United States Environmental Protection Agency (USEPA) recommends secondary standards for water systems but does not require public water systems to comply. However, individual states may choose to adopt them as enforceable standards. Table 12 (Drinking Water Quality Standards) refers to the standards for various chemical ions, physical water quality, and contaminants (DGS, July 2009). Contaminants that are not currently subject to any proposed or promulgated national primary drinking water regulation (NPDWR), are known or anticipated to occur in public water systems and may require regulations under Safe Drinking Water Act are known as unregulated contaminants.

The Lahontan Regional Water Quality Control Board (LRWQCB) requires that dischargers whose construction projects disturb one (1) or more acres of soil or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD).

4.10.2 Environmental Setting

Regional Climate

The Mojave Desert is found at elevations of 2,000 to 5,000 feet above mean sea level and is characterized by cool winter temperatures and warm summer temperatures, with its rainfall occurring almost entirely in the winter. Climatological data obtained for the Project Site indicates the annual precipitation averages 6.18 inches per year. Almost all of the precipitation in the form of rain occurs between October and April, with hardly any occurring between May and September. The wettest month is February, with a monthly average total precipitation of 1.22 inches. The average minimum and maximum temperatures for the region are 45.7 and 78.9 degrees Fahrenheit (°F), respectively, with December and January (monthly average 41° F) being the coldest months and July being the hottest (monthly average 100° F).

Oeste Subbasin

The Oeste Hydrologic Sub-area, also referred to in some geologic technical literature as El Mirage Valley watershed, is located just north of the San Gabriel Mountains along the southern edge of the Mojave Desert, San Bernardino County, California (DGS, July 2009). The Oeste Hydrologic Sub-area is located approximately 25 miles west of Victorville.

The El Mirage Valley groundwater basin has two principal groundwater aquifers: a lower regional aquifer extends from the southern portion of Sheep Creek to El Mirage (dry) Lake in the north. This aquifer extends from the Los Angeles County line in the west to the community of Phelan in the east (DGS, July 2009). The lower, regional aquifer is primarily being used by the larger water consumers in the north and is the primary aquifer for several municipal groups (including the Sheep Creek Water Company and the County of San Bernardino).

The upper perched aquifer is isolated near the dry lake area and is typically less than 250 ft deep below ground surface (bgs). However, in several places, the depth of the perched layer may be deeper and is interbedded with sand, silt, and gravel deposits. The upper perched aquifer is principally used by single-family dwellings and small businesses. DWR reports well yields averaging 230 gallons/minute (gpm) and a high of 1,000 (gpm). It is not clear in the DWR report if these yields are derived from the perched (less than 250 ft) or regional aquifer, although the regional aquifer seems more likely (DGS, July 2009).

Historical groundwater flow direction for the Oeste Hydrologic Sub-area is from the southern proximal portion of Sheep Creek wash fan to the northern central portion of Oeste Hydrologic Sub-area. However, due to the Sheep Creek wash fan morphology, a portion of flow exits the Oeste Hydrologic Sub-area and flows into the Alto Hydrologic Sub-area to the northeast. Further groundwater may be moving from other canyons and small streams from the west into El Mirage valley (DGS, July 2009).

Historically, groundwater production in the Oeste Sub-area has primarily been for agricultural purposes. Over the last 20 years, housing development and municipal production in the region has increased and has replaced agricultural production. Farming in the “High Desert” has slowed over the last few decades and agricultural activities are expected to follow current downward trends in the Oeste Sub-area. Dairy will most likely remain stable as long as the two active dairy operations (Meadowbrook and Hettinga) choose to remain in operation. Industrial uses may increase slightly over time but currently do not make up a material amount of production in the basin. Municipal production is expected to increase over time

to serve the rapidly growing communities of Piñon Hills and Phelan. Domestic uses [adjudicated domestic purveyors and non-adjudicated domestic producers (minimal producers)] are expected to increase slightly over time but will most likely be greatly outpaced by municipal demands (DGS, July 2009).

Floodplains

The Project site does not contain any natural drainages or waterways, according to the biological resources report in Appendix B-1. The Flood Insurance Rate Maps issued by the Federal Emergency Management Agency (FEMA) indicate the Project site is located in Zone D, where flooding is possible but undetermined. Zone D is not considered a Special Flood Hazard Area (SFHA), according to FEMA.

4.10.3 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
X. HYDROLOGY AND WATER QUALITY: Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
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:				
• result in substantial erosion or siltation onsite or offsite;			X	
• substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;				X
• create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				X
• impede or redirect flood flows?				X
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				X

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

Discussion

a) Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact.

Construction

Construction-related runoff pollutants are typically generated from waste and hazardous materials handling or storage areas, outdoor work areas, material storage areas, and general maintenance areas (e.g., vehicle or equipment fueling and maintenance, including washing). Construction projects that disturb 1 acre or more of soil, including the Proposed Project, are regulated under the CGP (2009-0009-DWQ - Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity) and its subsequent revisions (Order No. 2012-0006-DWQ) issued by the SWRCB. Projects obtain coverage under the CGP by developing and implementing a SWPPP, estimating sediment risk from construction activities to receiving waters, and specifying best management practices that would be implemented as a part of the project's construction phase to minimize pollution of stormwater prior to and during grading and construction. Therefore, the Proposed Project is required to obtain coverage of the CGP.

Therefore, with implementation of the BMPs in the required SWPPP, water quality or waste-discharge impacts from Project-related grading and construction activities would be less than significant, and no mitigation is required.

Operations

The Lahontan Regional Water Quality Control Board (LRWQCB) prepared a Water Quality Control Plan for the Lahontan Region, North and South Basins ("Basin Plan", LRWQCB, 2021) which sets forth water quality standards for the surface and ground waters of the Region, which include both designated beneficial uses of water and the narrative and numerical objectives which must be maintained or attained to protect those uses. All ground waters are considered suitable, or potentially suitable, for municipal or domestic water supply (MUN).

The Proposed Project is designed to draw approximately 3,000 acre-feet/year of State Water Project water from the California aqueduct in wet years for groundwater recharge and storage in the Oeste groundwater subbasin. The DWR routinely conducts water quality monitoring of SWP

water in various locations along the aqueduct to ensure that the water served meets the State's Drinking Water Standards.

The DGS report of the Oeste Sub-basin, studied the State's water quality standards and the water quality of the Oeste Sub-basin and concluded the following (DGS, July 2009):

- *Water quality throughout the lower regional aquifer in the Oeste Hydrologic Sub-area is generally of good quality. Several locations have experienced a small degradation in water quality over time, mainly those near the El Mirage (dry) Lake. Elevated arsenic levels (1.2 mg/l) near the dry lake are higher in concentration than the present MCL (0.010 mg/L). The source appears to be natural weathering processes of the Pelona schist, but further research will be needed to completely verify the source.*

- *The upper perched aquifer waters are generally of poorer quality than that of the deeper regional aquifer. This is in part due to recharge from the agricultural activities and association with the El Mirage (dry) Lake. Although most of the analyzed ions in the upper perched aquifer show elevated concentrations, the waters still meet state and federal drinking water quality standards. The only exception is arsenic. Arsenic is elevated in several wells along the northeastern edge of the perched aquifer. Variations in water quality may also be attributed to the possibility that groundwater is moving from Los Angeles county and into the Oeste Hydrologic Sub-area lower regional aquifer. This should be further evaluated as part of any future groundwater monitoring program. Other Potential issues may be associated with sampling protocols and also be re-evaluated as part of future key well program.*

The DWR identified that arsenic typically occurs in SWP water at 0.003 mg/l (DWR, October 2012), which is lower than the DGS identified concentrations in the Oeste Sub-basin (1.2 mg/). The SWP water to be recharged into the Oeste Sub-basin groundwater contains less arsenic than the naturally occurring groundwater, therefore, the groundwater quality would improve with the blending of Oeste Sub-basin water and the SWP water. Therefore, impacts to groundwater quality would be less than significant.

b) 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?

Less Than Significant Impact. Based on the July 2009 DGS report, the annual average water supply to the Oeste Sub-area is estimated at 1,000 to 3,000 Aft/yr. The best contemporary estimates of water being removed from the system, there is estimate an annual budget deficit of approximately 1,600 Aft/yr. These estimates appear reasonable when compared to water levels in the region which show a gradual downward trend.

The Proposed Project is anticipated to generally raise groundwater levels when compared to no project conditions, creating the same benefit of reduced pumping costs for adjacent private well owners.

Thus, impacts to groundwater recharge and groundwater supplies would be less than significant.

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:

- *result in substantial erosion or siltation onsite or offsite;*

Less Than Significant Impact. Grading activities during construction of the Proposed Project may result in wind driven soil erosion and loss of topsoil. All construction and grading activities would comply with SWPPP. Therefore, potential impacts associated with erosion would be less than significant, and no mitigation would be required.

- *substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite;*

Less Than Significant Impact. The Project proposes no impervious surfaces. The Proposed Project is designed to include any freeboard that would be needed for storm events. Therefore, the Project would not substantially increase the rate or amount of surface water runoff in a manner which would result in flooding on or offsite. The impact would be less than significant, and no mitigation is required.

- *create or contribute to runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or*

Less Than Significant Impact. Refer to the answers above.

- *impede or redirect flood flows?*

No Impact. The Project site does not contain any natural drainages or waterways, according to the biological resources report in Appendix B-1. The FEMA (Federal Emergency Management Agency) Flood Insurance Rate Maps indicates that the Project site is not located within any flood hazard areas. Therefore, the Project would not impede or redirect flood flows. There would be no impact, and no mitigation is required.

d) Would the project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant. The FEMA Flood Insurance Rate Maps indicates that the Project site is not located within any flood hazard areas. The Project Site is inland, more than 70 miles northeast of the Pacific Ocean, and is not subject to tsunami hazards. Seiches are surface waves created when a body of water is shaken, usually by earthquake activity. Seiches are of concern relative to development near large water bodies and water storage facilities, because inundation from a seiche can occur if the wave overflows a containment wall, such as the wall of a reservoir, water storage tank, dam, or other artificial body of water.

While the DWR canal would be considered a body of water that could potentially be subject to seiche, the canal exists approximately 187 feet from the Project's recharge basins, which would

absorb any overflow. Therefore, there would be a less than significant impact with respect to the risk of release of pollutants due to project inundation, and no mitigation is required.

e) Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The Proposed Project's construction contractor would be required to prepare and implement a SWPPP and associated BMPs in compliance with the CGP during grading and construction, as required by the LRWQCB and State Water Quality Control Board requirements. The SWPPP would specify BMPs that would be implemented for the Proposed Project to protect the water quality of receiving waters (Mojave River). Therefore, the Proposed Project would not conflict with the implementation of the State's or LRWQCB's water quality control plan.

The MWA has also prepared an Urban Water Management Plan (T&Y, 2021). The Urban Water Management Plan (UWMP) is the legal and technical water management foundation for urban water suppliers throughout California. MWA has assessed the available natural supplies through the applicable adjudications and agreements, the long- term availability of imported wastewater, the return flow attributable to water use in the MWA service area, as well as its long-term access to SWP Table A Contract supplies. In addition, MWA stores water both within MWA's service area boundaries and outside its boundaries to manage short-term water shortage conditions. Together, these supplies make up MWA's regional water asset portfolio that is actively managed by MWA and the regional retail agencies to ensure long-term reliability.

The purpose of the Proposed Project is to ensure groundwater reliability in the Oeste Sub-basin area. Therefore, the Proposed Project is consistent with the MWA's UWMP.

4.10.4 Mitigation Measures

No mitigation measures associated with impacts to Hydrology and Water Quality apply to the Proposed Project.

4.10.5 Conclusion

No potentially significant impacts of the Proposed Project are associated with Hydrology and Water Quality, and no mitigation would be required.

4.11 LAND USE PLANNING

4.11.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XI. LAND USE AND PLANNING: Would the project:				
a) Physically divide an established community?				X
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?			X	

Discussion

a) Would the project physically divide an established community?

No Impact. The Proposed Project is a water recharge facility at the end of an existing dirt road. Therefore, the Proposed Project is consistent with the surrounding land uses, and there are no impacts with regard to the division of an established community.

b) 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?

Less Than Significant. Although the Project would be overseen and approved by the MWA on property owned by the MWA, land use is guided by the San Bernadino County is RL – Rural Living.

The San Bernardino County Development Code Section 82.02.040 exempts certain utilities, including as water, from having to obtain a permit or land use approvals. Specifically, this section states:

> *(8) Utilities. The erection, construction, alteration, or maintenance by a public utility or public agency of utilities intended to service existing or nearby approved developments shall be permitted in any zone. These include: water; gas; electric; supply or disposal systems; including wires, mains, drains, sewers, pipes, conduits, cables, fire-alarm boxes, police call boxes, traffic signals, hydrants, etc., but not including new transmission lines and structures. Commercial satellite and wireless communications antennas are not exempt, and are instead subject to Chapter 84.27 (Wireless Telecommunications Facilities).*

The Project will be constructed by the MWA, a public agency, and consists of a groundwater recharge basin to serve customers of the Oeste subbasin, and/or provide for water reliability of the Oeste subbasin.

Therefore, the Project would not 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. The impact is less than significant, and no mitigation is required.

4.11.2 Mitigation Measures

No mitigation measures associated with impacts to Land Use and Planning apply to the Proposed Project.

4.11.3 Conclusion

Potential impacts of the Proposed Project associated with Land Use and Planning would be less than significant, and no mitigation would be required.

4.12 MINERAL RESOURCES

4.12.1 Impact Analysis

4.12.2 Regulatory Setting

In 1975, the California legislature enacted the Surface Mining and Reclamation Act (SMARA). This act provides for the reclamation of mined lands and directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the state to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data.

4.12.3 Environmental Setting

Around the turn of the century, large deposits of limestone and granite were discovered, prompting cement manufacturing to become the leading industry in the valley. In 1916, the Southwestern Portland Cement Company (SPCC) began operation in Victorville. There are no mines in the Project vicinity.

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XII. MINERAL RESOURCES: Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

Discussion

a) Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The Project Site is designated Mineral Resource Zone (MRZ) 3a, which is defined as areas containing known or inferred mineral occurrences of undetermined mineral resource significance. MRZ-2 areas are where geologic data indicate that significant mineral resources are present. Since the Project Site is not designated MRZ-2, development of the Project Site would not impact the availability of known mineral resources in the surrounding area. Therefore, no impacts associated with any known mineral resource that would be of value to the region and the residents of the state would occur, and no mitigation would be required.

b) Would the project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. See response to Threshold Question XII a), above. Thus, the Project would have no impact on the availability of locally important mineral resource recovery sites.

4.12.4 Mitigation Measures

No mitigation measures associated with impacts to Mineral Resources apply to the Proposed Project.

4.12.5 Conclusion

No potentially significant impacts of the Proposed Project are associated with Mineral Resources, and no mitigation would be required.

4.13 NOISE

Environmental noise is commonly measured in A-weighted decibels (dBA). A decibel (dB) is a unit of sound energy intensity. Sound waves, traveling outward from a source, exert a sound pressure level (commonly called a "sound level") measured in dB. An A-weighted decibel (dBA) is a db corrected for the variation in frequency response that duplicates the sensitivity of human ears. Decibels are measured on a logarithmic scale. Generally, a three dBA increase in ambient noise levels represents the threshold at which most people can detect a change in the noise environment; an increase of 10 dBA is perceived as a doubling of loudness.

Generally, noise is perceptible at an increase of 3 dBA as illustrated below:

Changes in Intensity Level, dBA	Changes in Apparent Loudness
1	Not perceptible
3	Just perceptible
5	Clearly noticeable
10	Twice (or half) as loud

Source: https://www.fhwa.dot.gov/environMent/noise/regulations_and_guidance/polguide/polguide02.cfm

Noise Descriptors

The noise descriptors utilized in the noise study for this Project include but are not limited to the following:

- Ambient Noise Level: The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

- Community Noise Equivalent Level (CNEL): The average equivalent A-weighted sound level during a 24- hour day, obtained after addition of five (5) dB to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) dB to sound levels in the night before 7:00 AM and after 10:00 PM.

- Equivalent Sound Level (LEQ): The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time-varying noise level. The energy average noise level during the sample period.

Vibration

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration and only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Table 6: *Vibration Source Levels for Construction Equipment* identifies typical construction sources of vibration as identified by the Federal Transit Administration.

Table 6: Vibration Source Levels for Construction Equipment

	Peak Particle Velocity (inches/second) at 25 feet	Approximate Vibration Level LV (dVB) at 25 feet
Pile driver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Pile driver (sonic)	0.734 (upper range)	105
	0.170 (typical)	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory roller	0.21	94
Hoe ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

Source: Transit Noise and Vibration Impact Assessment, Federal Transit Administration, May 2006.

4.13.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIII. NOISE: Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project site in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Less Than Significant Impact.

Construction Noise

Construction operations must follow the County's General Plan and the Noise Ordinance, which states that construction, repair or excavation work performed must occur within Temporary construction, maintenance, repair, or demolition activities between 7:00 a.m. and 7:00 p.m., except Sundays and Federal holidays. There are no sensitive receptors within 1,000 feet of the Project Site, and the Project would comply with the County's Noise Ordinance. Therefore, no significant impacts are identified or anticipated, and no mitigation measures are required.

Operations Noise

There are no sensitive receptors or land uses within 1,000 feet of the Project Site. The closest sensitive receptors are residential land uses located approximately 0.25 mile to the west and south of the Project Site. It is anticipated that noise generated from Project operations would not be perceptible to the sensitive receptors near the Project Site due to the distance.

Therefore, the Project would be consistent with the County's Noise Ordinance with respect to the noise impacts from the Project's traffic within the Project Site. The impact would be less than significant, and no mitigation is required.

b) Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?

Less Than Significant Impact. Construction activities can produce vibration that may be felt by adjacent land uses. The closest land uses are approximately 0.25 mile west and south of the Project Site. The construction of the Proposed Project would not require the use of equipment such as pile drivers, which are known to generate substantial construction vibration levels. The primary vibration source during construction may be from a bulldozer. A large bulldozer has a vibration impact of 0.089 inches per second peak particle velocity (PPV) at 25 feet which is perceptible but below any risk to architectural damage.

At 0.25 mile, a large bulldozer would yield a worst-case 0.0 PPV (in/sec) which means the vibration would not be perceptible during grading of the Project Site and is below any threshold of damage. Therefore, impacts are less than significant, and no mitigation is required.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The nearest airport is the Southern California Logistics Airport, located approximately 7 miles to the northwest of the site. Therefore, the Project is not located within the vicinity of a private airstrip or an airport land use plan or within 2 miles of a public airport or public use airport. Therefore, the Project would not expose people residing or working in the Project area to excessive noise levels. There would be no impact, and no mitigation is required.

4.13.2 Mitigation Measures

No mitigation measures associated with impacts to Noise apply to the Proposed Project.

4.13.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Noise, and no mitigation would be required.

4.14 POPULATION AND HOUSING

4.14.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIV. POPULATION AND HOUSING: Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X

Discussion

a) Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. The Proposed Project is the construction and operation of a groundwater recharge basin for the Oeste subbasin of the MWA. The Project will provide water service reliability for the population that draws from the Oeste subarea, as well as would provide water service for future connections consistent with expected population growth. It is not anticipated that population growth would occur due to the recharge basins.

Therefore, construction and operation of the Proposed Project would not significantly induce substantial unplanned population growth either directly or indirectly. Therefore, impacts would be less than significant, and no mitigation is required.

b) Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. The Project site is currently vacant and does not contain any structures. Therefore, the Project will not displace any existing housing and will not necessitate construction of replacement housing elsewhere. Thus, no impact is anticipated.

4.14.2 Mitigation Measures:

No mitigation measures associated with impacts to Population and Housing apply to the Proposed Project.

4.14.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Population and Housing, and no mitigation would be required.

4.15 PUBLIC SERVICES

4.15.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XV. PUBLIC SERVICES: a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?				X
Recreation/Parks?				X
Other public facilities?				X

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection

Less Than Significant Impact. The closest fire station to the Project site is Fire Station 13 at 10433 Mountain Rd, Piñon Hills, CA 92372, approximately 3.5 miles south of the Project site. This station would be the first to respond to calls for service from the site.

The Proposed Project is to construct and operate water recharge basins. The basins, once operational, would be unmanned and have no risk of fire that would increase fire response.

Therefore, potential impacts associated with fire protection would be less than significant, and no mitigation would be required.

Police Protection

Less Than Significant Impact. The closest police station to the Project Site is the Sheriff's station at 4050 Phelan Rd, Phelan, CA. Typically, impacts on police services are analyzed based on increases in permanent residents from projects involving residential developments. Although the Project does not involve an increase in residential development, the Proposed Project could

generate a typical range of police service calls, such as vehicular burglaries or thefts and disturbances during construction.

The site will have perimeter fences/walls and will be secured at all times. The Project Site is within the San Bernardino County Sheriff's service area; therefore, the Project would not require an expansion of the police service area.

Development of the Project Site would not result in the need for new or physically altered police protection facilities. Therefore, potential impacts associated with police protection would be less than significant, and no mitigation would be required.

Schools

No Impact. The Proposed Project, a water recharge basin, will not directly increase the County's population as it does not increase residential land use designations nor construct any housing. Therefore, it would not generate the need for new or altered school facilities. Therefore, the Proposed Project would not result in substantial adverse physical impacts related to schools. Therefore, potential impacts associated with schools would have no impacts, and no mitigation would be required.

Recreational/Parks

No Impact. The Proposed Project will not directly require the construction or expansion of public recreational facilities as it does not propose new residential uses. Therefore, there would be no impacts, and no mitigation is required.

4.15.2 Mitigation Measures:

No mitigation measures associated with impacts to Public Services apply to the Proposed Project.

4.15.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Public Services, and no mitigation would be required.

4.16 RECREATION

4.16.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVI. RECREATION:				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impacts. Impacts on parks and recreational facilities are typically analyzed based on increases in permanent residents from projects involving residential developments. The Project proposes to construct water recharge basins, and therefore, is not a residential development. Therefore, there would be no impacts to parks and other public recreational facilities, and no mitigation is required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The Proposed Project does not propose the development of any recreational facilities. Therefore, no impacts are anticipated.

4.16.2 Mitigation Measures

No mitigation measures associated with impacts to Recreation apply to the Proposed Project.

4.16.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Recreation, and no mitigation would be required.

4.17 TRANSPORTATION

4.17.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVII. TRANSPORTATION: Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?				X
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
d) Result in inadequate emergency access?				X

a) Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities?

No Impact. The Project is located in the unincorporated community of Piñon Hills, San Bernardino County, California. The subject property is located at the western terminus of Cayucos Drive, between 263rd Street East and Oasis Road.

There are no bicycle, pedestrian or transit facilities near the Project Site, and the San Bernardino County General Plan does not identify any such facilities near the Project Site. Therefore, the Project does not conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadways, bicycle and pedestrian facilities. There would be no impact, and no mitigation is required.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. CEQA Guidelines Section 15064.3 provides that transportation impacts of projects are, in general, best measured by evaluating the Project's Vehicle Miles Traveled (VMT). Automobile delay (often called Level of Service, LOS) is no longer be considered to be an environmental impact under CEQA, except in terms of consistency with a jurisdiction's General Plan where an LOS is identified. A VMT analysis is generally required for projects that generate traffic, such as residential, commercial, and industrial project, in addition to linear or roadway projects.

The Project is the construction and operations of a water recharge basin, which is not a land use or linear transportation project that would generate traffic, other than the occasional operations manpower and equipment. Therefore, the Project would not conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b). Impacts are less than significant, and no mitigation is required.

c) Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

No Impact. The Proposed Project does not include the construction or widening of any road facilities. Therefore, the Project does not increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses. There is no impact, and no mitigation is required.

d) Would the project result in inadequate emergency access?

No Impact. The Proposed Project is the construction and operation of water recharge basins that would not impact any roadways. Therefore, there are no impacts, and no mitigation is required.

4.17.2 Mitigation Measures

No mitigation measures associated with impacts to Transportation apply to the Proposed Project.

4.17.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Transportation, and no mitigation would be required.

4.18 TRIBAL CULTURAL RESOURCES

A Cultural Resources Assessment for the Proposed Project was prepared by CRM Tech in May 2021 (Appendix C). The assessment addressed the ethnographic and archaeology of the Native American occupation in the Project area.

Mojave Water Agency AB 52 Tribal Consultation

On November 9, 2022, the Mojave Water Agency notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end on December 9, 2022, in accordance with AB52. The results of the consultation are as follows:

- Mr. Raymond Huaute Cultural Resources Specialist Morongo Band of Mission Indians. Result: No response provided.
- Ms. Jill McCormick Historic Preservation Officer Quechan Tribe of the Fort Yuma Reservation. Result: No response provided.
- Ms. Donna Yocum Chairperson San Fernando Band of Mission Indians. Result: No response provided.
- Ms. Jessica Mauck Cultural Resources Management Department Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians). Result: No response provided.
- Mr. Mark Cochrane Co-Chairperson Serrano Nation of Mission Indians. Result: No response provided

4.18.1 Environmental Setting

Currently, the chronology most frequently applied in the Mojave Desert divides the region's prehistory into five periods marked by changes in archaeological remains, reflecting different ways in which Native peoples adapted to their surroundings.

The Victor Valley area is situated near the presumed boundary between the traditional territories of the Serrano and the Vanyume peoples. Linguistically the Vanyume were probably related to the Serrano, their southern neighbor, although politically they seem to have differed from the Serrano proper. The number of Vanyumes, never large, dwindled rapidly between 1820 and 1834, when southern California Indians were removed to the various missions and their asistencias, and the group virtually disappeared well before 1900. As a result, very little is known about the Vanyume today.

The Serrano's territory is centered at the San Bernardino Mountains, but also includes part of the San Gabriel Mountains, much of the San Bernardino Valley, and the Mojave River valley in the southern portion of the Mojave Desert, reaching as far east as the Cady, Bullion, Sheep Hole, and Coxcomb Mountains. Prior to European contact, Serrano subsistence was defined by the surrounding landscape and primarily based on the gathering of wild and cultivated foods and hunting, exploiting nearly all the resources available. They settled mostly on elevated terraces, hills, and finger ridges near where flowing water emerged from the mountains.

Loosely organized into exogamous clans led by hereditary heads, the clans were in turn affiliated with one of two exogamous moieties, the Wildcat (Tukutam) or the Coyote (Wahiiam). The exact nature of the clans, their structure, function, and number are not known, except that each clan was the largest autonomous political and landholding unit. The core of the unit was the patrilineage, although women retained their own lineage names after marriage. There was no pan-tribal political union among the clans.

The Serrano had a variety of technological skills that they used to acquire food, shelter, and clothing as well as to create ornaments and decorations. Common tools included manos and metates, mortars and pestles, hammerstones, fire drills, awls, arrow straighteners, and stone knives and scrapers.

These lithic tools were made from locally sourced material as well as materials procured through trade or travel. They also used wood, horn, and bone spoons and stirrers; baskets for winnowing, leaching, grinding, transporting, parching, storing, and cooking; and pottery vessels for carrying water, storage, cooking, and serving food and drink. Much of this material cultural, elaborately decorated, does not survive in the archaeological record. As usual, the main items found archaeologically relate to subsistence activities.

Although contact with Europeans may have occurred as early as 1771 or 1772, Spanish influence on Serrano lifeways was minimal until the 1810s, when a mission asistencia was established on the southern edge of Serrano territory. Between then and the end of the mission era in 1834, most of the Serrano in the western portion of their traditional territory were removed to the nearby missions. In the eastern portion, a series of punitive expeditions in 1866-1870 resulted in the death or displacement of almost all remaining Serrano population in the San Bernardino Mountains. Today, most Serrano descendants are affiliated with the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians, or the Serrano Nation of Indians.

4.18.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XVIII. TRIBAL CULTURAL RESOURCES: 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, 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		X		

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
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.		X		

Discussion

a) 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, 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 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)?

Less Than Significant Impact With Mitigation Incorporated. According to PRC Chapter 2.5, Section 21074, tribal cultural resources are sites, features, places, cultural landscapes, sacred places, and items with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historical Resources or included in a local register of historical resources as defined in Section 5020.1.

California AB 52 was approved by Governor Brown on September 25, 2014. AB52 specifies that CEQA projects with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource may have a significant effect on the environment. As such, the bill requires lead agency consultation with California Native American tribes traditionally and culturally affiliated with the geographic area of a proposed project, if the tribe requested to the lead agency, in writing, to be informed of proposed projects in that geographic area. The legislation further requires that the tribe-requested consultation be completed prior to determining whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a project.

Between November 9, 2022, the Mojave Water Agency notified the following tribal entity representatives of the Project and that the 30-day timeframe in which to request consultation would end on December 9, 2022, in accordance with AB52. While the tribes did not request consultation, **Mitigation Measures TCR-1** and **TCR-2** are included to ensure there would be no impacts in the event unanticipated finds are discovered. With the implementation of TRC-1 and TRC-2, the Project's impacts would be less than significant.

b) 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, 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 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?

Less Than Significant Impact With Mitigation Incorporated. The Project Site is a mix of undisturbed and disturbed land, and there are no resources that have been identified as significant within or near the Project Site. As the Project proposes to excavate for water recharge basins, there is the potential to uncover unanticipated tribal cultural resources.

As discussed above, the Mitigation Measures TCR-1 and TCR-2 would be implemented to avoid potential impacts to tribal cultural resources that may be unearthed by Project construction activities. Mitigation Measure CR-3 would be implemented if any human remains – including Native American human remains – are unearthed by Project construction activities. Implementation of these measures will ensure that Project-specific impacts will be less than significant.

4.18.3 Mitigation Measures:

MM TCR-1 The Most Likely Descendent (MLD), as identified by the County Coroner shall be contacted, as detailed in CR-4, of any pre-contact and/or historic-era cultural resources discovered during project implementation and be provided information regarding the nature of the find, so as to determine if Tribal input is required with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by an archaeologist, in coordination with the applicable tribe, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents the applicable tribe, or other tribes as applicable, for the remainder of the project, should the applicable tribe elect to place a monitor on-site.

MM TCR-2 Any and all archaeological/cultural documents created as a part of the project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the MWA for dissemination to applicable tribe. The MWA shall, in good faith, consult with the applicable tribe throughout the life of the project.

4.18.4 Conclusion

Implementation of **Mitigation Measures TCR-1, TCR-2** and **Mitigation Measure CR-3** (Section 4.5) would reduce potentially significant impacts of the Proposed Project associated with Tribal Cultural Resources to less than significant.

4.19 UTILITIES AND SERVICE SYSTEMS

4.19.1 Environmental Setting

Water for the construction would be supplied to the Project site by the Phelan Piñon Hills Community Services District. Electricity is provided by SCE, and natural gas is provided by Southwest Gas.

4.19.2 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XIX. UTILITIES AND SERVICE SYSTEMS: Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?				X
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

Discussion

a) Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

No Impact. The Proposed Project does not require wastewater, stormwater, electric power, nor natural gas or telecommunications facilities because it is the construction and operations of a water recharge basin. The water for dust control would not require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. There is no impact, and no mitigation is required.

b) Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less than Significant Impact. Water for dust control would be supplied by Phelan Piñon Hills Community Services District. It is anticipated that the construction water usage would not be excessive, and the Phelan Piñon Hills Community Services District would have sufficient water supplies available to serve the construction of the Project and during operations such as basin grading and maintenance. The Project would recharge water into the Oeste Sub-basin thereby increasing groundwater availability for the Phelan Piñon Hills Community Services District's future use. There would be a less than significant impact, and no mitigation would be required.

c) Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant. The Project is the construction and operations of water recharge basins. It is anticipated that the construction contractor would provide "portapotties" for the few construction workers and pumped at the nearest wastewater treatment facility. Therefore, the Project has a less than significant impact on wastewater treatment capacity, and no mitigation is required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less than Significant Impact. Project construction is not anticipated to generate significant quantities of solid waste with the potential to affect the capacity of regional landfills. Waste anticipated to be generated during construction would be trash associated with employee lunches, water bottles, etc, and in a very minor amount.

The regional landfills have ample capacity to service the Project. The impact would be less than significant, and no mitigation is required.

e) Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. All collection, transportation, and disposal of solid waste generated by the Project would comply with all applicable federal, state, and local statutes and regulations. Under AB 939, the Integrated Waste Management Act of 1989, local jurisdictions are required to develop source reduction, reuse, recycling, and composting programs to reduce the amount of solid waste entering landfills. Local jurisdictions are mandated to divert at least 50% of their solid

waste generation into recycling. In addition, the state has set an ambitious goal of 75% recycling, composting, and source reduction of solid waste by 2020. To help reach this goal, the state has adopted AB 341 and AB 1826. AB 341 is a mandatory commercial recycling bill and AB 1826 is a mandatory organic recycling bill. The County adopted its Integrated Waste Management Plan in 1998, which includes the Countywide Summary Plan, Source Reduction and Recycling Elements, and Non-Disposal Facility Elements for the County and each city in the County. Waste generated by the Project would enter the County's waste stream but would not adversely affect the County's ability to meet the requirements of AB 939, AB 341, or AB 1826, since the Project's waste generation would represent a nominal percentage of the waste created within the County. The Project would comply with all regulatory requirements regarding solid waste, and impacts associated with solid waste disposal regulations would be less than significant.

4.19.3 Mitigation Measures

No mitigation measures associated with impacts to Utilities and Service Systems apply to the Proposed Project.

4.19.4 Conclusion

No potentially significant impacts of the Proposed Project are associated with Utilities and Service Systems, and no mitigation would be required.

4.20 WILDFIRE

4.20.1 Impact Analysis

CEQA THRESHOLDS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XX. WILDFIRE: If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, Would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of wildfire?				X
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

Discussion

Section XX (*a-d*)

No Impact. The Proposed Project site is not located within a very high fire hazard severity zone according to County of San Bernardino General Plan maps or Local Responsibility and State Responsibility Area maps. Therefore, no impacts associated with wildfire would occur and no mitigation is required.

4.20.2 Mitigation Measures

No mitigation measures associated with impacts to Wildfire apply to the Proposed Project.

4.20.3 Conclusion

No potentially significant impacts of the Proposed Project are associated with Wildfire, and no mitigation would be required.

4.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL IMPACTS	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact or Does Not Apply
XXI. MANDATORY FINDINGS OF SIGNIFICANCE:				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		X		
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		X		

Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant With Mitigation Incorporated. The Project Site is vacant, contains no drainages, does not contain suitable habitat for any sensitive species, and would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, other approved local, regional, or state habitat conservation plan. **Mitigation Measures BIO-1** and **BIO-2** and **BIO-3** to reduce potential impacts to western Joshua tree and nesting birds were identified to reduce potential impacts to less than significant levels.

According to the Cultural Resources Assessment (Appendix C), no cultural resources have been recorded within the Project Site, and the Project Site does not contain any resources that are important to major periods of California history or prehistory. However, the **Mitigation Measures CR-1** and **CR-2** to manage unanticipated discoveries of cultural and Native American resources,

and **CR-3, TCR-1,** and **TCR-2** manage unanticipated discoveries of human remains were determined to be necessary to reduce impacts to less than significant. The Project Site is within an unknown potential paleontological resource according to the Cultural Resources study performed for the Project, although the level of knowledge of the area is not specifically known. **Mitigation Measure GEO-1** to manage unanticipated discoveries of paleontological resources is required to reduce impacts to less than significant.

Implementation of these measures will ensure that Project-specific impacts would be less than significant.

With the implementation of **Mitigation Measures BIO-1, BIO-2, BIO-3** and **CR-1, CR-2, CR-3, TCR-1, TCR-2** and **GEO-1,** the Proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or an endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

b) *Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?*

Less Than Significant Impact. As demonstrated by the analysis in this Initial Study, the Proposed Project would not result in any significant and unavoidable environmental impacts in any environmental category with the implementation of Project-specific mitigation measures. Implementation of mitigation measures at the Project level would reduce the potential for incremental environmental effects of the Proposed Project when viewed in conjunction with the effects of past projects, current projects, or planned future projects. Project impacts would be less than significant with mitigation incorporated.

c) *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

Less Than Significant. The Proposed Project would not cause substantial adverse effects on human beings, either directly or indirectly, according to the analysis.

Therefore, the Proposed Project would not directly or indirectly cause substantial adverse effects on human beings.

5 LIST OF PREPARERS

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6 REFERENCES

The following reports and/or studies are applicable to development of the Project site and are hereby incorporated by reference:

California Department of Water Resources, October 2012. *Appendix A. Department of Water Resources Water Quality Policy and Implementation Process for Acceptance of Non-Project Water into the State Water Project* (DWR, October 2012).

Cal Fire and Forestry, Fire Hazard Severity Zones in the State Responsibility Area, as accessed 6/29/23, at https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008.

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California State University Fullerton, Dept of Geological Sciences, July 2009. *Oeste Hydrologic Sub-Area Hydrogeologic Report* (DGS, July 2009)

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Tully & Young, May 27, 2021. 2020 Urban Water Management Plan, Mojave Water Agency (T&Y, 2021).

Appendix A

Oeste Basins, Air Quality, Greenhouse Gas, and Energy Impact Study

MD Acoustics,

March 14, 2023

Appendix B-1

Oeste Recharge Basins Project Mojave Water Agency, Habitat and Jurisdictional Assessment

ELMT Consulting

July 2021

Appendix B-2

California Department of Fish and Game Mohave Ground Squirrel Guideline Report, Proposed Oeste Recharge Basin Project

Randel Wildlife Consulting, Inc

June 2023

Appendix C

Historical/Archaeological Resources Survey Report, Oeste Recharge Project

CRM Tech

May 25, 2021

Appendix C

Paleontological Resources Assessment Report

CRM Tech

May 26, 2021