
DRAFT

**Initial Study and Mitigated Negative Declaration
MOJAVE TANKS AND BOOSTER STATION PROJECT**

August 2020

Lead Agency:



**1001 I Street
Sacramento, CA 95814**

Prepared for:



**Golden State
Water Company**
A Subsidiary of American States Water Company

**13608 Hitt Road
Apple Valley, CA 92308**

Prepared by:



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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DRAFT MITIGATED NEGATIVE DECLARATION MOJAVE TANKS AND BOOSTER STATION PROJECT

Lead Agency: State Water Resources Control Board

Project Proponent: Golden State Water Company (GSWC)

Project Location: The Proposed Project is located at 11149 Juniper Avenue, Morongo Valley, CA 92256. The project site is characterized as an undeveloped parcel (APN 058-318-104) within a rural residential neighborhood bounded by Mojave Drive to the north, Juniper Avenue to the west, an existing GSWC water tank, booster pump, and residential property to the east, and undeveloped desert land to the south in Morongo Valley, California.

Project Description:

GSWC proposes to construct two 0.4 million-gallon (MG) steel water storage tanks and a booster station at the southeast corner of Juniper Avenue and Mojave Drive in Morongo Valley, San Bernardino County, California (Figure 1 and 2). A new building would be installed to house the prefabricated booster pump station. One tank would be constructed in Phase 1 and the second tank would be constructed in Phase 2. An earthen basin to retain tank overflow and site drainage would also be constructed within the project site. The proposed water storage tanks and booster station would replace the existing 0.1 MG bolted steel water storage tank and booster station located at the current Mojave Plant 230 feet to the east. The existing storage tank and booster station are in poor condition and in need of replacement, but would not be removed as part of this Project. Replacement of these facilities is essential for the purveyance of water supplies to the Mojave Tank Zone and the Macelle Tank Zone. The proposed water storage tanks would provide an additional 0.7 MG of new water storage capacity to the Mojave Tank Zone. The existing tank would be removed after installation of the proposed tank is complete.

Construction of the proposed booster station would require a new Southern California Edison (SCE) electrical service connection at the project site. An SCE transformer and emergency generator would be installed on the southwest corner of the project site, adjacent to the proposed booster station building. The SCE transformer would be connected to main power through 80 feet of 2-inch conduit at Juniper Ave. To extend the water main to Proposed Project site, approximately 160 feet of 8-inch PVC pipeline would be installed in Mojave Drive. Approximately 45 feet of 8-inch pipeline would be installed between the booster station output and water main in Juniper Ave.

The proposed water storage tanks would have a capacity of 0.4 MG and diameter of 58 feet each. The proposed tanks would be painted desert sand to match the adjacent landscape. A new 840 sq. ft. building located south of the proposed storage tanks would house a new booster pump station. The Proposed Project includes an earthen basin (70 feet by 20 feet by 5 feet deep) for tank overflow and site drainage in the southern portion of the project site and perimeter fencing consisting of eight feet tall chain link with slats around the entire project site (Figure 3).

The proposed water storage tanks and booster station would operate 24 hours a day/7 days a week. The site would be visited by a Water System Operator each day. Maintenance activities would occur as needed. Access to the project site would be provided along Juniper Avenue.

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: Pre-construction Surveys for Burrowing Owl: Pre-construction surveys for burrowing owl shall be conducted prior to the initial clearing of the Project site. The burrowing owl surveys shall follow the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Two take avoidance surveys shall be conducted, with the first survey being conducted no less than 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If construction is halted for more than two weeks, an additional take avoidance survey shall be conducted no more than 24 hours prior to re-initiating construction.

If burrowing owls or suitable burrowing owl burrows with signs (e.g., whitewash, pellets, feathers, prey remains) are identified in the Project site during the surveys, consultation with the CDFW shall be conducted and the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) for surveys and mitigation shall be followed.

BIO-2: Pre-construction Survey for American Badger. Pre-construction surveys for American Badger shall be conducted prior to the initial clearing of the Project site and can be done concurrently with the burrowing owl survey.

The American Badger survey shall be conducted, no less than 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If construction is halted for more than two weeks, an additional take avoidance survey shall be conducted no more than 24 hours prior to re-initiating construction. If American badger den sites are identified in the Project site during the survey, consultation with the CDFW shall be conducted.

If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200-foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFW. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a nonmaternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season.

(February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFW. A written report documenting the badger removal shall be provided to CDFW within 30 days of relocation. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

BIO-3: Pre-construction Nesting Bird Survey: If construction or other project activities are scheduled to occur during the bird breeding season (February through August for raptors and March through August for the majority of migratory bird species), a pre-construction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, including those for the loggerhead shrike, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. If construction is halted for more than two weeks, an additional survey shall be conducted no more than 24 hours prior to re-initiating construction. The nesting bird survey shall include the Project site and adjacent areas where project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise, within 500-feet of the site. If an active nest is identified, a qualified biologist shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Buffers will be determined by a qualified biologist and are typically 300-foot radius for songbirds and 500-foot radius for raptors. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

Cultural Resources

CUL-1:

1. 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 Professional Qualification Standards in the appropriate field shall be hired to assess the find. GSWC will immediately contact the Lead Agency and notify them of the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any Native American pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide SMBMI Tribal input with regards to significance and treatment.
2. If significant Native American pre-contact archaeological 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 SMBMI and the Lead Agency for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
3. If human remains are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall

be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

Geology and Soils

GEO-1: If project excavations exceed four feet in depth, the Applicant (or its contractor) shall retain a qualified paleontologist to determine if the older Quaternary sediments are being disturbed. If so, the paleontologist shall establish a monitoring program to recover any significant fossils that may be encountered. Sediment samples shall be collected and processed to determine the small fossil potential in the project area. Any significant fossils recovered shall be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

Tribal Cultural Resources

TCR-1:

1. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CR-1, of any Native American pre-contact archaeological resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input 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 the archaeologist, in coordination with SMBMI and the CEQA lead agency, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of project ground disturbing activities, should SMBMI elect to place a monitor on-site.
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 applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

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**Draft Initial Study and Mitigated Negative Declaration
Mojave Tanks and Booster Station Project**

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ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APN	Assessor's Parcel Number
AVAQMD	Antelope Valley Air Quality Management District
BMPs	Best Management Practices
CalEEMod	California Emissions Estimator Model
Cal Fire	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH ₄	Methane
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CRHR	California Register of Historic Places
CWA	California Water Act
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FRAP	Fire and Resource Assessment Program
GHGs	Greenhouse Gases
GHG Plan	San Bernardino County Regional Greenhouse Gas Reduction Plan
GSWC	Golden State Water Company
HCP	Habitat Conservation Plan
KCAPCD	Kern County Air Pollution Control District
kWh	Kilowatt-hours
L _{dn}	Day-Night Average
L _{eq}	Equivalent Noise Level
LRA	Local Responsibility Area
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District

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MG	Million Gallon
MLD	Most Likely Descendant
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MUSD	Morongo Unified School District
MVFD	Morongo Valley Fire Department
NAHC	Native American Heritage Commission
NCCP	Natural Community Conservation Plan
ND	Negative Declaration
NPDES	National Pollutant Discharge Elimination System
N ₂ O	Nitrous Oxide
NO _x	Nitrogen Oxides
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O ₃	Ozone
PM ₁₀ and PM _{2.5}	Particulate Matter
PRC	Public Resources Code
ROG	Reactive Organic Gases
RWQCB	Regional Water Quality Control Board
SCAQMD	South Coast Air Quality Management District
SCCIC	South-Central Coastal Information Center
SCE	Southern California Edison
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SR	State Route
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	Vehicle Miles Traveled

SECTION 1.0 BACKGROUND

1.1 Summary

Project Title:	Mojave Tanks and Booster Station Project (Proposed Project)
Lead Agency Name and Address:	State Water Resources Control Board PO Box 944212 Sacramento, CA 94244-2120
Contact Person and Phone Number:	Wendy Pierce Senior Environmental Scientist Special Project Review Unit Division of Financial Assistance State Water Resources Control Board (916) 449-5178 Wendy.Pierce@waterboards.ca.gov
Project Proponent:	Golden State Water Company
Contact Person and Phone Number:	George Zakhari Water Quality Engineer Mountain / Desert District Office: (760) 515-8322 Cell: (442) 800-3327
Project Location:	11149 Juniper Avenue Morongo Valley, CA 92256
General Plan Designation:	Single Residential (RS-10M)
Zoning:	Single Residential (RS-10M)

1.2 Introduction

The State Water Resources Control Board (SWRCB) is the Lead Agency for this Initial Study. The Initial Study has been prepared to identify and assess the anticipated environmental impacts of the Mojave Tanks and Booster Station Project. This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Pub. Res. Code, Section 21000 *et seq.*) and State CEQA Guidelines (14 CCR 15000 *et seq.*). CEQA requires that all state and local government agencies consider the environmental consequences of projects over which they have discretionary authority before acting on those projects. A CEQA Initial Study is generally used to determine which CEQA document is appropriate

for a project (Negative Declaration [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

The Project site consists of approximately 0.923 acre of property located in the unincorporated community of Morongo Valley, San Bernardino County (Figure 1). The site is located in the southern half of Section 29 of Township 1 South, Range 4 East, San Bernardino Base and Meridian as depicted on the 1997 Morongo Valley, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map. The site is located 0.5 mile north of Twenty-nine Palms Highway (SH-62) and 10 miles north of Interstate 10 (I-10).

The Project footprint is 0.923 acres (Figure 2). The Project site (APN 058-318-104) is located on an undeveloped property within a rural residential area with the surrounding land uses consisting of RS, Single Residential (RS-10m) (County of San Bernardino 2007a; 2007b). The site is bounded by Mojave Drive to the north, Juniper Avenue to the west, GSWC water tank and residential property to the east, and undeveloped desert to the south (Figure 2). The site includes the undeveloped tank property and electrical service and pipeline extensions in Juniper Avenue and Mojave Drive (Figure 3). The elevation of the Project site ranges from 2,690 feet above mean sea level (AMSL) to 2,700 feet AMSL. The Project site is relatively level, consisting of mostly sandy soils.

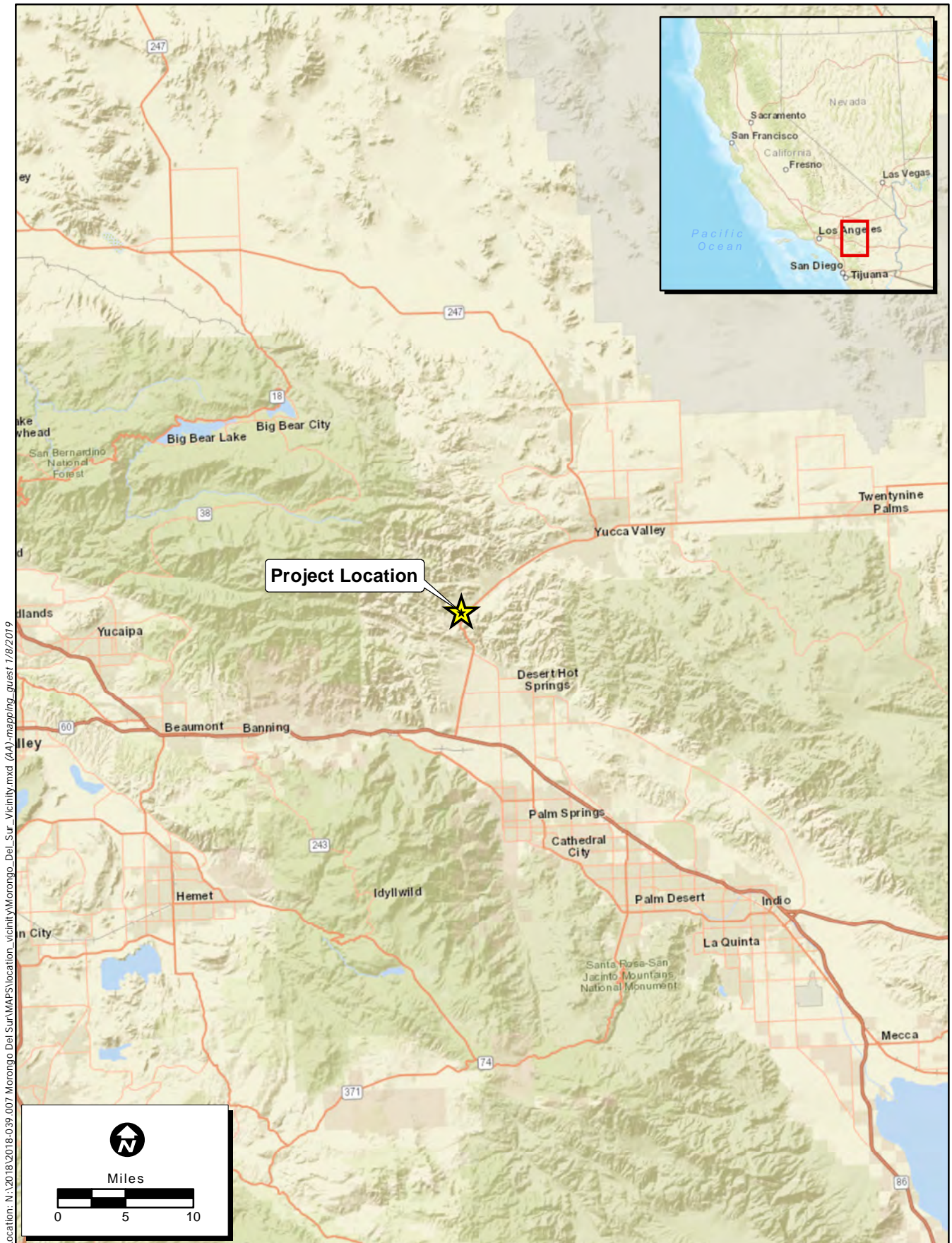


Figure 1. Project Vicinity

2018-039.007 Morongo Del Sur

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Map Date: 1/8/2019

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

Figure 2. Project Location

2018-039.007 Morongo Del Sur

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SECTION 2.0 PROJECT DESCRIPTION

2.1 Project Characteristics

GSWC proposes to construct two 0.4 million-gallon (MG) steel water storage tanks and a booster station at the southeast corner of Juniper Avenue and Mojave Drive in Morongo Valley, San Bernardino County, California (Proposed Project). One tank would be constructed in Phase 1 and the second tank would be constructed in Phase 2. The proposed water storage tanks and booster station would replace the existing 0.1 MG bolted steel water storage tank and booster station located at the current Mojave Plant 230 feet to the east. The existing storage tank and booster station are in poor condition and in need of replacement. A new building would be installed to house the booster pump station. An earthen basin to retain tank overflow and site drainage would also be constructed within the project site. Replacement of these facilities is essential for the purveyance of water supplies to the Mojave Tank Zone and the Macelle Tank Zone. The proposed water storage tanks would provide an additional 0.7 MG of new water storage capacity to the Mojave Tank Zone. The existing tank is filled with existing wells and the boosters pump water from the tank to higher elevated zones. The proposed tanks would operate in the same manner. The increased volume of the proposed tanks would not result in an increase in electricity, because the proposed increase of the volume of the tanks is to meet updated fire flow requirements. Construction of the proposed booster station would require a new Southern California Edison (SCE) electrical service connection at the project site. An SCE transformer and emergency generator would be installed on the southwest corner of the project site, adjacent to the proposed booster station building.

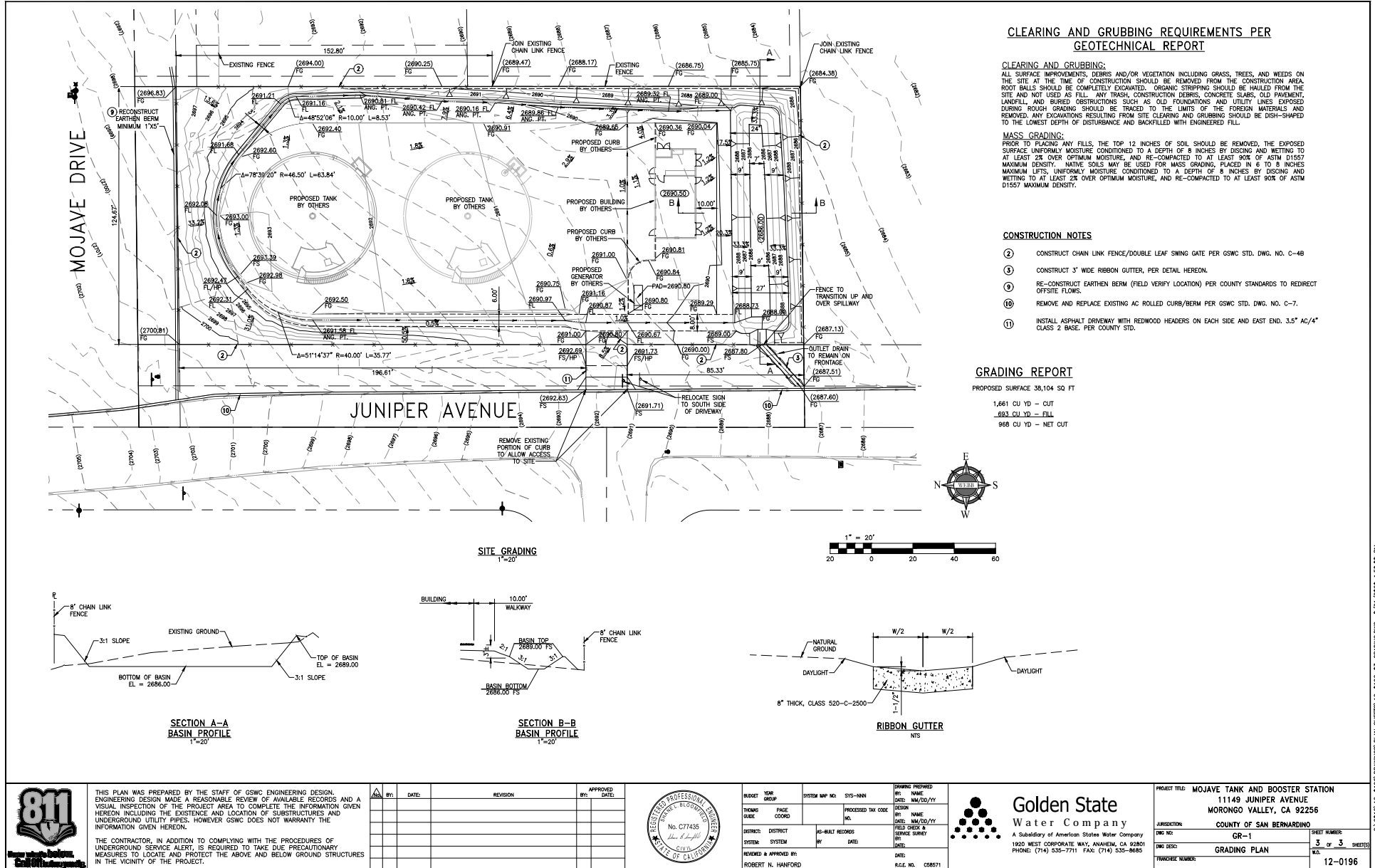
The proposed water storage tanks would have a capacity of 0.4 MG and diameter of 58 feet and height of 24 feet each. The proposed tanks would be painted desert sand to match the adjacent landscape. The proposed booster station would be located in an 840 sq. ft. building located south of the proposed storage tanks. The Proposed Project includes an earthen basin (70 feet by 20 feet by 5 feet deep) for tank overflow and site drainage in the southern portion of the project site and perimeter fencing consisting of eight feet tall chain link with slats (Figure 3). The proposed water storage tanks and booster station would operate 24 hours a day/7 days a week. Maintenance activities would occur as needed. Access to the project site would be provided along Juniper Avenue.

Construction activities within Juniper Avenue (a County-maintained road) would consist of installation of an 45 feet of 8-inch PVC water main, and 80 feet of 2-inch SCE conduit. An 8-inch PVC pipeline extension (approximately 160 feet) would be constructed in Mojave Drive, which is not a County-maintained road. The existing tank would be removed after installation of the proposed tank is complete.

2.2 Project Timing

Construction will be divided into two phases: Phase 1 would include the construction of the first tank, booster station, earthen basin, and emergency generator, which would take approximately 10 months to complete. Phase 2 would construct the second tank and is currently estimated to begin in 2040. The second tank will be built when the need arises after County approval of any development that drives the need.

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ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 3. Site Plan
2018-039.007 Mojave Tanks and Booster Station

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2.3 Regulatory Requirements, Permits, and Approvals

The following approvals and regulatory permits would be required for implementation of the Proposed Project:

- Water Supply Permit; State Water Resources Control Board
- Encroachment Permit for work in Juniper Avenue; San Bernardino County

2.4 Consultation with California Native American Tribe(s)

California Native American tribes traditionally and culturally affiliated with the project area have been notified of the project. No tribes have requested consultation pursuant to Public Resources Code section 21080.3.1. A summary of the notification results is provided in Section 4.18 of this Initial Study.

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SECTION 3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by this project as indicated by the checklist on the following pages.

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards/Hazardous Materials | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Utilities and Service Systems |
| <input checked="" type="checkbox"/> Cultural Resources | <input type="checkbox"/> Noise | <input type="checkbox"/> Wildfire |
| <input type="checkbox"/> Energy | <input checked="" type="checkbox"/> Paleontological Resources | <input type="checkbox"/> Mandatory Findings of Significance |
| <input checked="" type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population and Housing | |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Public Services | |

Determination

On the basis of this initial evaluation:

I find that the Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared. ☐

I find that although the 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. ☒

I find that the Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required. ☐

I find that the 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. ☐

I find that although the 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 Project, nothing further is required. ☐

Wendy Pierce
Senior Environmental Scientist

Date

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SECTION 4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

The project site is located on an undeveloped parcel within a rural residential neighborhood bounded by Mojave Drive to the north, Juniper Avenue to the west, a municipal water tank and residential property to the east, and undeveloped desert to the south in Morongo Valley, California. Prominent natural views located in the region include views of the San Gorgonio Mountains to the west and views of the Big Morongo Canyon Preserve to the east.

State Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. A highway can be designated as scenic based on how much natural beauty can be seen by users of the highway, the quality of the scenic landscape, and if development impacts the enjoyment of the view. The nearest scenic highway, State Route-38, extends from 0.1 miles east of the South Fork Campground to 2.9 miles South of State Route 18 at the state line. This scenic highway is approximately 49 miles from the Project. The Project site is located approximately a half-mile northwest of State Route 62 (SR-62), an Eligible State Scenic Highway – Not Officially Designated. The Project site is not within or adjacent to a state scenic highway (Caltrans 2019).

Visual Character of the Project Site

The project site consists of relatively flat undisturbed land bounded by Juniper Avenue to the west, Mojave Drive and residences to the north, a residence to the east, and open undisturbed land to the south. The existing tank is 27' diameter x 24' tall and the roof elevation is 2717 feet AMSL.

4.1.2 Aesthetics (I) Environmental Checklist and Discussion

Except as provided in Public Resources Code Section 21099, would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Scenic vistas in Morongo Valley mainly consist of views of the San Gorgonio Mountains to the east and the Big Morongo Canyon Preserve, which is located 0.8 mile to the west. The Proposed Project would be located in a rural residential area surrounded by residential development. The new tanks would be roughly 24 feet tall and graded down 5 feet into existing soil. Therefore, the new height above ground surface would be 19 feet. The site is relatively flat, and the Project would not degrade ridgeline or natural landforms. The Project would also construct an eight-foot-high perimeter fence and entry gate along Juniper Avenue, which would provide additional screening. The new tanks would be at an elevation of 2718 feet AMSL compared to the existing tank, which is 2717 feet AMSL, a difference of one foot in

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height. This change in elevation would not be sufficient to block the views of the nearest buildings of the distant mountain views to the east or west. Overall, the appearance of the new tanks would be similar to the existing tank on the adjacent site and would not be large enough to obstruct views of the San Geronio Mountains or the Big Morongo Canyon Preserve. Due to the nature of the Proposed Project and the existing development surrounding the project site, the Proposed Project is not within a scenic vista and is not anticipated to affect scenic vistas. No impact would occur.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would not damage any trees, rock outcroppings, or historic buildings, as none of these features are located on the project site. The project site is located approximately 0.5-mile northwest of SR-62 an Eligible State Scenic Highway – Not Officially Designated, and therefore, is not within or adjacent to a state scenic highway (Caltrans 2019). No impact would occur.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is located on an undeveloped parcel within a rural residential neighborhood bounded by Mojave Drive to the north, Juniper Avenue to the west, a GSWC water tank and residential property to the east, and undeveloped desert to the south in Morongo Valley, California. The Proposed Project would replace an existing tank and booster station and add a new tank, booster station, eight foot high perimeter chain-link fence, and entry gate along Juniper Avenue. The Project is not anticipated to significantly change the rural residential character of the area. The Proposed Project elements would be painted desert sand to blend into the surroundings and would not degrade public views from Juniper Avenue and Mojave Drive of the site and its surroundings. A less than significant impact would occur.

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Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Minimum security lighting is proposed as part of the Proposed Project. This would include box lighting on the exterior of the booster station and a light pole on the north side of the reservoir, which would add approximately one foot-candle of light intensity to the project site. The lighting would be directed downward, and glare impacts from the Proposed Project are not anticipated. A less than significant impact would occur.

4.1.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.2 Agriculture and Forestry Resources

4.2.1 Environmental Setting

"Forest land" as defined by Public Resources Code Section 12220(g) is "...land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

"Timberland" as defined by Public Resources Code Section 4526 means "...land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."

"Timberland zoned Timberland Production" is defined by Public Resources Code Section 51104(g) as "...an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision h."

The project site is zoned Single Residential (MV/RS-10M) and is not zoned as forest land or agriculture (County of San Bernardino 2007a). The project site and surrounding properties are not currently used for agriculture or timberland production.

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4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project is not located within designated farmland (County of San Bernardino 2007a). The California Mapping and Monitoring Program, Important Farmlands Map does not list the soils on the project site as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) because the Resources Agency Farmland Mapping and Monitoring Program has not mapped the project area. Therefore, the Proposed Project would not 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. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is zoned Single Residential (MV/RS-10M) and is not located in an agricultural use zone. According to the California Department of Conservation Williamson Act Parcels Map for San Bernardino County, the project site is not subject to a Williamson Act contract (County of San Bernardino 2007a; CDC 2019b). Therefore, the Proposed Project would not result in a conflict with an agricultural zoning designation or a Williamson Act contract. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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The project site is zoned Single Residential (MV/RS-10M) and is not zoned for forest land, timberland, or timberland production (County of San Bernardino 2007a). The project site is currently undeveloped and contains cheesebush scrub vegetation with less than 10% tree cover; it does not contain forestland or timberland. Surrounding areas are developed with rural residential uses. No impact would occur.

Would the project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is currently undeveloped and does not contain forestland or timberland, as defined above. Surrounding areas are developed with commercial and residential land uses. No impact would occur.

Would the project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site and the surrounding properties are not currently zoned or used for agriculture, and so could not result in the conversion of Farmland to non-agricultural use. As explained above, the Proposed Project would not result in the conversion of forest land to non-forest use as the project is not on forest land. No impact would occur.

4.2.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.3 Air Quality

4.3.1 Environmental Setting

The project site is located in Morongo Valley, which is part of the Mojave Desert Air Basin (MDAB). 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. 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. 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, with portions classified as dry-very hot desert, to indicate at least three months have maximum average temperatures over 100.4 degrees Fahrenheit (°F).

The MDAB is comprised of four air districts, the Kern County Air Pollution Control District (KCAPCD), the Antelope Valley Air Quality Management District (AVAQMD), the Mojave Desert Air Quality Management District (MDAQMD), and the eastern portion of the South Coast Air Quality Management District (SCAQMD). In Morongo Valley, the air quality regulating authority is the MDAQMD. The MDAQMD monitors air quality in the San Bernardino County's high desert and serves as the lead agency responsible for implementing and enforcing federal, state, and regional air quality regulations.

Both the US Environmental Protection Agency (EPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O₃), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The western portion of San Bernardino County, which encompasses the Project site, is designated as a nonattainment area for O₃ and coarse particulate matter (PM₁₀) under both federal and state standards (CARB 2018).

MDAQMD is charged with the responsibility of implementing air quality programs and ensuring that national and state ambient air quality standards are not exceeded and that air quality conditions are maintained in the project region. In an attempt to achieve national and state ambient air quality standards and maintain air quality, the air district has completed several air quality attainment plans and reports, which together constitute the State Implementation Plan (SIP) for the portion of the MDAB encompassing the Proposed Project.

The MDAQMD has also adopted various rules and regulations for the control of stationary and area sources of emissions. Provisions applicable to the Proposed Project are summarized as follows:

- **Rule 201 – Permits to Construct** applies to the construction of air emissions sources that are not otherwise exempt under Rule 219.
- **Rule 203 – Permit to Operate** requires air emissions sources that are not exempted by Rule 219 to obtain operating permit.
- **Rule 204 – Requirements** contains rule language describing New Source Review including Best Available Control Technology and emissions offset requirements for stationary sources.
- **Rule 219 – Equipment Not Requiring a Permit** describes the type of equipment that does not require a permit pursuant to District Rules 201 and 203.
- **Rule 401 – Visible Emissions** limits visibility of fugitive dust to less than No. 1 on the Ringlemann Chart (i.e., 20-percent opacity).
- **Rule 402 – Nuisance** applies when complaints from the public are received by the district.

- **Rule 403 – Fugitive Dust** prohibits visible dust beyond the property line of the emission source, requires “every reasonable precaution” to minimize fugitive dust emissions and prevent trackout of materials onto public roadways, and prohibits greater than 100 µg/m³ difference between upwind and downwind particulate concentrations.
- **Rule 404 – Particulate Matter Concentration** sets concentration limits based on the flow rate of the discharge. The concentration limits would apply to discharge from a stack (e.g., baghouse).
- **Rule 405 – Solid Particulate Matter Weight** limits emissions based on the weight of material processed.
- **Rule 900 – New Source Performance Standards** incorporates federal regulation (40 Code of Federal Regulations [CFR] 60) that affects the construction of emissions units. Requirements may or may not apply depending on the size, construction, and manufacture date of equipment that will be used. Specifically, NSPS OOO (40 CFR 60.670) applies to equipment in nonmetallic mineral processing plants.
- **Regulation XIII – New Source Review** contains a number of rules that are applied to new and modified sources.
- **Rule 1520 – Control of Toxic Air Contaminants from Existing Sources** implements AB 2588 Air Toxics Hot Spots requirements.
- **Rule 2002 – General Federal Actions Conformity** requires federal actions to conform to the applicable implementation plan.

4.3.2 Air Quality (III) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As part of its enforcement responsibilities, the EPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the project site is located within the MDAB, which is under the jurisdiction of the MDAQMD. The MDAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the air basin is in nonattainment. In order to reduce such emissions, the

MDAQMD adopts and enforces rules and regulations concerning sources of air pollution, issues permits for stationary sources of air pollution, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the federal Clean Air Act and Clean Air Act Amendments. The MDAQMD also assists CARB in preparing the SIP by preparing attainment plans that demonstrate how the ambient air quality standards will be achieved. The attainment plans describe the rules that will be developed and other means by which the MDAQMD will manage the emissions within its jurisdiction.

A project conforms with the MDAQMD attainment plans if it complies with all applicable district rules and regulations, complies with all control measures 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). A project is nonconforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. Conformity with growth forecasts can be established by demonstrating that the Proposed Project is consistent with the land use plan that was used to generate the growth forecast. The source of data forming the basis for the projections of air pollutant emissions in Morongo Valley is the County of San Bernardino General Plan. An example of a nonconforming 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, which in the case of the Proposed Project is the County General Plan).

The Proposed Project would be required to comply with all applicable district rules and regulations, including MDAQMD Rule 403 (Fugitive Dust) described above, and would comply with all proposed control measures from the applicable plans. As demonstrated below, the Proposed Project would not surpass any of the MDAQMD's significance thresholds for individual pollutants. Additionally, the Proposed Project is consistent with the growth forecast used to inform MDAQMD air quality planning, specifically the County of San Bernardino General Plan. The project site and immediate vicinity are located in an area designated as Single Residential (County of San Bernardino 2007a), and the current existing uses surrounding the project site include vacant land, residential, and a GSWC tank and booster station. The Proposed Project would construct a booster station and two water storage tanks on vacant land to replace the existing GSWC tank and booster station. This type of infrastructure is an allowed use in all land use zones. Thus, the Proposed Project is consistent with the growth forecasts used to inform MDAQMD air quality planning since it is consistent with the County's land use designation for the project site. Additionally, the Proposed Project proposes a nonresidential land use and would not result in an increase in population or vehicle trips. The Proposed Project would be constructed to meet the current maximum day demand with fire flow conditions. While the new water supply facility would provide more flexibility and reliability to the Morongo Del Sur System, it would not increase capacity beyond the current maximum day demand accounting for fire flow conditions. Therefore, the Proposed Project would not exceed the population or job growth projections used to develop MDAQMD's attainment plans, and thus would not result in a conflict. No impact would occur.

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Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

The Proposed Project's air quality impacts are mainly attributable to short-term construction activities. The long-term impacts of operating the water tanks and booster station would be from a daily visit by a Water System Operator and periodic maintenance and would be expected to be minimal. For purposes of impact assessment, air quality impacts have been separated into construction impacts and operational impacts.

Construction Emissions

Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including reactive organic gas (ROG), CO, NO_x, PM₁₀, and PM_{2.5}. The largest amount of ROG, CO, and NO_x emissions would occur during the earthwork phase. PM₁₀ and PM_{2.5} emissions would occur from fugitive dust (due to earthwork and excavation) and from construction equipment exhaust. Exhaust emissions from construction activities include emissions associated with the transport of machinery and supplies to and from the project site, emissions produced on-site as the equipment is used, and emissions from trucks transporting materials to and from the site. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur, but have the potential to represent a significant air quality impact.

During construction activities, the Proposed Project would also be required to comply with MDAQMD Rule 403 (Fugitive Dust). The purpose of this rule is to prohibit visible dust beyond the property line of the emission source, require "every reasonable precaution" to minimize fugitive dust emissions, and prevent trackout of materials onto public roadways.

The MDAQMD's (2016) *California Environmental Quality Act and Federal Conformity Guidelines* identifies both annual and daily construction significance thresholds for ROG, CO, and NO_x, SO₂, PM₁₀, and PM_{2.5}. Construction-generated ozone precursor emissions associated with the Proposed Project were calculated using CalEEMod. Predicted maximum annual and daily construction-generated emissions of criteria air pollutants for the Proposed Project are summarized and compared to MDAQMD significance thresholds in Table 4.3-1.

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Table 4.3-1. Construction-Related Criteria Pollutant Emissions

Construction Year	Pollutant (pounds per day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Annual (Maximum Tons per Year)						
Construction in 2020	0.2	1.9	1.6	0.0	0.2	0.1
Construction in 2021	0.1	0.9	0.9	0.0	0.1	0.0
<i>MDAQMD Potentially Significant Impact Annual Threshold</i>	25	25	100	25	15	12
Exceed MDAQMD Threshold?	No	No	No	No	No	No
Daily (Maximum Pounds per Day)						
Construction in 2020	3.54	28.85	25.39	0.05	6.32	3.73
Construction in 2021	3.20	26.00	24.79	0.05	1.51	1.22
<i>MDAQMD Potentially Significant Impact Daily Threshold</i>	137	137	548	137	82	65
Exceed MDAQMD Threshold?	No	No	No	No	No	No

Source: CalEEMod version 2016.3.2. Refer to Appendix A for Model Data Outputs.

Notes: Emissions estimates account for the demolition of the existing water tank and ground disturbance of the entire site in order to account for the potential installation of a second water tank. Emissions account for the following construction equipment to complete development of the full site with two water tanks:

Demolition activities: Concrete/Industrial Saws (1), Rubber Tired Dozers (1), Tractors/Loaders/Backhoes (3).

Site preparation and grading activities: Excavators (1), Rubber Tired Dozers (1), Tractors/Loaders/Backhoes (2),

Water tank installation: Cranes (1), Forklifts (1), Off-Highway Trucks (2), Generator Sets (1), Pavers (1), Paving Equipment (1), Rollers (1), Tractors/Loaders/Backhoes (1).

Project implementation was modeled for air pollutant emissions to occur over a 10-month time period spanning 2020-2021. Actual construction of the Project site would be dictated by several other forces, primarily associated with water demand in the Project region. For instance, the second water tank is not anticipated to be constructed until the year 2040. As such, if construction starts at a later date as anticipated, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Thus, considering full Project implementation by the year 2021 provides a conservative estimate of resultant air pollutant emissions

As shown in Table 4.3-1, construction-generated emissions would not exceed MDAQMD significance thresholds. Impacts resulting from the installation of the water tank as proposed by the Project would be less than significant.

Long-Term Operational Emissions

The Proposed Project would not include the provision of new permanent stationary or mobile sources of criteria air pollutant emissions, and therefore, by its very nature, would not generate quantifiable criteria

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emissions from project operations. The Proposed Project does not propose any permanent source or stationary source criteria air pollutant emissions. Once the Proposed Project is implemented, there would be minimal increase in automobile trips to the area from one Water System Operator. While it is anticipated that the Proposed Project would require intermittent maintenance to be conducted by GSWC staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Long-term impacts would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the project site include residences to the north, west, and east. The nearest residence is located directly adjacent to the eastern boundary of the site. Even though sensitive receptors may be located nearby, emissions would be less than significant and would not significantly affect the receptors.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of diesel particulate matter (DPM), ROG, NO_x, CO, and PM₁₀ from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. However, as shown in Table 4.2-1 the Project would not exceed the MDAQMD emission thresholds. The portion of the MDAB which encompasses the Project area is designated as a nonattainment area for O₃ and PM₁₀ under both federal and state standards (CARB 2018). Thus, existing O₃ and PM₁₀ levels in the MDAB are at unhealthy levels during certain periods.

The health effects associated with O₃ are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O₃ precursor emissions (ROG or NO_x) in excess of the MDAQMD thresholds, the Project is not anticipated to substantially contribute to regional O₃ concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in CO emissions in excess of the MDAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary toxic air contaminant (TAC) of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a TAC by the CARB in 1998. The potential cancer risk from the inhalation of DPM, as discussed below, outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs. Based on the emission modeling conducted, the maximum onsite construction-related daily emissions of exhaust PM_{2.5}, considered a surrogate for DPM, would be 0.06 pounds/day (see Appendix A). (PM_{2.5} exhaust is considered a surrogate for DPM because more than 90 percent of DPM is less than 1 microgram in diameter and therefore is a subset of particulate matter under 2.5 microns in diameter (i.e., PM_{2.5}). Most PM_{2.5} derives from combustion, such as use of gasoline and diesel fuels by motor vehicles.) As with O₃ and NO_x, the Project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the MDAQMD's thresholds. Additionally, the Project would be required to comply with MDAQMD Rule 403 described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, the Project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Therefore, impacts associated with exposure of sensitive receptors to substantial pollutant concentrations would be less than significant.

Long-Term Operational Impacts

The Proposed Project would not include the provision of new permanent stationary or mobile sources of TAC emissions, and therefore, by its very nature, would not be a source of TAC concentrations during project operations. Impacts would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or

recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

Construction-Generated Odors

The nearest land use to the site consists of a single-family residence located adjacent to the eastern Project site boundary. During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Wind patterns in Mojave are generally westward from February 1 through November 28, with a peak percentage of 82 percent in late June (Weather Spark 2020). These wind patterns would carry odors away from the single-family residence adjacent to the eastern Project boundary. The parcel of land west of the Project site is vacant, which further allows for dispersal of odors. Given that there are no natural topographic features (e.g., canyon walls) or manmade structures (e.g., tall buildings) that would potentially trap such emissions, construction-related odors would occur at magnitudes that would not affect substantial numbers of people. Therefore, construction odors would result in a less than significant impact related to odor emissions.

Operational Odors

The land uses generally identified as sources of odors include wastewater treatment plants, wastewater pumping facilities, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing and fiberglass manufacturing facilities, painting/coating operations, rendering plants, coffee roasters, food processing facilities, confined animal facilities, feedlots, dairies, green waste and recycling operations, and metal smelting plants. If a source of odors is proposed to be located near existing or planned sensitive receptors, this could have the potential to cause operational-related odor impacts. The Proposed Project does not include any of these land uses or similar land uses. The Proposed Project will include an emergency generator. The generator will run on diesel as a fuel and could produce temporary odors when in use. As discussed above, wind patterns would carry odors away from the single-family residence adjacent to the eastern Project boundary. The parcel of land west of the Project site is vacant, which further allows for dispersal of odors. Given that, there are no natural topographic features (e.g., canyon walls) or manmade structures (e.g., tall buildings) that would potentially trap such emissions, operation -related odors would occur at magnitudes that would not affect substantial numbers of people. Therefore, operational odors would result in a less than significant impact related to odor emissions.

4.3.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.4 Biological Resources

A biological resources technical report was completed for the Proposed Project to determine whether implementation of the Proposed Project would impact sensitive biological resources, as required under CEQA. A biological reconnaissance survey was conducted on December 20, 2018 by ECORP Senior Wildlife Biologist, Phillip Wasz. Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI), as well as the United States Fish and Wildlife Service (USFWS) National Wetland Inventory and the Natural Resources Conservation Service (NRCS) Web Soil Survey to determine the special status species and sensitive habitats that have been documented in the project vicinity. Because potential habitat for rare plants was identified during the reconnaissance survey, a rare plant survey was conducted on May 3, 2019. The results of the biological technical report are summarized below (ECORP 2019a).

4.4.1 Environmental Setting

Vegetation Communities

One native vegetation community was documented within the project site, cheesebush scrub. Within the Little San Bernardino mountains, this vegetation community typically occupies washes. The project site is located within the Big Morongo Valley where the Big Morongo Creek once flowed, thus representing areas where this vegetation community could occur (ECORP 2019a; Appendix B).

Wildlife

Wildlife species observed during the biological reconnaissance survey within the project site included white-tailed antelope squirrel (*Ammospermophilus leucurus*), California towhee (*Melospiza crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), Anna's humming bird (*Calypte anna*), mourning dove (*Zenaidura macroura*), house finch (*Haemorrhous mexicanus*) and American crow (*Corvus brachyrhynchos*) (ECORP 2019a; Appendix B).

Soils

The Project site is relatively flat consisting of mostly sandy soils. According to the Natural Resources Conservation Service Web Soil Survey, the project site has no digital soil data available (NRCS 2019).

Potential Waters of the U.S.

The reviews included in the biological technical report of the NRCS, National Wetlands Inventory (NWI), and the United States Geological Survey (USGS) topographic maps did not identify any potentially jurisdictional features, hydric soils, or wetlands present on the project site. The Big Morongo Creek is located approximately two miles east of the project, east of SR- 62.

Special-Status Plants

No special-status plant species were observed during the biological reconnaissance survey of the project site; however, suitable habitat for special-status plant species was present within the project site. Based on

the presence of suitable habitat and documented observations in the area, the project site provides suitable habitat for the following special-status plant species with a high potential to occur: triple-ribbed milk-vetch (*Astragalus tricarinatus*), Lincoln rockcress (*Boechera lincolnensis*), white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), and little San Bernardino linanthus (*Linanthus maculatus*). However, a focused protocol rare plant survey conducted on May 3, 2019 did not identify any special-status or rare plants on the Project site.

Special-Status Wildlife

The project site also provides suitable habitat for three wildlife species that have a high potential to occur in the project site based on the presence of suitable habitat and documented observations, including burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), and American badger (*Taxidea taxus*).

Wildlife Movement Corridors

The project site is located on an undeveloped parcel within a rural residential setting consisting of native cheesebush scrub. Additionally, the project site does not contain drainages, riverbeds, or any other features that are typically associated with facilitating wildlife movement.

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Literature Review

The literature review and database searches identified 50 special-status plant species and 32 special-status wildlife species that have the potential to occur on or near the Project site. With the San Bernardino Mountains to the east and the Little San Bernardino Mountains to the west, many of the species that appeared in the literature review occur outside of the elevation range of the Project site and are thus presumed absent because they only occur at higher elevations. Based on the habitat present on the site and the locations of species records in the vicinity of the Project site, four special-status plant species and three special-status wildlife species have a high potential to occur in the Project site.

Local or Regional Plans, Policies, or Regulations (Plants)

The conservation element of the Morongo Valley Community Plan addresses the community's goal for the protection and conservation of the natural resources in the Morongo Valley such as vegetation, habitat,

landforms, and wildlife (County of San Bernardino 2007b). The plan emphasizes the preservation of the Big Morongo Canyon Preserve, biological resources (pinon/juniper woodland, sage scrub, Joshua tree woodland, Mojave Desert scrub, saltbush scrub, alkali sinks, and sand dunes), and the night sky. The project site is characterized as vacant land consisting of cheesebush scrub located within a rural residential setting.

The Morongo Valley Community Plan describes several sensitive species that occur in scrub communities including the alkali mariposa lily (*Calochortus striatus*), the Mojave spineflower (*Chorizanthe spinosa*), Cushenberry buckwheat (*Eriogonwn ovalifolium* var. *vinewn*) and the Barstow woolly sunflower (*Eriophyllum mohavense*). As described below, none of these species or their habitat were identified during surveys. Habitat for other special status plant species were identified.

Special Status-Plant Species

The project site consists of native cheesebush scrub habitat. No special-status plant species were observed during the biological reconnaissance surveys of the project site; however, suitable habitat for special-status plant species was present within the Project site. The project site provides suitable habitat for four special-status plant species that have a high potential to occur in the project site based on the presence of suitable habitat and documented observations in the area, including triple-ribbed milk-vetch, Lincoln rockcress, white-bracted spineflower, and little San Bernardino linanthus. These species are described below.

Triple-ribbed milk-vetch (*Astragalus tricarlinatus*). Triple Ribbed milk-vetch is not a federally or state-listed species but does have a CNPS status of 1B.2 (plants rare, threatened, or endangered in California) (CNPS 2018). It is a perennial herb native to California. This species is typically found in desert scrub communities. This species has been documented approximately 1.3 miles east of the Project site (CDFW 2018a). Based on the presence of desert scrub habitats and sandy soils in the Project site, and the documented record of the species near the Project site, this species has been determined to have a high potential to occur within the Project site.

Lincoln Rockcress (*Boechera lincolnensis*). Lincoln rockcress is not a federally or state-listed species but does have a CNPS status of 2B.3 (plants rare, threatened, or endangered in California, but more common elsewhere) (CNPS 2018). It is a perennial herb native to California. This species is typically found in desert scrub communities. The nearest record for this species was identified in 1972 and includes a large polygon approximately two miles wide that encompasses the Project site (CDFW 2018a). Based on the presence of desert scrub habitats and sandy soils in the Project site, and the documented record of the species near the Project site, this species has been determined to have a high potential to occur within the Project site.

White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*). White-bracted sunflower is not a federally or state-listed species but does have a CNPS status of 1B.2 (plants rare, threatened, or endangered in California) (CNPS 2018). It is an annual herb that is endemic to the Coachella Valley. This species is typically found in coastal scrub (alluvian fans), Mojavean desert scrub, and pinyon and juniper woodland with sandy or gravelly soils. This species has been documented approximately 0.5 miles southwest of the

Project site (CDFW 2018a). Based on the presence of desert scrub habitats and sandy soils in the Project site, and the documented record of the species near the Project site, this species has been determined to have a high potential to occur within the Project site.

Little San Bernardino Mountains linanthus (*Linanthus maculatus*). Little San Bernardino Mountains linanthus is not a federally or state-listed species but does have a CNPS status of 1B.2 (CNPS 2018). It is an annual herb that is endemic to the Coachella Valley. This species is typically found in desert dunes, Joshua tree woodland, Mojavean desert scrub, and Sonoran Desert scrub with sandy soils. This species has been documented approximately 1.1 miles southwest of the Project site (CDFW 2018a). Based on the presence of desert scrub habitats and sandy soils in the Project site, and the documented record of the species near the Project site, this species has been determined to have a high potential to occur within the Project site.

Focused Rare Plant Survey

Based on the results of the literature review, a focused protocol rare plant survey was conducted on the Project site on May 3, 2019. The focused protocol rare plant survey did not identify any special-status or rare plants on the project site. The non-native ground cover has likely pushed out the smaller native target species, and the isolated nature of the project site from other native plant communities significantly decreases potential for any native species to re-establish.

Conclusion

Considering the local or regional plans, policies and regulations, the literature review and utilizing the biological and focused survey results as evidence, no direct or indirect impacts to targeted special-status plant species would occur if the property were developed. Therefore, no avoidance, minimization, or mitigation measure are recommended for special-status plant species.

Local or Regional Plans, Policies, or Regulations (Animals)

The conservation element of the Morongo Valley Community Plan addresses the community's goal for the protection and conservation of the natural resources in the Morongo Valley such as vegetation, habitat, landforms, and wildlife (County of San Bernardino 2007b). The plan emphasizes the preservation of several rare, unusual, or protected species that occur in scrub communities, including the desert tortoise (*Gopherus agassizii*), Mojave ground squirrel (*Spermophilus mohavensis*), and LeConte's thrasher (*Toxostoma leconteii*).

Special-Status Wildlife Species

The project site also provides suitable habitat for three special-status wildlife species that have a high potential to occur in the project site based on the presence of suitable habitat and documented observations, including burrowing owl, loggerhead shrike, and American badger. These species are described below.

Burrowing owl (*Athene cunicularia*). The burrowing owl is a CDFW Species of Special Concern (SSC, CDFW 2018a). It is typically found in dry open areas with few trees and short grasses; it is also found in vacant lots near human habitation. It uses uninhabited mammal burrows for roosts and nests. It primarily feeds

on large insects and small mammals but will also eat birds and amphibians. The Project site contained suitable habitat with soils suitable for burrowing, however, no burrows of adequate size were observed during the surveys. Documented records of this species were identified near the Project site (CDFW 2018). The presence of suitable habitat and documented records approximately 5.0 miles from the Project site resulted in this species having a high potential to occur in the Project site.

Loggerhead shrike (*Lanius ludovicianus*). The loggerhead shrike is a CDFW SSC (CDFW 2018b). It prefers open areas with scattered trees and shrubs including savanna, desert scrub, and open woodland habitats. Its diet includes large insects and other invertebrates, but it will also prey upon small mammals, lizards, and snakes. Suitable foraging and nesting habitat is present throughout the Project site. Documented records of this species were identified in the literature review and data base searches approximately 10 miles south of the Project site (CDFW 2018a). The Project site provides suitable foraging and nesting habitat for this species. The presence of suitable habitat and the documented records near the Project site resulted in this species having a high potential to occur in the Project site.

American badger (*Taxidea taxus*). The American badger is a CDFW SSC (CDFW 2018b). This mammal species prefers habitat that includes dry open areas consisting of shrubs, forest, and herbaceous habitats, with loose soils for digging burrows (NatureServe 2018). This species is typically solitary and is scattered at low densities throughout the Colorado Desert, but can move long distances to find suitable habitat and mates. The Project site contains suitable habitat within the scrub vegetation on site. The nearest record for this species was identified in 1949 and includes a large polygon, approximately 10 miles wide, that encompasses the Project site has been documented near the Project site (CDFW 2018a). The presence of suitable habitat and the documented records near the Project site resulted in this species having a high potential to occur in the Project site.

Special Status Biological Reconnaissance Survey (Animals)

The wildlife observed in the Project site were typical of the rural residential setting and the habitat observed in the Project site. Wildlife species observed during the biological reconnaissance survey included white-tailed antelope squirrel (*Ammospermophilus leucurus*), California towhee (*Melospiza crissalis*), white-crowned sparrow (*Zonotrichia leucophrys*), Anna's humming bird (*Calypte anna*), mourning dove (*Zenaidura macroura*), house finch (*Haemorhous mexicanus*) and American crow (*Corvus brachyrhynchos*). A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Appendix B.

Migratory Birds and Raptors

The vegetation (trees and shrubs) present in the project site could also provide nesting habitat for songbirds and raptors protected by the MBTA and California Fish and Game Code. Other areas adjacent to the Project site could provide nesting habitat for migratory birds and raptors including the adjacent shrubs, trees, adjacent power poles, and buildings.

If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the

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Migratory Bird Treaty Act and their nests through the removal of habitat in the project site and indirectly through increased noise, vibrations, and increased human activity.

Conclusion

Considering the local or regional plans, policies and regulations, the literature review and the results of the biological reconnaissance survey, without mitigation direct impacts to special-status wildlife species could occur by mortality and habitat loss during ground disturbance and indirect impacts could occur from construction noise and vibrations. However, impacts to species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Sensitive habitats include vegetation communities which are considered rare in the region, are considered sensitive in the State of California, and are listed as sensitive under local conservation plans. The project site consists of one native vegetation community, cheesebush scrub. This vegetation community is considered secure by CNPS and not in need of any protections. Furthermore, this community is not listed in the CNDDDB, CNSPEI, or the USFWS IPaC lists (Appendix B). The project site did not contain any riparian habitat or sensitive natural communities that would need to be preserved. No impact would occur.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is characterized as vacant land consisting of cheesebush scrub located within a rural residential setting. A review of the NRCS, NWI, and the USGS topographic maps did not identify any potentially jurisdictional features, hydric soils, or wetlands present on the project site. The Big Morongo Creek is located approximately two miles east of the project site, just east of SR- 62. During the biological reconnaissance survey, the qualified biologist did not identify any State or federally protected wetlands or Waters of the United States on the site. The nearest blue line stream is located approximately 0.3 mile northwest of the Project site and the nearest wetland is located approximately 1.1 miles east of the Project

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site. As currently designed the development of the project site would not result in impacts to State or federally protected wetlands or Waters of the United States.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site was assessed for its ability to function as a wildlife movement corridor. The project site is characterized as vacant land consisting of cheese bush scrub located within a rural residential setting. Features typical to wildlife movement corridors such as drainages, riverbeds, greenbelts, refuge systems, underpasses, and biogeographic land bridges are not found on or in the vicinity of the project site. Therefore, the project site would not be considered a linkage or corridor between conserved natural habitat areas, impede the use of native wildlife nursery sites, or substantially interfere with the movement of any native resident fish or wildlife species. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would be consistent with the goals and policies set forth in the Morongo Valley Community Plan (County of San Bernardino 2007b). The conservation element of the Morongo Valley Community Plan addresses the community's goal for the protection and conservation of the natural resources in the Morongo Valley such as vegetation, habitat, landforms, and wildlife. The plan emphasizes the preservation of the Big Morongo Canyon Preserve, biological resources (pinon/juniper woodland, sage scrub, Joshua tree woodland, Mojave Desert scrub, saltbush scrub, alkali sinks, and sand dunes), and the night sky. The project site is characterized as vacant land consisting of cheesebush scrub located within a rural residential setting. There are no trees or habitats named in the Morongo Community Plan Conservation Element that are located in the project site. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Conservation Plan, or other approved local, regional, or state habitat conservation plan?				

The project site is not located within a Habitat Conservation Plan (HCP) or Natural Community Conservation Plan (NCCP). Therefore, development of the Proposed Project would not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional or state HCP. No impact would occur.

4.4.3 Mitigation Measures

BIO-1: Pre-construction Surveys for Burrowing Owl: Pre-construction surveys for burrowing owl shall be conducted prior to the initial clearing of the Project site. The surveys shall follow the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Two take avoidance surveys shall be conducted, with the first survey being conducted no less than 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If construction is halted for more than two weeks, an additional habitat assessment survey shall be conducted no more than 24 hours prior to re-initiating construction.

If burrowing owls or suitable burrowing owl burrows with signs (e.g., whitewash, pellets, feathers, prey remains are identified in the Project site during the survey, consultation with the CDFW shall be conducted and the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) for surveys and mitigation shall be followed.

BIO-2: Pre-construction Surveys for American Badger. Pre-construction surveys for American Badger shall be conducted prior to the initial clearing of the Project site.

The American Badger surveys shall follow the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Two take avoidance surveys shall be conducted, with the first survey being conducted no less than 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If construction is halted for more than two weeks, an additional take avoidance survey shall be conducted no more than 24 hours prior to re-initiating construction. If American badger den sites are identified in the Project site during the survey, consultation with the CDFW shall be conducted.

If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200-foot buffer established. This buffer may be reduced based on the location of the den upon consultation

with CDFW. Maternity dens shall be flagged for avoidance, identified on construction maps, and a qualified biologist shall be present during construction. If avoidance of a nonmaternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFW. A written report documenting the badger removal shall be provided to CDFW within 30 days of relocation. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

BIO-3: Pre-construction Nesting Bird Survey: If construction or other project activities are scheduled to occur during the bird breeding season (February through August for raptors and March through August for the majority of migratory bird species), a pre-construction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, including those for the loggerhead shrike, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. If construction is halted for more than two weeks, an additional survey shall be conducted no more than 24 hours prior to re-initiating construction. The nesting bird survey shall include the Project site and adjacent areas where project activities have the potential to affect active nests, either directly or indirectly due to construction activity or noise, within 500-feet of the site. If an active nest is identified, a qualified biologist shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Buffers will be determined by a qualified biologist and are typically 300-foot radius for songbirds and 500-foot radius for raptors. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

4.5 Cultural Resources

4.5.1 Environmental Setting

Cultural Resources

A Cultural Resources Inventory Report was prepared by ECorp Consulting, Inc. (ECORP 2019b, Appendix C) for the Proposed Project to determine if cultural resources were present in or adjacent to the project site and assess the sensitivity of the project site for undiscovered or buried archaeological resources. The cultural context of the project site including regional and local prehistory, ethnography, and regional and project area histories can be found in the report in Appendix C.

The analysis of cultural resources was based on a records and literature search conducted at the South-Central Coastal Information Center (SCCIC) at California State University, Fullerton on January 8, 2019, a literature review, and a field survey on December 19, 2018. The literature search included the results of previous surveys within a one-mile (1600 meters) radius of the Proposed Project site.

A search of the Sacred Lands File by the Native American Heritage Commission (NAHC) showed no Native American cultural resources in the project site. On February 18, 2020, Project notification letters with

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invitations to consult on the Project were sent by certified mail and email to representatives of the two tribes on the State Water Board's Assembly Bill (AB) 52 list for the project area in San Bernardino County: the San Manuel Band of Mission Indians (SMBMI) and the Colorado River Indian Tribes (CRIT). The tribal consultation process is discussed further in Section 4.18 Tribal Cultural Resources.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The cultural resources records search indicated that the project site had not been previously surveyed and that no previously recorded historical, archaeological, or tribal cultural resources within or adjacent to the project site. As a result of the field survey, two historic-period isolates were recorded within the project site: MV-001-I (isolated bottle base and coffee can) and MV-002-I (isolated crushed flat top beverage can). Neither of these isolates are individually eligible for inclusion in the National Register of Historic Places or California Register of Historical Resources, and neither contributes to any known or suspected historic district (ECORP 2019c). Therefore, the Proposed Project would not result in any significant impacts to known Historical Resources under CEQA. However, there still remains a possibility that unrecorded archaeological resources are present beneath the ground surface, and that such resources may be exposed during project construction. Impacts to historical resources would be less than significant with the implementation of Mitigation Measure CUL-1.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No archaeological resources have been recorded in the project site. Additionally, the archaeological sensitivity of the project site is believed to be low (ECORP 2019b). However, there still remains the possibility for ground-disturbing activities to expose previously unrecorded archaeological resources beneath the ground surface. Impacts to archaeological resources would be less than significant with the implementation of Mitigation Measure CUL-1.

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Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Based on the records search from SCCIC and the Sacred Lands File search completed by the NAHC, no formal cemeteries are located in or near the project site and no human remains have been reported within or adjacent to the project site (ECORP 2019b). Therefore, the likelihood that the Proposed Project would disturb human remains is low. However, there is still potential for unanticipated human remains to be uncovered during project construction. With the implementation of Mitigation Measure CUL-1, impacts to human remains would be less than significant.

4.5.3 Mitigation Measures

CUL-1:

1. 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 Professional Qualification Standards in the appropriate field shall be hired to assess the find. GSWC will immediately contact the Lead Agency and notify them of the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed within TCR-1, regarding any Native American pre-contact finds and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide SMBMI Tribal input with regards to significance and treatment.
2. If significant Native American pre-contact archaeological 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 SMBMI and the Lead Agency for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.
3. If human remains are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 and that code enforced for the duration of the project.

4.6 Energy

4.6.1 Environmental Setting

Electricity/Natural Gas Services

SCE provides electrical services to San Bernardino County through State-regulated public utility contracts. SCE, the largest subsidiary of Edison International, is the primary electricity supply company for much of Southern California. It provides 14 million people with electricity across a service territory of approximately 50,00 square miles. The Southern California Gas Company provides natural gas services to the project area. Southern California Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g. of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh.

The electricity consumption in San Bernardino County from 2015-2018 is shown in Table 4.6-1. As indicated, the demand has increased since 2015.

Table 4.6-1. Residential Electricity Consumption in San Bernardino County 2015-2018	
Year	Electricity Consumption (kilowatt hours)
2018	5,443,731,723
2017	5,409,197,320
2016	4,997,544,199
2015	4,953,489,541

Source: ECDMS 2019

The natural gas consumption attributable to San Bernardino County, including Morongo Valley, from 2015-2018 is shown in Table 4.6-2. As shown the demand has increased since 2015.

Table 4.6-2. Residential Natural Gas Consumption in San Bernardino County 2015-2018	
Year	Natural Gas Consumption (therms)
2018	231,468,146
2017	235,261,401
2016	234,628,679
2015	223,939,116

Source: ECDMS 2019

Automotive fuel consumption in San Bernardino County from 2015 to 2019 is shown in Table 4.6-3. As shown, automotive fuel consumption has slightly decreased since 2015.

Table 4.6-3. Automotive Fuel Consumption in San Bernardino County 2015-2019	
Year	Countywide Fuel Consumption (gallons)
2019	1,217,246,895

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Table 4.6-3. Automotive Fuel Consumption in San Bernardino County 2015-2019	
Year	Countywide Fuel Consumption (gallons)
2018	1,235,583,400
2017	1,250,905,370
2016	1,266,302,895
2015	1,217,906,450

Source: CARB 2017

4.6.2 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The impact analysis focuses on the two sources of energy that are relevant to the Proposed Project: electricity and the equipment fuel necessary for project construction. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use project. For the purpose of this analysis, the amount of electricity estimated to be consumed by the Project (for the pumping of water) is quantified and compared to that consumed by residential land uses in San Bernardino County. Similarly, the amount of fuel necessary for project construction and operations is calculated and compared to that consumed in San Bernardino County.

The analysis of electricity gas usage is based on California Emissions Estimator Model (CalEEMod) modeling conducted by ECORP Consulting, which quantifies energy use for project operations. The amount of total construction-related fuel use was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Energy consumption associated with the Proposed Project is summarized in Table 4.6-4.

Table 4.6-4. Proposed Project Energy and Fuel Consumption		
Energy Type	Annual Energy Consumption	Percentage Increase Countywide
Electricity Consumption ¹	7,813 kilowatt-hours	0.0001%
Construction-related Fuel Consumption ²	43,350 gallons	0.0035%

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Table 4.6-4. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumption	Percentage Increase Countywide
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Source: ¹Electricity consumption calculated by ECORP Consulting using CalEEMod 2016.3.2. ²Construction-related fuel consumption calculated using Climate Registry 2016.

Notes: The Project increases in electricity consumption are compared with all of the residential buildings in San Bernardino County in 2018, the latest data available. The Project increases in construction-related fuel consumption are compared with the countywide fuel consumption in 2019, the most recent full year of data.

As shown in Table 4.6-4, the increase in electricity usage as a result of the Proposed Project operations would constitute a negligible increase of 0.0001 percent in the typical annual electricity consumption attributable to non-residential uses in San Bernardino County. As previously described, the proposed water storage tanks and booster station would replace the existing 0.1 MG bolted steel water storage tank and booster station located at the current Mojave Plant. The existing storage tank and booster station are in poor condition and in need of replacement. Replacement of these facilities is essential for the purveyance of water supplies to the Mojave Tank Zone and the Macelle Tank Zone. The proposed tanks would provide an additional 0.7 MG of new water storage capacity to the Mojave Tank Zone. Due to the relatively low increase in electricity consumption as a result of the Proposed Project and its objective to increase water supply storage for municipal use, the Proposed Project would not result in the inefficient, wasteful, or unnecessary consumption of energy.

The Proposed Project's gasoline fuel consumption during the construction period is estimated to be 43,350 gallons of fuel, which would increase the annual gasoline fuel use in the county by 0.0035 percent during the single year that project construction takes place (Appendix E). As such, project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. No unusual project characteristics would necessitate the use of construction equipment that would be less energy efficient than at comparable construction sites in the region or the state. Construction contractors would purchase their own gasoline and diesel fuel from local suppliers and would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. For these reasons, it is expected that construction fuel consumption associated with the Proposed Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature. Similarly, during operations fuel consumption for infrequent service and maintenance vehicle trips to the reservoir site would not be wasteful, inefficient or unnecessary. Impacts would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

State and local agencies regulate the use and consumption of energy through various regulations. As discussed under 4.6.2 question (a) of the Checklist the energy and fuel consumption related to project construction would be minimal. The new booster station would be more energy efficient than the existing one, and thus would decrease the energy consumption compared to current levels. Further, these estimates are conservative as they do not consider likely increases in electrical generation that will occur over time. For example, California is shifting away from nonrenewable sources of energy in exchange for renewable sources, which by their very nature make them difficult to waste. For instance, in August of 2018 the California Legislature passed SB 100, the California 100 Percent Clean Energy Act, which sets the goal of powering the state with 100 percent clean and carbon free electricity by 2045.

During operations, the proposed water storage tanks and booster station would replace an existing water storage tank, install a second water storage tank, and install a new booster station located at the current Mojave Plant. Replacement of these facilities is essential for the purveyance of water supplies to the Mojave Tank Zone and the Macelle Tank Zone. As stated above, construction contractors would judiciously use fuel supplies to minimize costs due to waste and subsequently maximize profits. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and requiring recycling of construction debris, would further reduce the amount of transportation fuel demand during project construction. Thus, the Proposed Project would not conflict or obstruct any local or state plans for renewable energy or energy efficiency. No impact would occur.

4.6.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.7 Geology and Soils

A site-specific geotechnical investigation was prepared for the Proposed Project by Landmark Geoengineers and Geologists (Landmark) in February 2020. The purpose of this geotechnical study was to investigate the subsurface soil at selected locations within the site for evaluation of physical/engineering properties and liquefaction potential during seismic events.

4.7.1 Environmental Setting

A site-specific geotechnical report was prepared by Landmark for the Project in February 2020 and is included in Appendix D. The report investigated the subsurface soil at selected locations within the site for evaluation of physical/engineering properties and liquefaction potential during seismic events.

Geomorphic Setting

Morongo Valley is situated along SR-62 between the Big Morongo Canyon Preserve and the San Geronio Mountains. The Morongo Valley plan area sits at an approximate elevation of 2,538 feet AMSL. There are three geological faults within the Morongo Valley Plan area: Pinto Mountain, Dry Morongo, and the Morongo Valley Faults. Although these three faults are considered active, no earthquakes have occurred in recent times. No perennial streams area located within the plan area (County of San Bernardino 2007b).

Regional Seismicity and Fault Zones

An active fault, according to California Department of Conservation, Division of Mines and Geology, is a fault that has indicated surface displacement within the last 11,000 years. A fault that has not shown geologic evidence of surface displacement in the last 11,000 years is considered inactive. The project site is not located within an Alquist-Priolo Fault Zone. Alquist-Priolo earthquake fault zones are regulatory zones surrounding the surface traces of active faults in California. Wherever an active fault exists, if it has the potential for surface rupture, a structure for human occupancy cannot be placed over the fault and must be a minimum distance from the fault (generally fifty feet) (CDC 2020). The nearest Alquist-Priolo fault traces and hazard zones are located approximately 0.50 mile southeast of the project site (CDC 2019c).

Soils

The project site is relatively flat consisting of mostly sandy soils. Subsurface soils consist of sand (SP and SP-SM) with traces of gravel to maximum depth penetrated. The near surface soils are non-expansive in nature (Landmark 2020).

Paleontological Resources

A paleontological resources records search was requested by ECORP Consulting, Inc. (Natural History Museum of Los Angeles County 2019; Appendix C) for the Proposed Project to determine if paleontological resources were present in or adjacent to the project site and assess the sensitivity of the project site for undiscovered paleontological resources. The paleontological records search for the Proposed Project was completed on January 18, 2019.

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
	i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

i) The Proposed Project would construct two steel water storage tanks and a booster station at the southeast corner of Juniper Avenue and Mojave Drive in Morongo Valley, California. The project site (APN 058-318-104) is located on an undeveloped property within a rural residential neighborhood bounded by Mojave Drive to the north, Juniper Avenue to the west, a municipal water tank and residential property to the east, and undeveloped desert to the south.

According to the San Bernardino County General Plan Geologic Hazard Overlay Map, the project site is not located within an earthquake fault zone boundary (County of San Bernardino 2007c; CDC 2019c). The nearest Alquist-Priolo fault traces and hazard zones are located approximately 0.50 mile southeast of the project site (CDC 2019c).

Although the Proposed Project does propose a building to house the booster station, this structure is not habitable and would not pose a substantial risk to people or other structures as it is not within an Alquist-Priolo Earthquake Fault Zone and no known earthquake faults traverse the project site.

Additionally, the Proposed Project would include an earthen basin to retain tank overflow and site drainage within the project site in the event of shaking for a fault outside the project site. Therefore, potential impacts that would expose people or structures to substantial adverse effects associated with the rupture of a known earthquake fault are less than significant.

ii) In general, Southern California as a whole is a seismically-active region that contains many earthquake faults. The primary seismic hazard at the project site is the potential for strong ground shaking during earthquakes along the San Andreas and Pinto Mountain faults. The project is likely to be subjected to moderate to strong ground motion from earthquakes in the region. Ground motions are dependent primarily on the earthquake magnitude and distance from the rupture zone. Acceleration magnitudes are also dependent upon attenuation by rock and soil deposits, direction of rupture and type of fault; therefore, ground motions may vary considerably in the same general area (Landmark 2020).

The California Building Code (CBC) requires that a site-specific ground motion hazard analysis be performed in accordance with ASCE 7-16 Section 11.4.8 for structures on Site Class D and E with S_s greater than or equal to 0.2. The project site has been classified as Site Class D and has a S_1 value of 0.77,

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which would require a site-specific ground motion hazard analysis ((Landmark 2020). However, ASCE 7-16 Section 11.4.8 provides three exceptions which permit the use of conservative values of design parameters for certain conditions for Site Class D and E sites in lieu of a site-specific hazard analysis. With adherence to the recommendations listed in the geotechnical report (Appendix D), the potential for impacts that would expose people or structures to substantial adverse effects associated with strong seismic ground shaking is less than significant.

iii) Seismically-induced liquefaction is a phenomenon in which cyclic stresses, produce by earthquake-induced ground motion, create excess pore pressures in soils. According to the San Bernardino County General Plan Geologic Hazard Overlay Map, the project site is not located in an area with liquefaction susceptibility (County of San Bernardino 2007c; CDC 2019c). Furthermore, according to the site-specific geotechnical investigation, the risk of liquefaction is low due to the depth of groundwater (greater than 100 feet) (Landmark 2020; Appendix D). Therefore, the Proposed Project would not expose people or structures to substantial adverse effects associated with seismic related ground failure including liquefaction. No impact would occur.

iv) Implementation of the Proposed Project would include the construction of a booster station and two water storage tanks at the southeast corner of Juniper Avenue and Mojave Drive in Morongo Valley, California. According to the San Bernardino County General Plan Geologic Hazard Overlay Map, the project site is not located on a site that is susceptible to landslides (County of San Bernardino 2007c; CDC 2019c). According to the site-specific geotechnical report, the hazard of landsliding is unlikely due to the planar topography adjacent to the project site. No ancient landslides are shown on geologic maps or aerial photographs of the region and no indications of landslides were observed during our site investigation (Landmark 2020; Appendix D). Therefore, the Proposed Project would not expose people or structures to substantial adverse effects associated with landslides. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Construction of the Proposed Project would require ground disturbing activities, such as grading, that has the potential to result in soil erosion or the loss of topsoil. The project site is underlain by sandy soils which are generally considered well-drained. A National Pollutant Discharge Elimination System (NPDES) permit will not be required, as less than 1-acre of soil will be disturbed. However, Best Management Practices (BMPs) would be prepared for the Proposed Project and would be implemented to manage erosion and the loss of topsoil during construction-related activities. BMPs will consist of a stabilized construction entrance to avoid tracking soils off-site; straw wattles at drainage that outlets onto public roadways; small retention pond to collect "first flows"; and straw wattles on slopes. The Proposed Project's grading plan would also ensure that earthwork is designed to avoid soil erosion. Impacts as a result of soil erosion or the loss of topsoil would be less than significant.

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is relatively flat and consists of sandy soils. According to the San Bernardino County General Plan Geologic Hazard Overlays Map, the project site is not located within an area that is susceptible to landslides or liquefaction (County of San Bernardino 2007c). The Proposed Project would not construct habitable structures. Therefore, implementation of the Proposed Project would not contribute to or expose people or structures to substantial adverse effects associated with on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. The most current Uniform Building Code no longer contains Table 18-1-B but has been superseded by Chapter 18 of the International Building Code. As previously stated, soils within the project area are generally sandy soils that would not be subject to expansion (NRCS 2019). Subsurface soils encountered during the field exploration conducted on January 31, 2020 consist of sand (SP and SP-SM) with traces of gravel to maximum depth penetrated. The near surface soils are non-expansive in nature (Landmark 2020), resulting in no direct or indirect risk to life or property. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project does not include the installation of a septic system or alternative wastewater disposal system. No impacts would occur.

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Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A paleontological records search was completed by the Vertebrate Paleontology Section of the Natural History Museum of Los Angeles County on January 18, 2019 (Natural History Museum of Los Angeles County 2019; Appendix C). The records search indicated that the project site has surface deposits composed of soil and younger (Holocene Epoch) Quaternary alluvium, derived as alluvial fan deposits from the surrounding Little San Bernardino Mountains. There were no fossil vertebrate localities nearby from these types of deposits and they are unlikely to contain vertebrate fossils due to their young age. However, exposures of older Quaternary alluvium (Pleistocene Epoch) are exposed on the edges of the younger Quaternary alluvium and in the northeast of the project site, indicating it may also underly the project area. The nearest recorded fossil location is fossil vertebrate LACM 1269 of *Equus* located in these older Quaternary deposits southeast of the project site near Desert Hot Springs on the northwestern edge of Edom Hill in the Indio Hills.

Shallow excavations in the younger Quaternary Alluvium exposed throughout the project area are not likely encounter any vertebrate fossils. The Proposed Project would have maximum cuts of 13 feet below the north tank. The tank would be cut 5 feet below existing grade and the construction would also include 2 feet of ring wall embedment and 6 feet of sub-excavation below the ring well. These deeper excavations that extend down into older Quaternary alluvium may uncover vertebrate fossil remains. If project excavation extends into older Quaternary deposits, there is a potential for unknown buried paleontological resources to be affected. The County of San Bernardino's General Plan Conservation Element (2007d) requires monitoring of rough grading cuts in areas with the potential for sensitive paleontological resources that are greater than 3 feet in depth be monitored by a qualified paleontologist. Impacts would be less than significant with implementation of mitigation measure GEO-1.

4.7.3 Mitigation Measures

GEO-1: If project excavations exceed four feet in depth, the Applicant (or its contractor) shall retain a qualified paleontologist to determine if the older Quaternary sediments are being disturbed. If so, the paleontologist shall establish a monitoring program to recover any significant fossils that may be encountered. Sediment samples shall be collected and processed to determine the small fossil potential in the project area. Any significant fossils recovered shall be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Greenhouse gases (GHGs) are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring, process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH₄ traps over 25 times more heat per molecule than CO₂, and N₂O absorbs 298 times more heat per molecule than CO₂. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO₂e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

The Appendix G thresholds for GHG's do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project.

The CEQA Guidelines note that an agency has the discretion to either quantify a project's greenhouse gas emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)).

The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130(f)). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

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Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by a public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency.

Under CEQA, the MDAQMD is the expert commenting agency on GHG emissions and related matters within the MDAB. The MDAQMD provides guidelines to assessing the significance of project specific GHG emissions and offers both daily and annual thresholds for GHG emissions (MDAQMD 2016). MDAQMD thresholds were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions,... An individual project's compliance with these thresholds means that the environmental impact of the individual project's GHG emissions will not be cumulatively considerable under CEQA.

4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Construction-Generated Greenhouse Gas Emissions

Construction-related activities that would generate GHGs include worker commute trips, haul trucks carrying supplies and materials to and from the project site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from construction of the Proposed Project.

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Table 4.8-1. Construction-Related Greenhouse Gas Emissions	
Emissions Source	CO₂e
Annual Emissions (Maximum Metric Tons per Year)	
Project Phase 1	276
Project Phase 2	164
<i>MDAQMD Annual Threshold</i>	<i>100,000 metric tons</i>
Exceeds Annual Threshold?	No
Daily Emissions (Maximum Pounds per Day)	
Project Phase 1	4,854
Project Phase 2	4,844
<i>MDAQMD Daily Threshold</i>	<i>548,000 pounds</i>
Exceeds Daily Threshold?	No

Source: CalEEMod version 2016.3.2, MDAQMD 2016. Refer to Appendix A for Model Data Outputs.

Notes: Emissions estimates account for the demolition of the existing water tank and ground disturbance of the entire site in order to account for the potential installation of a second water tank. Emissions account for the following construction equipment to complete development of the full site with two water tanks:

Demolition activities: Concrete/Industrial Saws (1), Rubber Tired Dozers (1), Tractors/Loaders/Backhoes (3).

Site preparation and grading activities: Excavators (1), Rubber Tired Dozers (1), Tractors/Loaders/Backhoes (2),

Water tank installation: Cranes (1), Forklifts (1), Off-Highway Trucks (2), Generator Sets (1), Pavers (1), Paving Equipment (1), Rollers (1), Tractors/Loaders/Backhoes (1).

Project implementation was modeled for air pollutant emissions to occur over a 10-month time period spanning 2020-2021. Actual construction of the Project site would be dictated by several other forces, primarily associated with water demand in the Project region. For instance, the second water tank is not anticipated to be constructed until the year 2040. As such, if construction starts at a later date as anticipated, it can be expected that Project emissions would be reduced because CalEEMod incorporates lower emission factors associated with construction equipment in future years due to improved emissions controls and fleet modernization through turnover. Thus, considering full Project implementation by the year 2021 provides a conservative estimate of resultant air pollutant emissions.

As shown in Table 4.8-1, the Proposed Project construction would not exceed the recommended significance threshold.

Climate change is a global problem. And GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about 1 day), GHGs have much longer atmospheric lifetimes of 1 year to several thousand years that allow them to be dispersed around the globe.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory. GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. The additive effect of Project-related GHGs would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change.

In addition, the proposed Project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. As previously discussed, the proposed Project would not exceed MDAQMD significance thresholds, which were developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will not be cumulatively considerable under CEQA. Therefore, the Project's cumulative contribution of GHG emissions would be less than significant.

Operational-Generated Greenhouse Gas Emissions

The Proposed Project would provide an additional 0.7 MG of new water storage capacity over existing conditions. Therefore, operation of the Proposed Project would result in GHG emissions predominately associated with the increased use of electricity used to pump water. Per the CalEEMod emissions software model, this increase in water pumped would result in the generation of 1.4 metric tons of CO₂e annually. This is considerably less than the significance threshold of 100,000 metric tons of CO₂e annually adopted by the MDAQMD. Thus, a less than significant impact would occur.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The *San Bernardino County Regional Greenhouse Gas Reduction Plan* (GHG Plan) was published in March of 2014. The GHG Reduction Plan establishes a GHG emissions reduction target for the year 2020 that is 15 percent below year 2007 emission levels. The GHG Plan is consistent with AB 32 and sets the County on a path to achieve a more substantial long-term reduction in the post-2020 period. Achieving this level of emissions would ensure that the contribution to greenhouse gas emissions from activities covered by the GHG Plan would not be cumulatively considerable.

Implementation of the County's GHG Plan is achieved through the Development Review Process by applying appropriate reduction requirements to projects, which reduce GHG emissions. All new development is required to quantify a project's GHG emissions and adopt feasible mitigation to reduce project emissions below a level of significance. A review standard of 3,000 metric tons of CO₂e per year is used to identify and mitigate individual project emissions.

As shown in Table 4.8-1, the Proposed Project would generate less than 3,000 CO₂e per year. Therefore, the Proposed Project would comply with the emissions reduction targets in the County's GHG Plan. A less than significant impact would occur.

4.8.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.9 Hazards and Hazardous Materials

4.9.1 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Construction of the Proposed Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, pesticides, and other similar materials. The transport of hazardous materials by truck is regulated by federal safety standards under the jurisdiction of the U.S. Department of Transportation. Additionally, the implementation of BMPs stipulating proper storage of hazardous materials and vehicle refueling would be implemented during construction. Construction impacts would be less than significant.

During operation, the Proposed Project may require small quantities of hazardous materials, such as lubricants and paint, for maintenance of the booster station and tanks. Compliance with applicable laws and regulations would ensure impacts associated with the routine transport, use, or disposal of hazardous material during operation would also be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

During construction some hazardous materials, such as diesel fuel, would be used. BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements, would be prepared for the Proposed Project. BMPs will consist of a stabilized construction entrance to avoid tracking soils off-site; straw waddles at drainage that outlets onto public roadways; small retention pond to collect "first flows"; and straw waddles on slopes. The release of any spills would be prevented through the implementation of BMPs. Operation of the Proposed Project would require the use of small quantities of hazardous materials, such as paint or cleaning supplies. The transport, use, and storage of these products would comply with all Federal, State, and local laws regulating management and use of hazardous materials. Impacts would be less than significant.

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no schools located within a one-quarter mile radius of the project site. The nearest school to the project site is Morongo Valley Elementary School located 0.3-mile northeast of the project site. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Government Code §65962.5 requires the Department of Toxic Substances Control (DTSC), the State Department of Health Services, the SWRCB, and the California Integrated Waste Management Board to compile and annually update lists of hazardous waste sites and land designated as hazardous waste property throughout the state.

CalEPA's Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated on the project sites and/or the adjacent properties and businesses (CalEPA 2020). The list, although mostly covering the requirements of Section 65962.5, has always been incomplete as it does not indicate if a specific site was at one time included in the abandoned site program. DTSC does not and has never made that information available.

The list is a compilation of five separate websites that include: 1- DTSC's Envirostor that identifies waste or hazardous substances sites, 2- GeoTracker that identifies underground storage tanks for which an unauthorized release report was filed, cleanup sites, and all solid waste disposal facilities from which there is a mitigation of hazardous waste for which a regional board has notified DTSC., 3- a pdf of solid waste disposal sites identified by the Water Board with waste constituents above hazardous waste levels outside the waste management unit, 4- a list of cease and desist orders and clean up and abatement orders, and 5- a list of hazardous waste facilities subject to corrective action.

1. DTSC's Envirostor indicated that that project site was not identified as a hazardous waste or substances site (DTSC 2019). Additionally, no surrounding sites identified during the search were within a one-mile radius of the Project. (Properties farther than 1 mile from the Project sites were

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not considered for further analysis because they present a low probability for releases that could affect the Project site).

2. GeoTracker did not identify the site as an underground storage tanks for which an unauthorized release report was filed, a cleanup site, or a solid waste disposal facility from which there is a mitigation of hazardous waste for which a regional board has notified DTSC (SWRCB 2019).

3. A list of solid waste disposal sites with waste constitutes about hazardous waste levels outside the waste management unit was also checked. No records were listed.

4. The list of Cease and Desist Orders and Clean Up and Abatement Orders did not include the Project site location.

5. The list of hazardous facilities submit to corrective action do not include the Project site location.

As the project is not listed on one of the five websites provided to fulfill the Cortese List, the Project will not create a significant hazard to the public or the environment. There are no hazardous waste facilities and sites with known contamination, or sites where there may be reasons to investigate further located on the project site or in its vicinity. There would be no impact.

Would the Project:

- 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?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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The nearest airport to the project site is Yucca Valley Airport, located approximately 11.5 miles to the northeast. Due to the distance between the project site and the closest airport, no airport related safety hazards are anticipated for people working at the project site. No impact would occur.

Would the Project:

- f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Construction of the Proposed Project would require construction to occur within Juniper Avenue and Mojave Drive. Temporary construction activities associated with the Proposed Project would be confined

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to the project site and would not physically impair access to other existing roadways within the project vicinity. All construction staging areas would be on-site. Grading activities stage on-site just prior to commencing work. All subsequent phases of work would stage in the flat area between the reservoir and the booster station on-site. Access to local residences would be maintained at all times. Therefore, the potential for impacts that could impair implementation of or physically interfere with an adopted emergency response or evacuation plan is less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is located on land designated as Very High Fire Hazard Severity Zone as recommended by CAL FIRE (CAL FIRE 2007). The Proposed Project involves the construction of steel water storage tanks and booster station building and would not include habitable structures. The project will provide increased fire flow to nearby residences. Fire protection will occur through construction best management practices and coordination with the County on construction requirements in high fire hazard areas. A less than significant impact would occur.

4.9.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.10 Hydrology and Water Quality

4.10.1 Hydrology and Water Quality (X) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is located within the jurisdiction of the Colorado River Regional Water Quality Control Board (RWQCB). The Colorado River RWQCB sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act (CWA) to include both the beneficial uses of specific water bodies and the levels of water quality that must be met and maintained to protect those uses (water quality objectives). Water quality standards for all ground and surface waters overseen by the Colorado River RWQCB are documented in the Colorado River Basin Water Quality Control Plan (Basin Plan). Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the Colorado River

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RWQCB is designed to minimize and control discharges to surface and ground water within the region, largely through permitting, such that water quality standards are effectively attained.

During construction of the Proposed Project water quality impacts could occur without proper controls. Soils loosened during grading, as well as spills of fluids or fuels from vehicles and equipment, if mobilized or transported offsite in overland flow, have the potential to degrade water quality. During construction, the GSWC would implement BMPs to prevent construction pollutants and products from violating any water quality standards or any waste discharge requirements.

Additionally, the Proposed Project would include an earthen basin to retain tank overflow and site drainage within the project site. During construction, water discharge would be pumped to the earthen basin and infiltrated to groundwater. During operation, the Proposed Project would not generate runoff that could substantially degrade surface or groundwater quality.

Planned and unplanned discharge events are covered under the statewide order National Pollutant Discharge Elimination System (NPDES). The NPDES general permit authorizes discharges from drinking water systems. This Order provides regulatory coverage for short-term or seasonal planned and emergency (unplanned) discharges resulting from a water purveyor's essential operations and maintenance activities undertaken to comply with the federal Safe Drinking Water Act, the California Health and Safety Code, and the State Water Board's Division of Drinking Water permitting requirements for providing reliable delivery of safe drinking water.

Planned discharges include regularly scheduled, automated, or non-regularly scheduled activities that must take place to comply with mandated regulations and that the water purveyor knows in advance would result in a discharge to surface water or that would otherwise result in a discharge to surface water, but is instead directed to groundwater for beneficial reuse. Emergency discharges include unplanned discharges that occur due to facility leaks, system failures, operational errors, or catastrophic events for which the water purveyor is not aware of the discharge until after the discharge has commenced. Planned and emergency discharges may occur directly, through a constructed storm drain or through another conveyance system, to waters of the United States or through discharge that would otherwise go to a water of the US, but is instead directed to groundwater for beneficial reuse. As such, planned and unplanned discharge events would be covered under GSWC's NPDES permit for Drinking Water System Discharges to Waters of the U.S, WID Number 4DW0623. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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The Sustainable Groundwater Management Act (SGMA) applies to all California Groundwater Basins and requires that high-and medium-priority groundwater basins form Groundwater Sustainability Agencies and be managed in accordance with locally developed Groundwater Sustainability Plans or Alternative Plans (DWR 2019). The proposed Project falls within the Morongo Valley Groundwater Basin, Basin 7-020. The basin covers 7,288.1 acres (DWR 2019). The basin is prioritized in the Very Low priority category based on the consideration of the eight components required in Water Code Section 10933(b) (DWR 2019). As a result, the groundwater basin is not required to develop a sustainable groundwater management plan at this time. The basin is currently not over-drafted or adjudicated.

The Proposed Project would construct two water storage tanks and a booster station. The proposed increased volume of 0.4 million gallons for the replacement tank is for meeting updated fire flow requirements and would not substantially impact Colorado River Water Basin groundwater supplies or recharge. The new tank would replace an existing GSWC water storage tank to serve current customers within the Mojave Tank Zone. Per the GSWC Master Plan, increased storage is required to mitigate an existing storage deficiency in the pressure zone. The additional storage provided by the first tank is required to meet the current system maximum day and fire flow demands. The second tank will be constructed as water demand increases in the future. The reservoirs would be filled with existing wells and the boosters pump water from the reservoir to higher elevated zones. This replacement would not substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 that would:				
i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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i-iv) The project site is located on flat vacant undisturbed land. No potentially jurisdictional features, hydric soils, or wetlands were identified on the project site during the biology literature review or site survey (Appendix B). The existing site sheet flows to the southwest at 7 percent into Juniper Avenue.

The Proposed Project would require grading the project site for placement of the proposed tanks and booster station. Grading of the project site could affect existing drainage patterns and result in erosion or siltation on- or off-site. However, the Proposed Project's grading plan would be designed to maintain the existing drainage pattern and minimize the potential for erosion or siltation on- or off-site. The site would be graded to capture the majority of rainfall within an earthen basin located along the southerly property boundary.

BMPs would consist of a stabilized construction entrance to avoid tracking soils off-site; straw waddles at drainage that outlets onto public roadways; small retention pond to collect "first flows"; and straw waddles on slopes. During construction, implementation of BMPs would minimize potential erosion or siltation. A less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Seiches occur as a series of standing waves induced by seismic shaking or land sliding into an impounded body of water. Seiches are not considered to be a potential hazard to the project site. The project site is approximately 75 miles inland from the Pacific Ocean coastline and is therefore not subject to a tsunami. According to the San Bernardino County Land Use Plan General Plan Hazard Overlay Map for Morongo Valley, the project site is not located within a dam inundation zone (County of San Bernardino 2010). Furthermore, the site is located on Zone X, outside of the 0.2% annual chance floodplain by the Federal Emergency Management Agency (FEMA) (Landmark 2020). No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Project site is located within the Colorado River watershed, and falls under the Colorado River Basin Plan which contains the water quality regulations for the Colorado River Basin Region and programs to implement those regulations. The watershed is regulated by the Colorado River Regional Water Quality Control Board, Region 7. The Proposed Project would implement BMPs to minimize potential erosion or siltation. BMPs will consist of a stabilized construction entrance to avoid tracking soils off-site; straw waddles at drainage that outlets onto public roadways; small retention pond to collect "first flows"; and straw waddles on slopes. Implementation of these BMPs would ensure that discharge meets the water

quality objectives of the Colorado River Basin Plan. During construction, water discharge would be pumped to the earthen basin and infiltrated to groundwater. Planned and unplanned discharge events are covered under the statewide order (NPDES).

The Sustainable Groundwater Management Act (SGMA) applies to all California Groundwater Basins and requires that high-and medium-priority groundwater basins form Groundwater Sustainability Agencies and be managed in accordance with locally developed Groundwater Sustainability Plans or Alternative Plans (DWR 2019). The proposed project falls within the Morongo Valley Groundwater Basin, Basin 7-020. The basin covers 7,288.1 acres (DWR 2019). The basin is prioritized in the Very Low priority category based on the consideration of the eight components required in Water Code Section 10933(b) (DWR 2019). As a result, the groundwater basin is not required to develop a sustainable groundwater management plan at this time. The basin is currently not overdrafted or adjudicated.

Construction and operation of the Proposed Project would not interfere with any groundwater management or recharge plan. The reservoirs would be filled with existing wells and the boosters pump water from the reservoir to higher elevated zones. The proposed increased volume of the reservoirs are due to meeting updated fire flow requirements and in order to improve network reliability against mechanical and hydraulic failure. The replacement of the tank and addition of new tanks would not substantially impact Colorado River Water Basin groundwater supplies or recharge. No impact would occur.

4.10.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.11 Land Use and Planning

4.11.1 Land Use and Planning (XI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site and immediate vicinity are located in an area designated as Single Residential (County of San Bernardino 2007a). Current existing uses surrounding the project site include vacant land, residential, and a GSWC water storage tank and booster station. The Proposed Project would construct two water storage tanks and a booster station on vacant land replacing the existing GSWC tank and booster station in the Mojave Tank Zone.

The project is on private property. Short-term temporary impacts will occur during construction of the electric pipelines, and the water pipeline, across Juniper Avenue. No road closures would occur. Traffic control shall comply with San Bernardino County requirements. The Proposed Project would not physically divide an established community. Implementation of the Proposed Project would provide needed water

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storage and stable operating pressures to water customers within the Morongo Valley area. Therefore, with regards to physically dividing an established community, no impacts are anticipated.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site and immediate vicinity are located in an area designated as Single Residential (County of San Bernardino 2007a). In general, infrastructure is an allowed use in all land use zones. The Proposed Project would construct two water storage tanks and a booster station and would not conflict with an applicable land use plan or habitat conservation plan. The Proposed Project would be consistent with the goals and policies set forth in the Morongo Valley Community Plan (County of San Bernardino 2007b). The conservation element of the Morongo Valley Community Plan addresses the community's goal for the protection and conservation of the natural resources in the Morongo Valley such as vegetation, habitat, landforms, and wildlife. There are no trees or habitats named in the Morongo Community Plan Conservation Element that are located in the project site. As such, no impact would occur.

4.11.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.12 Mineral Resources

4.12.1 Mineral Resources (XII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

According to the California Department of Conservation Mineral Land Classification Map the project site is located with Mineral Resource Zone 4 (MRZ-4). MRZ-4 designates areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources. It should be noted that land classified as MRZ-4 does not imply that there is little likelihood for the presence of mineral resources, but rather that there is a lack of knowledge regarding mineral occurrence (CDC 1994). The Proposed Project includes two aboveground steel water storage tanks and a booster station. No mining activities are being conducted on the site, no mining activities are planned for this site, and there are no current or future mining activities occurring in the vicinity of the project site.

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Therefore, implementation of the Proposed Project would not result in the loss of availability of a known mineral resource. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would not 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, because no mining operations or other resource recovery sites exist on or near the project site (CDC 1994). Therefore, no impact would occur.

4.12.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.13 Noise

4.13.1 Environmental Setting

Noise Fundamentals

Noise is generally defined as sound that is loud, disagreeable, or unexpected. The selection of a proper noise descriptor for a specific source is dependent on the spatial and temporal distribution, duration, and fluctuation of the noise. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in $L_{dn}/CNEL$). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10-dBA “weighting” added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn} .
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the

hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by a number of sources, including mobile sources, such as automobiles, trucks and airplanes, and stationary sources, such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of 3 dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about 5 dBA (FHWA 2008), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. [WEAL] 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the "line of sight" between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer residential units is generally 30 dBA or more.

Sensitive Noise Receptors

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as parks, historic sites, cemeteries, and recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses. The nearest sensitive receptors to the project site include residences to the north, west, and east.

Existing Ambient Noise Environment

Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA).

The project site is located in a rural residential area where the nearest noise-sensitive land use receptors include single-family residences to the north, west, and east. The nearest residence is located directly adjacent to the eastern boundary of the site. In order to quantify existing ambient noise levels in the project area, ECORP conducted three short-term noise measurements on February 25, 2019. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site (see Appendix F for Noise Measurement Locations). The 10-minute measurements were taken between 2:39 p.m. and 3:25 p.m, when the existing plant was in operation. Short-term (L_{eq}) measurements are considered representative of the noise levels throughout the daytime hours. The average noise levels and sources of noise measured at each location are listed in in Table 4.13-1.

Table 4.13-1. Existing (Baseline) Noise Measurements					
Site Number	Location	L_{eq} dBA	L_{min} dBA	L_{max} dBA	Time
1	Center of Project site.	47.1	33.6	61.4	2:39 p.m.
2	East of Project site on adjacent property next to the existing water tank on Mojave Drive.	53.5	38.0	71.1	3: 15 p.m.
3	South of Project boundary near adjacent residence and along Park Avenue.	44.8	32.6	63.6	2: 59 p.m.

Source: Measurements were taken by ECORP Consulting with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Appendix F for noise measurement outputs.

As shown in Table 4.13-1, the ambient recorded noise levels ranged from 44.8 dBA to 53.5 dBA in the vicinity of the project site (see Appendix F for noise measurement locations). This noise range is typical of that experienced in quiet, suburban, residential areas, as stated previously. The most common noises in the project vicinity is automotive vehicles (cars, trucks, buses, motorcycles), barking dogs, and residential power equipment.

Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced. This can be through peak particle velocity or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively. Vibration impacts on people can be described as the level of annoyance and can vary depending on an

individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

It is difficult to specify noise levels that are generally acceptable to everyone; what is annoying to one person may be unnoticed by another. Standards may be based on documented complaints in response to documented noise levels or based on studies of the ability of people to sleep, talk, or work under various noise conditions. However, all such studies recognize that individual responses vary considerably. Standards usually address the needs of the majority of the general public.

Short-Term Construction Noise

Construction would be divided into two phases: the first phase would include the construction of the first tank, booster station, earthen basin, and emergency generator, and would take approximately 10 months to complete. The second phase consists of constructing the second tank and would be built when the need arises, currently estimated to begin in 2040. Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for on-site construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., building construction, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve 1 or 2 minutes of full power operation followed by 3 to 4 minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts).

The County of San Bernardino Development Code *Title 8, Division 3, § 83.01.080* exempts noise for construction provided that construction is limited between the hours of 7:00 a.m. to 7:00 p.m. Monday through Saturday and is prohibited on Sundays and federal holidays. The County's Code does not promulgate numeric thresholds pertaining to the noise associated with construction. This is due to the fact that construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Proposed Project. Furthermore, Morongo Valley is a developing urban community and construction noise is generally acceptable by the residence as a reality within the urban environment.

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To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor in the Project vicinity, the construction equipment noise levels were calculated using the Roadway Noise Construction Model for the demolition, site preparation, grading, building construction, paving and painting. Onsite building construction, paving and painting are modeled to occur simultaneously. These noise levels were compared against the construction-related noise level threshold established in the *Criteria for a Recommended Standard: Occupational Noise Exposure* prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 4.13-2. Consistent with Federal Transit Association (FTA) recommendations for calculating construction noise, construction noise was measured from the center of the Project site (FTA 2018). The nearest sensitive receptor is a residence adjacent to eastern boundary of the Project site.

Table 4.13-2. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment – Unmitigated			
Equipment	Estimated Exterior Construction Noise Level @ Nearest Residence	Construction Noise Standards (dBA L_{eq})	Exceeds Standards?
Demolition			
Concrete/Industrial Saws (1)	79.7	85.0	No
Rubber Tired Dozers (1)	74.8	85.0	No
Tractors/Loaders/Backhoes (3)	77.1 (each)	85.0	No
Combined Demolition Equipment	84.4	85.0	No
Site Preparation			
Tractors/Loaders/Backhoes (2)	77.1 (each)	85.0	No
Rubber Tired Dozers (1)	74.8	85.0	No
Excavators (1)	73.8	85.0	No
Combined Site Preparation Equipment	81.9	85.0	No
Grading			
Rubber Tired Dozers (1)	74.8	85.0	No

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Table 4.13-2. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment – Unmitigated			
Equipment	Estimated Exterior Construction Noise Level @ Nearest Residence	Construction Noise Standards (dBA L_{eq})	Exceeds Standards?
Tractors/Loaders/Backhoes (2)	77.1 (each)	85.0	No
Excavators (1)	73.8	85.0	No
Combined Grading Equipment	81.9	85.0	No
Building Construction, Paving and Painting			
Generator Sets (1)	74.7	85.0	No
Cranes (1)	69.7	85.0	No
Forklifts (1)	76.5	85.0	No
Welders (3)	67.1 (each)	85.0	No
Off-Highway Trucks (2)	67.3 (each)	85.0	No
Cement and Mortar Mixers (1)	71.9	85.0	No
Pavers (1)	71.3	85.0	No
Rollers (1)	70.1	85.0	No
Tractors/Loaders/Backhoes (1)	77.1	85.0	No
Air Compressors (1)	70.8	85.0	No
Combined Building Construction, Paving and Painting Equipment	83.3	85.0	No

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix F for Model Data Outputs.

Notes: Construction equipment used during construction derived from CalEEMod 2016.3.2.

L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 4.13-2, during construction activities no individual or cumulative piece of construction equipment would exceed the NIOSHA threshold of 85 dBA L_{eq} at the nearest sensitive receptor. A less than significant impact would occur.

Project construction would result in minimal additional traffic on adjacent roadways over the time period that construction occurs. According to the CalEEMod model, which is used to predict air pollutant emissions associated with Project construction, including those generated by worker commute trips, the maximum number of construction workers traveling to and from the Project site on a single day would be nine. The demolition phase is estimated to generate 33 haul truck trips over the course of 20 days. According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the*

Traffic Noise Analysis Protocol (2013a), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The Project construction would not result in a doubling of traffic, and therefore its contribution to existing traffic noise would not be perceptible.

Long-Term Operational Impacts

Project Operations- On-Site Noise Sources

The nearest noise-sensitive land use consists of a single-family residence located adjacent to the eastern project site boundary. The County of San Bernardino Development Code implements the goals and policies of the General Plan by regulating land use within unincorporated areas of the County. Each piece of property is within a "zone" or "land use district" which describes the rules under which that land use may be used. The project site is zoned as single residential. Per section 83.01.080 of the County Code, an acceptable daytime (7:00 a.m.-10:00 p.m.) noise level for single residential is 55 dBA, while a maximum noise level of 45 dBA is acceptable during the nighttime hours (10:00 p.m.-7:00 a.m.).

The main operational noise associated with the Proposed Project would be the equipment used for the proposed water storage tanks and booster station. As previously stated, the proposed water storage tanks and booster station would replace an existing GSWC water storage tank and booster station located at the current Mojave Plant. The location of the new water storage tanks and booster station would be approximately 230 feet to the west of the existing water storage tank and booster station and could be expected to generate the same level of noise as the existing facility. Therefore, operation of the Proposed Project would not result in any substantial changes in the noise environment. This impact is less than significant.

Project Operations-Off-Site Traffic Noise

Project operations would result in extremely minimal additional traffic on adjacent roadways. The only visitors to the site would be that of repair or maintenance work that would be done very infrequently. According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013a), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). The Proposed Project would not result in a doubling of traffic, and therefore its contribution to existing traffic noise would not be perceptible. Traffic noise impacts associated with the Proposed Project would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Result in generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Construction-Generated Vibration

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Project construction would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance. This impact discussion utilizes County of San Bernardino's recommended standard of 0.2 inches per second (in/sec) peak particle velocity with respect to the prevention of structural damage for normal buildings, as contained in Development Code *Title 8, Division 3, § 83.01.090*. This is also the level at which vibrations may begin to annoy people in buildings. The nearest structure of concern to the construction site is a single-family residence located approximately 33 feet away from the site boundary. However, it is acknowledged that construction activities would occur throughout the project site and would not be concentrated at the point closest to the sensitive receptors. Table 4.13-3 displays vibration levels for typical construction equipment.

Table 4.13-3. Vibration Source Amplitudes for Construction Equipment	
Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Rock Breaker	0.082
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2018; Caltrans 2013

Based on the vibration levels presented in Table 4.13-3, ground vibration generated by heavy-duty construction equipment would not be anticipated to exceed approximately 0.089 in/sec peak particle velocity at 25 feet. Thus, the structure located at 33 feet would not be negatively affected. No impact would occur.

Operational Vibration

Project operations would not include the use of any stationary equipment that would result in excessive groundborne vibration levels. For this reason, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located approximately 11.4 miles northeast of Yucca Valley Airport. The project site is not located within an airport land use plan and is not within two miles of an airport. Implementation of

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the Proposed Project would not affect airport operations, nor result in increased exposure of noise-sensitive receptors or workers to aircraft noise. For this reason, no impact would occur.

4.13.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.14 Population and Housing

4.14.1 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project does not propose the construction of new housing or businesses and therefore is not anticipated to directly or indirectly induce population growth in the area. Due to the nature of the Proposed Project, it is not anticipated to generate a substantial increase in employment opportunities capable of inducing population growth. Per the GSWC Master Plan, increased storage is required to mitigate an existing storage deficiency in the pressure zone. The additional storage provided by the first tank is required to meet the current system maximum day and fire flow demands. The second tank will be constructed in response to future water demand increases. The Project would require continuous staffing during construction in the range of a minimum of three to a maximum of 12 people and no new staffing during operation.

The second tank would also be tied to water demand triggered from associated development or developments approved through the County's general planning process. The tank would only be built once the associated future development the water will provide for is approved under the General Plan or other approval of development from the County. As a result, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would not displace housing or people because there are no homes located within the project site. No impact would occur.

4.14.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.15 Public Services

4.15.1 Environmental Setting

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Fire Protection

The Morongo Valley Fire Department (MVFD) provides fire protection services for the Morongo Valley area including the project site. The MVFD covers an area of approximately 30 square miles and serves a population of approximately 5000 people. The Proposed Project would construct two water storage tanks and a booster station to serve the Mojave Tank Zone. Construction materials used at the new Mojave Plant would be similar to the existing plant, including two steel reservoirs similar to the existing steel reservoir, wood booster station building similar to the existing building, and chain link perimeter fence similar to the existing fence. Once the new facility is built the old facility would be decommissioned, balancing out the need for fire protection. The Proposed Project is not anticipated to require additional services or extended response times for fire protection services. There is current demand for the first tank, and the second tank would be built based on need from approved developments through the County's general Plan or planning process. The Proposed Project would improve fire flow water delivery to the Mojave Tank Zone area. A beneficial impact would occur.

Police Services

The San Bernardino County Sheriff's Department provides police protection services for the Morongo Valley including the project site. The Proposed Project would construct two water storage tanks and a booster station to serve the Mojave Tank Zone. The new plant will also have an underground electric service and alarms connected through SCADA to Water Operations personnel. The replacement of one tank and booster station with the other would not require additional police resources. Due to the nature of the Proposed Project it is not anticipated to require additional police protection, necessitate the construction of new facilities or increase the demand on police protection services, or result in extended response times for police protection services. No impact would occur.

Schools

The project site is located within the jurisdiction of the Morongo Unified School District (MUSD). The MUSD operates 18 educational facilities including: 11 elementary schools, two middle schools, three high schools, and two independent study centers. The Proposed Project would construct a water storage tank and booster station to serve the Mojave Tank Zone. Due to the nature of the Proposed Project it is not anticipated to induce population growth; therefore, it would not create additional demand for schools. No impact would occur.

Parks

The Proposed Project is not anticipated to induce population growth; therefore, it would not create additional demand for parks. No impact would occur.

Other Public Facilities

The Proposed Project is not anticipated to induce population growth; therefore, it would not create additional demand for other public facilities, such as libraries. No impact would occur.

4.15.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.16 Recreation

4.16.1 Recreation (XVI) Materials Checklist

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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The Proposed Project does not propose housing or other uses that would induce population growth. The Proposed Project would construct two water storage tanks and a booster station to serve the Morongo Valley area. Due to the nature of the Proposed Project, it would not increase the use of existing neighborhood or regional parks or other recreational facilities such that physical deterioration would occur or be accelerated. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project would construct two water storage tanks and a booster station to serve the Morongo Valley area. The Proposed Project would not require the construction or expansion of recreational facilities. No impact would occur.

4.16.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.17 Transportation

4.17.1 Environmental Setting

The community of Morongo Valley is bisected by Twenty-Nine Palms Highway (SR-62). This major corridor provides the community of Morongo Valley access to Yucca Valley to the northeast and Desert Hot Springs to the south. SR-62 also provides access to natural areas such as Joshua Tree National Park and the Colorado River. SR-62 is characterized as a two-lane state highway originating at the I-10 interchange in Riverside County, traveling north into San Bernardino County and eventually terminating at the Arizona State Line (County of San Bernardino 2007b).

4.17.2 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Morongo Valley Community Action Guide

The Community Action Guide is a framework of actions identified by the community and supports implementation of the actions by the Morongo Valley community. The goals and policies from the previous Community Plan were used to inform the Guide and the Policy Plan portion of the Countywide Plan. The only policies related to traffic in the Guide are "Community Focus Statement F: Grow the local economy in a manner consistent with the rural character of Morongo Valley" and "Action Statement F.2: Advocate to Caltrans for the preparation of a traffic study to assess the impacts of installing traffic signals, or other traffic calming measures, at key intersections in the business district."

San Bernardino County General Plan – Circulation Element

There are currently over 10,000 miles of roadways located within San Bernardino County. These facilities fall under the jurisdiction of one of the three governmental agencies responsible for construction and maintenance of roadway infrastructure. Approximately 5,930 miles of roadways within the County fall under the jurisdiction of the numerous incorporated municipalities located across the County. These facilities range in classification from major arterials to local streets. The overarching goal of the General Plan Circulation Element is to coordinate land use and transportation planning, to ensure adequate transportation facilities, to support planned land uses and ease congestion. Goal CI-1 through Goal CI-8 of this Element relate to transportation facilities.

Construction Impacts

The Proposed Project would generate short-term construction related vehicle trips. Construction and worker traffic would utilize SR-62 and Juniper Avenue, a non-artery residential neighborhood street, to access the project site. Construction of the Proposed Project would require construction to occur within Juniper Avenue and Mojave Drive. Temporary equipment movement and construction activities associated with the Proposed Project would be confined to the project site and would not physically impair access to other existing roadways within the project vicinity. All construction staging areas would be on-site and access to local residences would be maintained at all times. Grading activities stage on-site just prior to commencing work. All subsequent phases of work would stage in the flat area between the reservoir and the booster station on-site. Solid waste generation during the 10-month construction period would be minimal (approximately 40 tons), and as such traffic generated from hauling of solid waste off-site would be negligible.

Juniper Avenue is a local road with a speed limit of 45 miles per hour. This road primarily provides access to adjacent land and the collector network and would therefore not produce heavy traffic. There are no designated bicycle routes in the vicinity of the Project. Mojave Drive and Juniper Avenue do not have pedestrian facilities (e.g. paved sidewalks) in the vicinity of the Project site, however the Project would not impede pedestrian access along these roads nor future construction of pedestrian facilities. Furthermore, there are no bus routes in the vicinity of the Project site.

Construction traffic would be minimal such that no traffic diversion would be necessary. The Project would require fewer than 15 pieces of equipment to be staged during the 10-month construction period. The Project contractor would prepare a site-specific Traffic Control Plan to be implemented during construction, which would be reviewed and approved by the County. The contractor would use flaggers to control safe vehicle passage through the construction area on Juniper Avenue. Mojave Drive is a wide dirt

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roadway and no lane closures are anticipated; however, similar traditional traffic control measures would occur on this road. Therefore, construction of the Proposed Project would not conflict with the policies set forth in the Circulation and Infrastructure section of the Morongo Valley Community Action Guide or the San Bernardino County General Plan Circulation Element. Impacts would be less than significant.

Operational Impacts

Operational impacts are anticipated to be similar to existing conditions because the Proposed Project would replace an existing use. The facility would require one daily visit by a Water System Operator. While it is anticipated that the Proposed Project would require intermittent maintenance to be conducted by GSWC staff, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. No solid waste would be generated during operation of the facility; therefore no traffic impacts would result from waste hauling. Impacts would be less than significant.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CEQA Guidelines section 15064.3, subdivision (b) details the use of vehicle miles traveled (VMT) to assess the significance of transportation impacts. As detailed in CEQA Guidelines section 15064.3, subdivision (c), beginning on July 1, 2020, the provisions of this section shall apply statewide.

Section 15064.3 Subdivision (b) of the CEQA guidelines specify for Land Use Projects "Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major traffic stop or a stop along an existing high-quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact."

The Guidelines also specify, "If existing models or methods are not available to estimate the vehicles miles traveled for the particular project being considered, a lead agency may analyze the project vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate." No models or methods are available for use of this project. Instead the project is evaluated qualitatively.

The Proposed Project would construct two water storage tanks and a booster station to replace existing similar facilities. Operation and maintenance of the Proposed Project would require one daily visit to the project site. The Project would generate short-term construction related vehicle trips, but fewer than 15 pieces of equipment would be staged during the 10-month construction period. Construction traffic would utilize SR-62 and Juniper Avenue to access the project site. Construction of the Proposed Project would require construction to occur within Juniper Avenue and Mojave Drive. Temporary construction

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activities associated with the Proposed Project would generally be confined to the project site and would not physically impair access to other existing roadways within the project vicinity. All construction staging areas would be on-site. Grading activities stage on-site just prior to commencing work. All subsequent phases of work would stage in the flat area between the reservoir and the booster station on-site. Access to local residences would be maintained at all times. Furthermore, solid waste generation during construction and operation would be minimal, and as such traffic generated from hauling of solid waste off-site would be negligible. This use would not create a significant transportation impact that would conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b). Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Proposed Project would construct two water storage tanks with a capacity of 0.4 MG and diameter of 58 feet each. The Proposed Project would also include a booster station located within an 840 sq. ft. building. Additionally, the Proposed Project includes perimeter fencing consisting of eight feet tall chain link with slats. Access to the project site would be provided via a driveway along Juniper Avenue. Juniper Avenue is a local road with a speed limit of 45 miles per hour. This road primarily provides access to adjacent land and the collector network, and would therefore not produce heavy traffic. The project entrance would be designed by a registered professional engineer and would not increase hazards due to a geometric design feature. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The County's Morongo Valley Community Action Guide identifies SR-62 as the evacuation route for the planning area. Construction traffic would utilize SR-62 and Juniper Avenue to access the project site. However, the negligible increase in traffic during operation and maintenance of the Proposed Project would not result in inadequate access to SR-62.

Construction of the Proposed Project would require construction to occur within Juniper Avenue and Mojave Drive for new pipelines and the SCE transmission line. The Applicant would apply for an Encroachment Permit from the County Transportation Department for these activities. The Project contractor would prepare a site-specific Traffic Control Plan to be implemented during construction, which would be reviewed and approved by the County. The contractor would use flaggers to control safe vehicle passage through the construction area on Juniper Avenue. Mojave Drive is a wide dirt roadway

and no lane closures are anticipated; however, similar traditional traffic control measures would occur on this road.

Temporary construction activities associated with the Proposed Project would be confined to the project site and would not physically impair access to other existing roadways within the project vicinity. All construction staging areas would be on-site. Grading activities stage on-site just prior to commencing work. All subsequent phases of work would stage in the flat area between the reservoir and the booster station on-site. Access to local residences would be maintained at all times. Impacts would be less than significant.

4.17.3 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

On February 18, 2020, Project notification letters with invitations to consult on the Project were sent by certified mail and email to representatives of the two tribes on the State Water Board's Assembly Bill (AB) 52 list for the project area in San Bernardino County: the San Manuel Band of Mission Indians (SMBMI) and the Colorado River Indian Tribes (CRIT). No response has been received by the State Water Board from the CRIT. The SMBMI responded in an email on March 19, 2020 with suggested mitigation measures. The tribe stated they are not concerned with the project implementation as planned and do not require additional consultation. The State Water Board contacted the tribal office by email on March 20, 2020 to acknowledge receipt of the request and state that the mitigation measures would be incorporated into the document.

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

While there are no known tribal cultural resources (TCRs) in the project footprint, ground-disturbing activities have the potential to result in the discovery of, or inadvertent damage to, archaeological contexts and human remains, and this possibility cannot be eliminated. Consequently, there is a potential for significant impacts on TCRs. Implementation Mitigation Measures CUL-1 (See Section V) and TCR-1 would reduce the potential impacts to less than significant.

4.18.3 Mitigation Measures

TCR-1:

1. The San Manuel Band of Mission Indians Cultural Resources Department (SMBMI) shall be contacted, as detailed in CUL-1, of any Native American pre-contact archaeological resources discovered during project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input 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 the archaeologist, in coordination with SMBMI and the Lead Agency, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents SMBMI for the remainder of project ground disturbing activities, should SMBMI elect to place a monitor on-site.
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 applicant and Lead Agency for dissemination to SMBMI. The Lead Agency and/or applicant shall, in good faith, consult with SMBMI throughout the life of the project.

4.19 Utilities and Service Systems

4.19.1 Utilities and Service Systems (XIX) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Proposed Project involves the construction of two water storage tanks and a booster station. The Project would not require any additional water facilities beyond those being installed. The only wastewater that would be produced by the Proposed Project would occur during periodic maintenance of the proposed water storage tanks. However, the Proposed Project would include an earthen basin designed to contain tank overflow and site drainage within the project site.

Work at the site would be limited. The site would not include bathrooms for workers. Therefore, maintenance of the proposed water storage tanks would not result in the discharge of wastewater or result in the need for wastewater treatment facilities.

The new plant will have an underground electric service and would include the installation of an SCE transformer on site to regulate the voltage to the new booster station. However, because the Proposed Project would consist of the replacement of an existing pump with an updated booster pump, new electrical use demands are anticipated to be similar or improved when compared to previous electrical demands. The reservoir is filled with existing wells and the boosters pump water from the reservoir to higher elevated zones. The increase volume of the reservoir will not result in an increase in electricity, for the proposed increase of the volume of the reservoir is due to meeting updated fire flow requirements. No natural gas would be required for the Project. SCADA equipment will be installed to communicate to the CSA, either through telephone lines or by radio. The Project would not require new or expanded electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Additionally, the Proposed Project would not result in a direct or indirect increase in population or in any use that would generate wastewater or require water supply beyond what was already evaluated and planned for in the County of San Bernardino General Plan. No impact will occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
development during normal, dry and multiple dry years?				

The Sustainable Groundwater Management Act (SGMA) applies to all California Groundwater Basins and requires that high-and medium-priority groundwater basins form Groundwater Sustainability Agencies and be managed in accordance with locally developed Groundwater Sustainability Plans or Alternative Plans (DWR 2019). The proposed Project falls within the Morongo Valley Groundwater Basin, Basin 7-020. The basin covers 7,288.1 acres (DWR 2019). The basin is prioritized in the Very Low priority category based on the consideration of the eight components required in Water Code Section 10933(b) (DWR 2019). As a result, the groundwater basin is not required to develop a sustainable groundwater management plan at this time. The basin is currently not over-drafted or adjudicated (DWR 2019).

The Proposed Project would construct two water storage tanks and a booster station. The proposed increased volume of 0.4 million gallons for the replacement tank is for meeting updated fire flow requirements and would not substantially impact Colorado River Water Basin groundwater supplies or recharge. The new tank would replace an existing GSWC water storage tank to serve current customers within the Mojave Tank Zone. Per the GSWC Master Plan, increased storage is required to mitigate an existing storage deficiency in the pressure zone. The additional storage provided by the first tank is required to meet the current system maximum day and fire flow demands. The second tank will be constructed as water demand increases in the future, which would increase. The reservoirs would be filled with existing wells and the boosters pump water from the reservoir to higher elevated zones. Only the water to fill the tanks would be required; the proposed increase of the volume of the reservoir is due to meeting updated fire flow requirements. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

As discussed previously in the response to 4.19 (a) above, the Proposed Project would not discharge any wastewater or result in the need for wastewater treatment facilities. No impact would occur.

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Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Proposed Project involves the construction of two water storage tanks and a booster station. Any solid waste debris resulting from construction of the Proposed Project would be minimal and would be disposed of at a permitted landfill. The Proposed Project would be serviced by Landers Sanitary Landfill located at 592000 Winters Road, Landers, CA 92285. According to Cal Recycle, Landers Sanitary Landfill has a maximum permitted capacity of 13,983,500 cubic yards and a remaining capacity of 11,148,000 cubic yards (Cal Recycle 2020). The minimal increase in waste associated with the Proposed Project would not be expected to affect the permitted capacity of this landfill. Approximately 40 tons of solid waste would be generated during the 10-month construction period and hauled away from the site, as follows:

- Clearing, Grubbing, and Grading – 7 tons of organics, and 10 tons of deleterious materials, such as rock, brick, trash, etc.
- Reservoir Construction – 8 tons of construction related debris.
- Booster Station Construction -10 tons of construction related debris.
- Miscellaneous - 5 tons of miscellaneous construction related debris.

The Project Applicant would encourage contractors to recycle materials when possible. The Proposed Project would not generate solid waste during operation. A less than significant impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Waste generated by the Proposed Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste. Any solid waste debris resulting from construction of the Proposed Project would be minimal and would be disposed of at a permitted landfill, or recycled when possible. The Proposed Project would not generate solid waste during operation. No impact would occur.

4.19.2 Mitigation Measures

No significant impacts were identified, and no mitigation measures are required.

4.20 Wildfire

4.20.1 Environmental Setting

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CALFIRE) to identify areas of very high fire hazard severity zones within Local Responsibility Areas (LRA). Mapping of the areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30 to 50-year time horizon and their associated expected fire behavior, and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to buildings.

4.20.2 Wildfire (XX) Environmental Checklist and Discussion

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located on land designated as VHFHSZ as recommended by CAL FIRE (CAL FIRE 2007). The Proposed Project involves the construction of two water storage tanks and a booster station. The increased storage is required to meet the maximum day demand and fire flow demand. Access to the Proposed Project is planned at one entryway along Juniper Avenue.

The County's Morongo Valley Community Action Guide identifies SR-62 as the evacuation route for the planning area. Operation and maintenance of the Proposed Project would not result in inadequate access to SR-62. Construction of the Proposed Project would require construction to occur within Juniper Avenue and Mojave Drive for new pipelines and the SCE transmission line. Temporary construction activities associated with the Proposed Project would be confined to the project site and would not physically impair access to other existing roadways within the project vicinity. All construction staging areas would be on-site. Grading activities stage on-site just prior to commencing work. All subsequent phases of work would stage in the flat area between the reservoir and the booster station on-site. Solid waste generation during construction and operation would be minimal, and as such traffic generated from hauling of solid waste off-site would be negligible.

Access to local residences would be maintained at all times. Fire protection constructed at the new Mojave Plant would be similar to the existing plant, including a steel reservoir, wood booster station building, and chain link perimeter fence. The new plant will have an underground electric service and alarms connected through SCADA to Water Operations personnel. Due to the scale and nature of the Proposed Project it is not anticipated to impair an adopted emergency response plan or emergency evacuation plan. No impact would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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 a wildfire? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

As described above, the Proposed Project involves the construction of two water storage tanks and a booster station and does not propose habitable structures. The increased storage would meet the maximum day demand and fire flow demand, and would provide fire flow for nearby residences. Wind patterns in Mojave are generally westward from February 1 through November 28, with a peak percentage of 82% in late June (Weather Spark 2020). Any pollutant concentrations from a fire would likely travel westward towards the vacant parcel adjacent to the western project boundary. Additionally, the Proposed Project is located on a relatively flat undeveloped parcel. Fire protection constructed at the new Mojave Plant would be similar to the existing plant, including two steel reservoirs similar to the existing steel reservoir, a booster pump station similar to the wood booster station building, and fence similar to the chain link perimeter fence. The new plant will have an underground electric service and alarms connected through SCADA to Water Operations personnel. Therefore, the Proposed Project would not expose any occupants to pollutant concentrations from wildfire as a result of slope, prevailing winds, or other factors. No impact would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- | | Potentially
Significant
Impact | Less than
Significant with
Mitigation
Incorporated | Less than
Significant
Impact | No
Impact |
|--|--------------------------------------|---|-------------------------------------|--------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The Proposed Project is located within a rural residential area and will require an SCE transformer to serve the proposed booster station. However, the Proposed Project would replace an existing GSWC water storage tank and booster station and provide improved water service to the area. Fire protection constructed at the new Mojave Plant would be similar to the existing plant, including two steel reservoirs similar to the existing a booster pump station similar to the steel reservoir, wood booster station building, and a fence similar to the chain link perimeter fence. The new plant will have an underground electric service and alarms connected through SCADA to Water Operations personnel. Therefore, the Proposed Project would not exacerbate fire risk resulting in temporary or ongoing impacts to the environment. No impact would occur.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- | | Potentially
Significant
Impact | Less than
Significant with
Mitigation
Incorporated | Less than
Significant
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|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| 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? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

The Proposed Project is located on relatively flat undeveloped terrain and would not include the construction of habitable structures. Additionally, the Project would not substantially change the existing runoff patterns from existing conditions or increase impervious surfaces.

Due to the lack of fire fuel with the surrounding area the steel tank failing to a degree of losing its water supply is highly unlikely. In the event of tank failure, the Proposed Project includes an earthen basin (70 feet by 20 feet by 5 feet deep) for tank overflow and site drainage in the southern portion of the project site. Therefore, the Proposed Project would not expose people or structures to risks including downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. No impact would occur.

4.21 Mandatory Findings of Significance

4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Proposed Project would not substantially degrade the quality of the environment or substantially reduce the habitat of a fish or wildlife species. With the Mitigation Measures BIO-1 through BIO-3 outlined in Chapter IV Biological Resources, the Proposed Project would not cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. With Mitigation Measures CUL-1, CUL-2 and GEO-1, the Project will not eliminate important examples of the major periods of California history or prehistory. Therefore, the project would have a less than significant impact with mitigation incorporated.

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Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) 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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As described in the impact analyses in this IS/MND, any potentially significant impacts of the proposed Project would be reduced to a less than significant level. According to the County of San Bernardino Land Use Services Department, only two project applications located in Morongo Valley have been submitted in the last two years (County of San Bernardino 2020a). One of these projects is Tentative Parcel Map 20029 which proposes to subdivide 56.86 acres into three 2.5-acre parcels, one 9.85-acre parcel, and a 39.5-acre remainder parcel. The second project proposes a lot line adjustment between two parcels on 2.47 acres; assessor parcel numbers 0584-111-16 (1.24 acres) and 0584-111-15 (1.23 acres) located in the RS-1 zone. As of August 2020, neither of these projects has been heard by the County Planning Commission (County of San Bernardino 2020b).

Projects completed in the past have also implemented mitigation as necessary. Accordingly, the Proposed Project would not otherwise combine with impacts of related development to add considerably to any cumulative impacts in the region. With mitigation, the Proposed Project would not have impacts that are individually limited, but cumulatively considerable. Therefore, the project would have a less than cumulatively considerable impact with mitigation incorporated.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The checklist categories of: Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Cultural, Geology and Soils, Hydrology and Water Quality, Population and Housing, Tribal Cultural, Noise, Transportation, and Wildfire evaluate Project impacts that may have adverse effects on human beings, either directly or indirectly. All of the Project's impacts on human beings, both direct and indirect, that are attributable to the Project were identified and mitigated. Therefore, the Proposed Project would not either directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct and indirect impacts of the proposed Project are identified as having no impact, less than significant impact, or less than significant impact with mitigation. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

SECTION 5.0 LIST OF PREPARERS

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SECTION 7.0 LIST OF APPENDICES

Appendix A – CalEEMod Model Data Outputs

Appendix B – Biological Technical Report

Appendix C – Cultural Resources Inventory and Paleontological Records Search

Appendix D – Geotechnical Report

Appendix E – Energy Consumption Outputs

Appendix F – Noise Measurement Data