DRAFT

Initial Study and Mitigated Negative Declaration

YEAGER WELL REPLACEMENT PROJECT

Morongo Valley, California

Lead Agency:

State Water Resources Control Board
464 West 4th Street
San Bernardino, CA 92401

Prepared for:
Golden State Water Company
13608 Hitt Road
Apple Valley, CA 92308

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

111 Academy Way, Suite 210
Irvine, CA 92617

June 2025

THIS PAGE INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

1.0 BACKGROUND 1-1

1.1 Summary 1-1

1.2 Introduction 1-2

1.3 Surrounding Land Uses/Environmental Setting 1-2

2.0 PROJECT DESCRIPTION 2-1

2.1 Project Purpose and Need 2-1

2.2 Project Characteristics 2-1

2.3 Project Timing 2-2

2.4 Regulatory Requirements, Permits, and Approvals 2-2

2.5 Consultation With California Native American Tribe(s) 2-2

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION 3-5

3.1 Environmental Factors Potentially Affected 3-5

4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION 4-1

4.1 Aesthetics 4-1

4.1.1 Environmental Setting 4-1

4.1.2 Aesthetics (I) Environmental Checklist and Discussion 4-2

4.1.3 Mitigation Measures 4-3

4.2 Agriculture and Forestry Resources 4-4

4.2.1 Environmental Setting 4-4

4.2.2 Agriculture and Forestry Resources (II) Environmental Checklist and Discussion 4-4

4.2.3 Mitigation Measures 4-6

4.3 Air Quality 4-6

4.3.1 Environmental Setting 4-6

4.3.2 Air Quality (III) Environmental Checklist and Discussion 4-7

4.3.3 Best Management Practices 4-14

4.4 Biological Resources 4-14

4.4.1 Environmental Setting 4-16

4.4.2 Biological Resources (IV) Environmental Checklist and Discussion 4-21

4.4.3 Mitigation Measures 4-25

4.5 Cultural Resources 4-28

4.5.1 Environmental Setting 4-28

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion 4-29

4.5.3 Best Management Practices....4-30
4.6 Energy....4-30
4.6.1 Environmental Setting....4-30
4.6.2 Energy (VI) Environmental Checklist and Discussion....4-33
4.6.3 Mitigation Measures....4-35
4.7 Geology and Soils....4-35
4.7.1 Environmental Setting....4-35
4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion....4-36
4.7.3 Mitigation Measures....4-40
4.8 Greenhouse Gas Emissions....4-40
4.8.1 Environmental Setting....4-40
4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion....4-42
4.8.3 Mitigation Measures....4-43
4.9 Hazards and Hazardous Materials....4-44
4.9.1 Hazards and Hazardous Materials (IX) Environmental Checklist and Discussion....4-44
4.9.2 Mitigation Measures....4-48
4.10 Hydrology and Water Quality....4-48
4.10.1 Regional Hydrology....4-48
4.10.2 Site Hydrology and On-Site Drainage....4-49
4.10.3 Hydrology and Water Quality (X) Environmental Checklist and Discussion....4-49
4.10.4 Best Management Practices....4-53
4.11 Land Use and Planning....4-54
4.11.1 Environmental Setting....4-54
4.11.2 Land Use and Planning (XI) Environmental Checklist and Discussion....4-54
4.11.3 Mitigation Measures....4-55
4.12 Mineral Resources....4-55
4.12.1 Environmental Setting....4-55
4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion....4-56
4.12.3 Mitigation Measures....4-57
4.13 Noise....4-57
4.13.1 Environmental Setting....4-57
4.13.2 Noise (XIII) Environmental Checklist and Discussion....4-62
4.13.3 Mitigation Measures....4-72
4.14 Population and Housing....4-73

4.14.1 Population and Housing (XIV) Environmental Checklist and Discussion....4-73
4.14.2 Mitigation Measures....4-73
4.15 Public Services....4-73
4.15.1 Public Services (XV) Environmental Checklist and Discussion....4-73
4.15.2 Fire Services....4-74
4.15.3 Police Services....4-74
4.15.4 Schools....4-75
4.15.5 Parks and Other Public Facilities....4-75
4.15.6 Mitigation Measures....4-75
4.16 Recreation....4-76
4.16.1 Recreation (XVI) Materials Checklist....4-76
4.16.2 Mitigation Measures....4-76
4.17 Transportation....4-77
4.17.1 Environmental Setting....4-77
4.17.2 Transportation (XVII) Environmental Checklist and Discussion....4-77
4.17.3 Mitigation Measures....4-81
4.18 Tribal Cultural Resources....4-81
4.18.1 Environmental Setting....4-81
4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion....4-81
4.18.3 Best Management Practices....4-82
4.19 Utilities and Service Systems....4-83
4.19.1 Utilities and Service Systems (XIX) Environmental Checklist and Discussion....4-83
4.19.2 Mitigation Measures....4-85
4.20 Wildfire....4-85
4.20.1 Environmental Setting....4-85
4.20.2 Wildfire (XX) Environmental Checklist and Discussion....4-86
4.20.3 Mitigation Measures....4-87
4.21 Mandatory Findings of Significance....4-88
4.21.1 Mandatory Findings of Significance (XXI) Environmental Checklist and Discussion....4-88

5.0 LIST OF PREPARERS....5-1
5.1 State Water Resources Control Board....5-1
5.2 Golden State Water Company....5-1
5.3 ECORP Consulting, Inc....5-1

6.0 BIBLIOGRAPHY....6-1

LIST OF TABLES

Table 4.3-1. Construction-Related Emissions 4-10
Table 4.6-1. Non-residential Electricity Consumption in San Bernardino County 2018-2022 4-32
Table 4.6-2. Automotive Fuel Consumption in San Bernardino County 2019-2023 4-33
Table 4.6-3. Proposed Project Fuel Consumption 4-34
Table 4.8-1. Construction-Related Greenhouse Gas Emissions 4-42
Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density 4-60
Table 4.13-2. Construction Average (dBA) Noise Levels – Daytime 4-65
Table 4.13-3. Unmitigated Construction Average (dBA) Noise Levels – Nighttime 4-66
Table 4.13-4. Mitigated Construction Average (dBA) Noise Levels – Nighttime 4-69
Table 4.13-5. Representative Vibration Source Levels for Construction Equipment 4-70
Table 4.13-6. Construction Vibration Levels at 150 Feet 4-71

LIST OF FIGURES

Figure 1. Project Vicinity 1-3
Figure 2. Project Location 1-4
Figure 3. Project Site Plan 2-3
Figure 4. Representative Site Photographs 2-4
Figure 5. Daytime Noise Generation Contours 4-67
Figure 6. Nighttime Noise Generation Contours 4-68

LIST OF APPENDICES

Appendix A – Air Quality/Greenhouse Gas Modeling Output
Appendix B – Biological Resources Assessment
Appendix C – Cultural Resources Assessment (*confidential; available by request*)
Appendix D – Energy Modeling Output
Appendix E – Paleontological Assessment
Appendix F – Noise Impact Modeling Output

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
ADT	Average Daily Trips
ANSI	American National Standards Institute
APN	Assessor's Parcel Number
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH_4	methane
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPSEI	California Native Plant Society's Electronic Inventory
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
County	County of San Bernardino
CPUC	California Public Utilities Commission
CRRWQCB	Colorado River Regional Water Quality Control Board
dB	decibels
dBA	A-weighted decibels
DBH	diameter at breast height
DOC	California Department of Conservation
DPM	diesel particulate matter
DTSC	California Department of Toxic Substances Control
DWR	California Department of Water Resources
ECORP	ECORP Consulting, Inc.
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GHG Plan	County of San Bernardino GHG Reduction Plan

Term	Definition
gpm	gallons per minute
GSWC	Golden State Water Company
IS/MND	Initial Study and Mitigated Negative Declaration
kV	kilovolts
kWh	kilowatt-hours
L_{dn}	Average Daily Noise Level
L_{eq}	Average Hourly Noise Level
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
MUSD	Mojave Unified School District
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NIOSH	National Institute for Occupational Safety and Health
NO_x	nitrogen oxides
NRCS	Natural Resources Conservation Service
O_3	ozone
PEIR	Programmatic Environmental Impact Report
PM	Particulate Matter
PM_{10}	Particulate Matter Less than 10 Microns in Diameter
$PM_{2.5}$	Particulate Matter Less than 2.5 Microns in Diameter
PPB	Parts per Billion
PPV	Peak Particle velocity
PRC	Public Resources Code
Project	Yeager Well Replacement Project
RCNM	Roadway Construction Noise Model
ROG	Reactive Organic Gases
SB	Senate Bill
SCE	Southern California Edison
SIP	State Implementation Plan
SO_2	sulfur dioxide
SR	State Route
State Water Board	State Water Resources Control Board
TAC	Toxic Air Contaminant
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey
VHFHSZ	Very High Fire Hazard Severity Zones
WSC	Western Science Center
$\mu g/m^3$	micrograms per cubic meter

EXECUTIVE SUMMARY

Lead Agency:	State Water Resources Control Board (State Water Board)
Project Proponent:	Golden State Water Company (GSWC)
Project Location:	GSWC is planning to construct a replacement potable water supply well at its Yeager-Vale Plant, located at 11077 Vale Drive, Morongo Valley, California, San Bernardino County (County) Assessor's Parcel Number (APN): 058326108. An adjacent GSWC-owned parcel to the south (APN: 058326107) has been identified by GSWC as a location for the replacement well. The identified parcel is approximately 130 feet (east to west) by 100 feet (north to south). The addition of the parcel to the south would expand the total area of the Yeager-Vale Plant to approximately 0.77 acre. The Project Site encompasses both parcels and is located approximately 0.15 mile southwest of highway 62, immediately east of Vale Drive, north of Mojave Drive, and west of East Drive. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. The northern parcel, Parcel A, containing the Yeager-2, is developed with facilities associated with the existing well operation, ornamental vegetation, gravel road, chain link fencing, and existing man-made discharge basin. The southern parcel, Parcel B, proposed for Yeager-4 is composed of a mix of native and nonnative vegetation consisting of disturbed *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance (mesquite thickets). Parcel B contains compact sandy soils, with scattered debris throughout, and a dirt roadway across the site. The Project Site is located near the Big Morongo Canyon Preserve, approximately 0.03 miles to the east. To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline will be installed. The pipeline will span approximately 500 linear feet, terminating south of the East Drive and Covington Drive intersection. This alignment has been selected to avoid encroachment on wetland habitat within the Big Morongo Canyon Preserve.

Project Description:

GSWC is planning to construct a replacement potable water supply well, Yeager Well 4, at its Yeager-Vale Plant, located at 11077 Vale Drive, Morongo Valley, California (San Bernardino County Assessor's Parcel Number [APN]: 058326108). An adjacent GSWC-owned parcel to the south (APN: 058326107) has been

identified by GSWC as the proposed location for the replacement well. The identified parcel is approximately 130 feet (east to west) by 100 feet (north to south). The addition of the parcel to the south would expand the total area of the Yeager-Vale Plant to approximately 0.77 acre.

The Proposed Project would be part of GSWC's Morongo Del Sur System, which delivers groundwater pumped from the Morongo Valley portion of the Morongo Basin located east and west of the Twenty-Nine Palms Highway between Morongo Valley and Yucca Valley. GSWC is proposing to decommission Yeager-2 once Yeager Well 4 has been established. Yeager-2 is approximately 300 feet deep, and the new Yeager-4 well would reach approximately the same depth. The facility would not require a crew or staff; therefore, no bathroom facilities would be built.

The southern parcel, Parcel B, of the Project Site is undeveloped land, with mesquite dominated vegetation and cottonwood tree (*Populus* sp.) towards the eastern side, and overhead power lines parallel to the northern property line between the southern parcel and the Yeager-Vale Plant. The overhead power lines proceed north along the eastern perimeter of the Yeager-Vale Plant. As part of the construction, the vegetation and the large cottonwood tree will need to be removed and the ground leveled and prepared (i.e., temporary gravel bed) for heavy equipment prior to construction activities. The cottonwood tree measures 25 feet tall and has a 14.6-inch diameter at breast height (DBH). The Project ingress/egress would be on the western property boundary from Vale Drive (see Figure 3). The Yeager-Vale Plant has several permanent structures that would be protected in place: the Yeager-Vale Plant treatment building, generator, motor control center, and chemical building. The existing onsite discharge pond located on Parcel A would also remain in place.

To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline would be installed. The line will extend east along Mojave Drive and then continue north along East Drive before terminating south of the East Drive and Covington Drive intersection, with the line discharging into an upland area (see Figure 3). The pipeline would span approximately 500 linear feet and be completely contained within the developed roadway and shoulder of Mojave Drive and East Drive. This alignment has been selected to avoid encroachment on wetland habitat within the Big Morongo Canyon Preserve.

GSWC maintains regulatory coverage for this discharge under the State Water Board National Permit Discharge Elimination System (NPDES) Permit for Drinking Water System Discharges (Order No. WQ 2014-0194-DWQ, WDID No. 4DW0623), administered by the State Water Board Division of Water Quality. In June 2015, GSWC received a Notice of Applicability (NOA) for the Statewide Drinking Water System Discharge Permit, identification number 4DW0623, which asserts coverage under Order No. WQ 2014-0194-DWQ. Under this NOA, GSWC is authorized to discharge water from GSWC's Morongo Del Sur Drinking Water system into the Big Morongo Creek (located within the Big Morongo Canyon Preserve). To ensure NPDES permit compliance, two temporary settling tanks would be deployed on Parcel B to remove suspended solids, reduce turbidity, and decrease flow velocity prior to discharge. These tanks operate based on gravitational sedimentation principles and serve as a best management practice for the discharge. The temporary discharge pipeline and settling infrastructure would be fully decommissioned and removed upon completion of construction activities.

The highest pumping rate at Yeager-2 was 415 gallons per minute (gpm) when measured in 1990, and the pumping rate has declined nearly 50 percent in recent years. Yeager-4 is anticipated to have a capacity of 300-400 gpm. Pumping rates would be determined during drilling and are impacted by several factors including well interference at the well field, the nearby domestic wells across the street, and water quality.

To meet the local noise ordinances, 24-foot-high sound walls would be required during well drilling. It is expected that the Project Site would need to be partially enclosed with sound walls strategically placed to minimize impacts to sensitive receptors to the west and south sides of the Project Site.

Project construction, consisting of grading, well drilling, and equipping, would begin in August 2025 and take approximately five to six months to complete. Drilling would occur for approximately 150 days. Some components of the well drilling would require 24-hour operations.

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1 **Pre-Construction Special-Status Wildlife Survey.** To ensure impacts to special-status wildlife species, including red-diamond rattlesnake *(Crotalus ruber*), coast horned lizard (*Phrynosoma blainvillii*), and San Diego desert woodrat (*Neotoma lepida intermedia*), are less than significant, a pre-construction special-status wildlife survey shall be conducted no more than three days prior to the initiation of construction activities (e.g., equipment staging, ground disturbance, vegetation removal, and/or heavy equipment work). The survey shall be conducted by a qualified biologist, experienced in identifying special-status wildlife species and determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures. The survey shall also be conducted during the appropriate time of day and weather conditions and shall encompass the entire project site and a 500-ft buffer, where access is permissible. Areas where access is not permissible will be scanned with binoculars. If special-status species are identified on the Project Site, the biologist should coordinate with the State Water Resources Control Board, CDFW, and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

BIO-2 **Pre-Construction Nesting Bird Survey.** To avoid disturbance of nesting and special-status birds, or migratory bird species protected by Sections 3503, 3503.5, and 3513 of the CFGC and the MBTA, activities related to project construction, including but not limited to vegetation and/or tree removal, should occur outside of the bird breeding season (February 1 through August 31). If ground disturbance, vegetation and tree removal, or heavy equipment work must begin in the breeding season, then a pre-construction nesting bird survey shall be conducted no more than three days prior to the initiation of construction activities. The survey shall be conducted at the appropriate time of day, during appropriate weather conditions, no more than three days prior to the initiation of Project activities such as vegetation removal and/or initial ground disturbance. The survey shall encompass the Project Site and a 250-foot buffer for passerines and a 500-foot buffer for raptors. The

survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the region. An additional survey shall be conducted following any lapse in construction activity of seven or more days during the bird breeding season. The survey shall cover all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration should take into consideration the size of the Project Site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and it shall be sufficient to ensure the data collected is complete and accurate. The survey should be conducted by a qualified biologist experienced in identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.

If no nesting birds are observed during the survey, Project Site preparation and construction activities may begin.

If active nests are found, a qualified biologist shall establish a suitable avoidance buffer around the nest, with specific buffer widths to be determined by a qualified biologist. The buffer shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines the nestlings have fledged and/or the nest is no longer active, the nest has failed, or the nest has otherwise been determined inactive. The buffer shall be established to ensure nesting activity is not disturbed by construction activity and determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the Project Site. The buffer(s) shall be demarcated by the biologist and the boundary marked with bright construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. Encroachment into the buffer shall occur only at the discretion of a qualified biologist and with monitoring of the active nest to ensure construction activities are not disrupting nesting behavior. If a qualified biologist determines that such Project activities may be causing an adverse reaction, the qualified biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. Work can resume within these avoidance areas when no other active nests are found, or the nest is determined to be inactive.

BIO-3 **Pre-Construction Crotch Bumble Bee Survey.** Prior to construction activities or vegetation disturbance, a qualified biologist shall conduct a habitat assessment for Crotch bumble bee within 50 feet of the project work area. The habitat assessment shall identify potential foraging, nesting, and/or overwintering resources. If suitable habitat is present, those areas shall be avoided to the extent feasible.

If suitable habitat is unavoidable, prior to the start of initial ground-disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation), a qualified biologist shall conduct a protocol-level presence/absence survey for Crotch bumble bee in areas of suitable habitat during the peak active period for Crotch bumble bee (highest detection probability). The peak active period for Crotch bumble bee in the project area is anticipated to be April through August given the expected desiccation of Crotch bumble bee floral resources within the project area by late-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's 2023 Survey Considerations for CESA Candidate Bumble Bee Species, or the most current CDFW guidance in effect at the time.

If Crotch bumble bee is present, the qualified biologist shall identify the location of nests in in the survey area, to the extent feasible. If nests are identified, the qualified biologist shall determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If project component activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. If establishment of a no-disturbance buffer is feasible, construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive, construction activities within the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the duration of project component construction activities in each work area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site.

If Crotch bumble bee is determined to be present on the project site, floral resources associated with the species that will be removed or damaged by project construction, shall be replaced at a minimum 1:1 ratio.

BIO-4 Biological Monitoring. A qualified biologist shall be present to monitor all initial ground disturbing and vegetation-clearing activities conducted for the Project. During each monitoring day, the biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to minimize impacts on special-status species with potential to occur. The monitor will be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring shall take place until the Project Site has been completely cleared of any vegetation. If an active nest is identified, the biological monitor shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest

is deemed no longer active by the biologist. If listed (candidate, threatened, or endangered) wildlife species are detected during biological monitoring activities, then consultation with the USFWS and/or CDFW shall be conducted, and a mitigation plan shall be developed to avoid and offset impacts to these species. Mitigation measures may consist of work restrictions and/or additional biological monitoring activities after ground-disturbing activities are complete.

Geology and Soils

GEO-1 **Unanticipated Discovery of Paleontological Resources.** If paleontological resources are discovered during construction, all work must halt within a 100-foot radius of the discovery and a qualified paleontologist will be retained to evaluate the find. The paleontologist shall notify the GSWC and lead agency if the find is significant. The paleontologist shall evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The qualified paleontologist will evaluate the significance of the find and recommend appropriate measures for the disposition of the find (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

Noise

NOI-1 **Temporary Construction Noise Barriers**

- All construction noise, except for well drilling, shall be 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. Only operation of the well drilling rig may occur outside the construction noise exempt hours. Other mechanical equipment shall be prohibited from operating outside construction noise exempt hours.
- Prior to the initiation of construction activities at the project site, the contractor shall install temporary noise barriers along the north, south, east, and west boundaries of the work area to mitigate noise generated during execution of the contract and to shield adjacent residential areas. Sound barriers will be a minimum of 24 feet in height, except for where they intersect power lines, and shall be rated Sound Transmission Class 28 or higher. Where sound barriers bisect existing overhead utilities, the structure will be a minimum of 16 feet in height. The proposed orientation of the temporary discharge line intersects the southern boundary of the proposed sound wall; however, it is the contractor's responsibility to route the orientation of the temporary discharge line while maintaining noise mitigation during construction and testing activities. The layout of noise attenuating structures is anticipated to consist of approximately 625 linear feet of 24-foot noise paneling, approximately 30 linear feet of 24-foot sound curtains, and approximately 40 linear feet of 16-foot noise paneling.
- Temporary construction noise barriers may be removed when the well drilling has been completed, and all construction occurs within noise exempt hours.

Best Management Practices Incorporated into the Project to Avoid and Minimize Less than Significant Effects

Air Quality

BMP AQ-1 To comply with Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 403 (Fugitive Dust) to reduce fugitive dust emissions during construction, GSWC shall require the construction contractor to implement Mojave Desert Air Basin dust control measures listed below during construction. GSWC shall verify these dust control measures are listed in the construction contract prior to the start of construction.

- Water shall be applied a minimum of twice daily on unpaved/untreated areas and on disturbed soil areas with active construction occurring on the project site, or more frequently as needed to prevent visible dust emissions exceeding 20 percent opacity (Ringelmann No. 1).
- All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour or when ongoing dust plumes occur.
- On-site vehicle speed shall be limited to 15 miles per hour.
- GSWC shall suspend work and implement corrective actions if visible emissions cross the property line or if a public dust complaint is received.

Cultural Resources

BMP CUL-1 Archaeological Discovery. In the event that cultural resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input regarding significance and treatment.

BMP CUL-2 Monitoring and Treatment Plan. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan (Plan), the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

BMP CUL-3 Human Remains. If human remains or funerary objects 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 shall be enforced for the duration of the project.

Hydrology and Water Quality

BMP HYD-1 To ensure compliance with the National Pollutant Discharge Elimination System Permit, two temporary settling tanks would be deployed on Parcel B to remove suspended solids, reduce turbidity, and decrease flow velocity prior to discharge. These tanks operate based on gravitational sedimentation principles. The temporary discharge pipeline and settling infrastructure would be fully decommissioned and removed upon completion of construction activities.

BMP HYD-2 Sediment control practices shall be used to filter and trap sediment particles to prevent them from reaching receiving waters. Erosion control practices shall be used to protect soil surfaces at the discharge point of the temporary discharge pipeline. Such controls shall minimize the energy of discharges by managing flow velocities and volumes and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the areas downstream of the discharge point.

Tribal Cultural Resources

BMP TCR-1 **Notification and Monitoring.** The Yuhaaviatam of San Manuel Nation Cultural Resources Management Department (YSMN) shall be contacted, as detailed, in CUL-1, of and pre-contact and/or historic-era cultural resources discovered during project implementation and shall be provided information regarding the nature of the find, so as to provide Tribal input regarding significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan (Plan) shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

BMP TCR-2 **Document Review.** Any and all archaeological/cultural documents created as part of this project (including but not limited to isolate records, site reports, survey reports, and testing reports) shall be supplied to the Project Proponent and Lead Agency for dissemination to YSMN. The Lead Agency and/or Project Proponent shall, in good faith, consult with YSMN throughout the life of the project.

THIS PAGE INTENTIONALLY LEFT BLANK

1.0 BACKGROUND

1.1 Summary

Project Title:	Yeager Well Replacement Project (Project)
Lead Agency Name and Address:	State Water Resources Control Board (State Water Board) 464 West 4th Street San Bernardino, CA 92401
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 (GSWC)
Contact Person and Phone Number:	Omar Tinoco Associate Water Quality Engineer 13608 Hitt Road Apple Valley, CA 92308 (310) 848-5505
Project Location:	The Proposed Project is located within the existing GSWC Yeager Well site at 11083 Vale Drive in the community of Morongo Valley, San Bernardino County (County). The Project Site is located approximately 0.15 mile southwest of Highway 62, immediately east of Vale Drive, north of Mojave Drive, and west of East Drive.
General Plan Designation:	Single Residential (RS-10M)
Zoning:	Morongo Valley/Single Residential - 10,000 square feet Minimum (MV/RS-10M)

1.2 Introduction

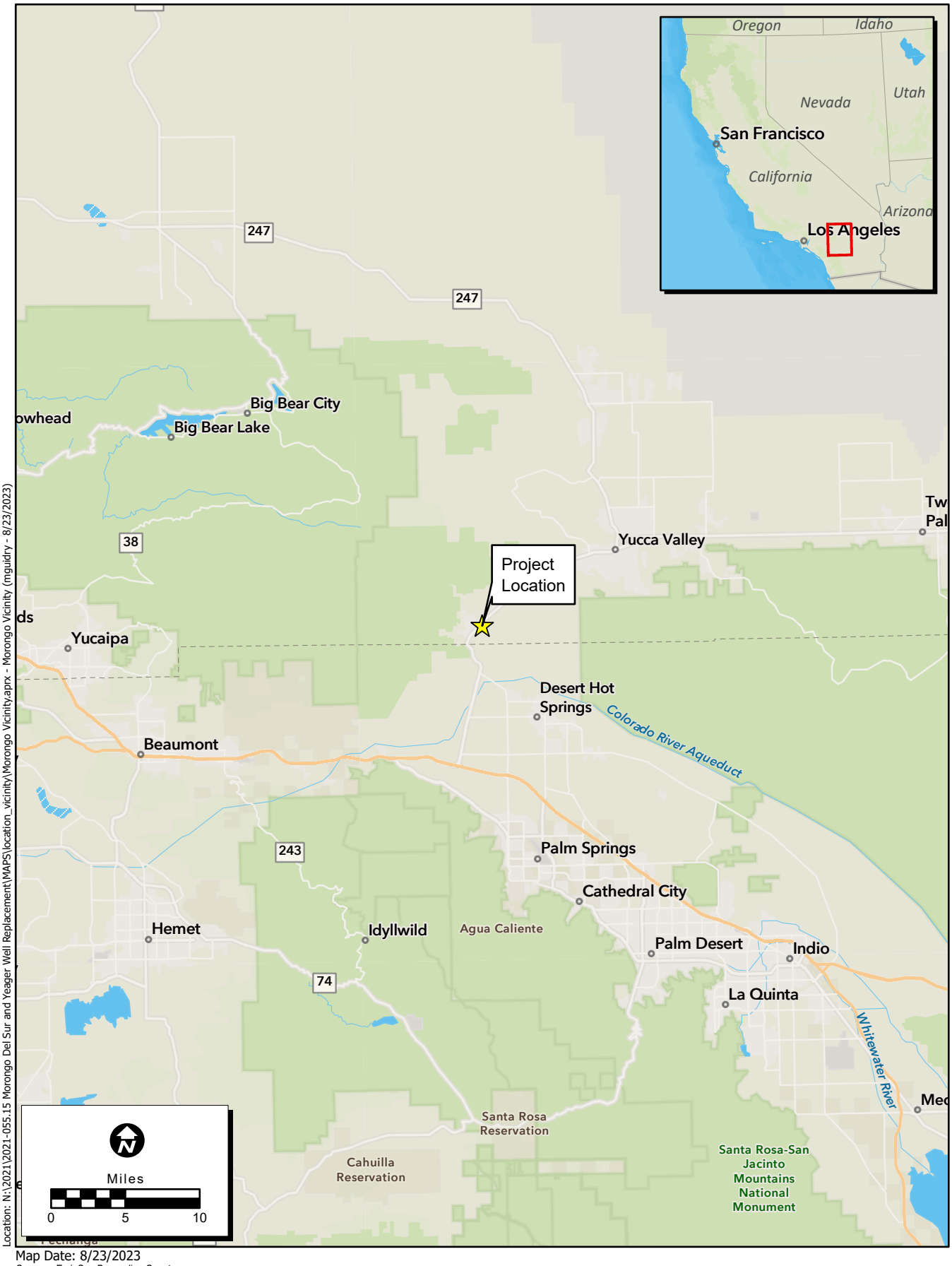
The State Water Board is the Lead Agency for this Initial Study and Mitigated Negative Declaration (IS/MND). This IS/MND has been prepared to identify and assess the anticipated environmental impacts of the Yeager Well Replacement Project (Project or Proposed Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resource Code, Section 21000 et seq.) and CEQA Guidelines (14 California Code of Regulations [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 the potentially significant environmental impacts associated with a proposed project and determine which CEQA document is appropriate (i.e., Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report).

1.3 Surrounding Land Uses/Environmental Setting

Morongo Valley is located in the south-central portion of San Bernardino County, in the southern Mojave Desert. The community is bordered by the Sawtooth Mountains on the north, the Town of Yucca Valley to the northeast, Joshua Tree National Park to the east, Riverside County on the south, and the San Bernardino Mountain Range on the west.

The Proposed Project is located at the existing GSWC Yeager Well site at 11083 Vale Drive and a southern-adjacent parcel (APNs 058326108 and 058326107) in the community of Morongo Valley, San Bernardino County. The Project Site is located approximately 0.15 mile southwest of highway 62, immediately east of Vale Drive, north of Mojave Drive, and west of East Drive (Figures 1 and 2).

The Project Site consists of two adjacent parcels totaling approximately 0.77 acre. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. The northern parcel, Parcel A, containing the Yeager-2, is developed with facilities associated with the existing well operation, ornamental vegetation, gravel road, chain link fencing, and existing man-made discharge basin. The southern parcel, Parcel B, proposed for Yeager-4 is composed of a mix of native and nonnative vegetation consisting of disturbed mesquite thickets. Parcel B contains compact sandy soils, with scattered debris throughout, and a dirt roadway across the site. The Project Site is located near the Big Morongo Canyon Preserve, approximately 0.03 miles to the east. To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline will be installed. The pipeline will span approximately 500 linear feet, terminating south of the East Drive and Covington Drive intersection. This alignment has been selected to avoid encroachment on wetland habitat within the Big Morongo Canyon Preserve. The Project Site's land use is designated for low-density residential, and the zoning is Morongo Valley/Single Residential - 10,000 square feet Minimum (MV/RS-10M).



Location: N:\2021\2021-055.15 Morongo Del Sur and Yeager Well Replacement\MAPS\location_vicinity\Morongo Vicinity.aprx - Morongo Vicinity (mguidry - 8/23/2023)

Map Date: 8/23/2023

Sources: Esri, San Bernardino County

Figure 1. Project Vicinity



Location: N:\2021\2021-055.15 Morongo Del Sur and Yeager Well Replacement\MAPS\location_vicinity\Morongo Vicinity.aprx - Morongo Location (trotellini - 5/21/2025)

Map Date: 5/21/2025

Sources: Esri, San Bernardino County (2024)

Figure 2. Project Location

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2.0 PROJECT DESCRIPTION

2.1 Project Purpose and Need

According to an assessment conducted by GSWC in April 2023, Yeager-2 has reached the end of its useful service life due to a 50 percent decline in specific capacity and pumping water levels following a rehabilitation event in 2015. Yeager Well 4 is needed to replace Yeager-2's diminished supply.

2.2 Project Characteristics

GSWC is planning to construct a replacement potable water supply well, Yeager Well 4, at its Yeager-Vale Plant, located at 11077 Vale Drive, Morongo Valley, California (San Bernardino County APN: 058326108). An adjacent GSWC-owned parcel to the south (APN: 058326107) has been identified by GSWC as the proposed location for the replacement well. The identified parcel is approximately 130 feet (east to west) by 100 feet (north to south). The addition of the parcel to the south would expand the total area of the Yeager-Vale Plant to approximately 0.77 acre.

The Proposed Project would be part of GSWC's Morongo Del Sur System, which delivers groundwater pumped from the Morongo Valley portion of the Morongo Basin located east and west of the Twenty-Nine Palms Highway between Morongo Valley and Yucca Valley. GSWC is proposing to decommission Yeager-2 once Yeager Well 4 has been established. Yeager-2 is approximately 300 feet deep, and the new Yeager-4 well would reach approximately the same depth. The facility would not require a crew or staff; therefore, no bathroom facilities would be built.

The southern parcel, Parcel B, of the Project Site is undeveloped land, with mesquite dominated vegetation and a large cottonwood tree towards the eastern side, and overhead power lines parallel to the northern property line between the southern parcel and the Yeager-Vale Plant. The overhead power lines proceed north along the eastern perimeter of the Yeager-Vale Plant. As part of the construction, the vegetation and the large tree will need to be removed and the ground leveled and prepared (i.e., temporary gravel bed) for heavy equipment prior to construction activities. The cottonwood tree measures 25 feet tall and has a 14.6-inch DBH. The Project ingress/egress would be on the western property boundary from Vale Drive (see Figure 3). The Yeager-Vale Plant has several permanent structures that would be protected in place: the Yeager-Vale Plant treatment building, generator, motor control center, and chemical building. The existing onsite discharge pond located on Parcel A would also remain in place.

To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline would be installed. The line will extend east along Mojave Drive and then continue north along East Drive before terminating south of the East Drive and Covington Drive intersection, with the line discharging into an upland area (see Figure 3). The pipeline would span approximately 500 linear feet and would run within the developed roadway and shoulder of Mojave Drive and East Drive. This alignment has been selected to avoid encroachment on wetland habitat within the Big Morongo Canyon Preserve.

GSWC maintains regulatory coverage for this discharge under the State Water Board NPDES General Permit for Drinking Water System Discharges (Order No. WQ 2014-0194-DWQ, WDID No. 4DW0623), administered by the State Water Board. To ensure NPDES permit compliance, two temporary settling tanks would be deployed on Parcel B to remove suspended solids, reduce turbidity, and decrease flow velocity prior to discharge. These tanks operate based on gravitational sedimentation principles and serve as a best management practice for the discharge. The temporary discharge pipeline and settling infrastructure would be fully decommissioned and removed upon completion of construction activities.

The highest pumping rate at Yeager-2 was 415 gallons per minute (gpm) when measured in 1990, and the pumping rate has declined nearly 50 percent in recent years. Yeager-4 is anticipated to have a capacity of 300-400 gpm. Pumping rates would be determined during drilling and are impacted by several factors including well interference at the well field, the nearby domestic wells across the street, and water quality.

To meet the local noise ordinances, 24-foot-high sound walls would be required during well drilling. It is expected that the Project Site would need to be partially enclosed with sound walls strategically placed to minimize impacts to sensitive receptors to the west and south sides of the Project Site.

2.3 Project Timing

Project construction, consisting of grading, well drilling, and equipping, would begin in August 2025 and take approximately six months to complete. Drilling would occur for approximately 150 days. Some components of the well drilling would require 24-hour operations.

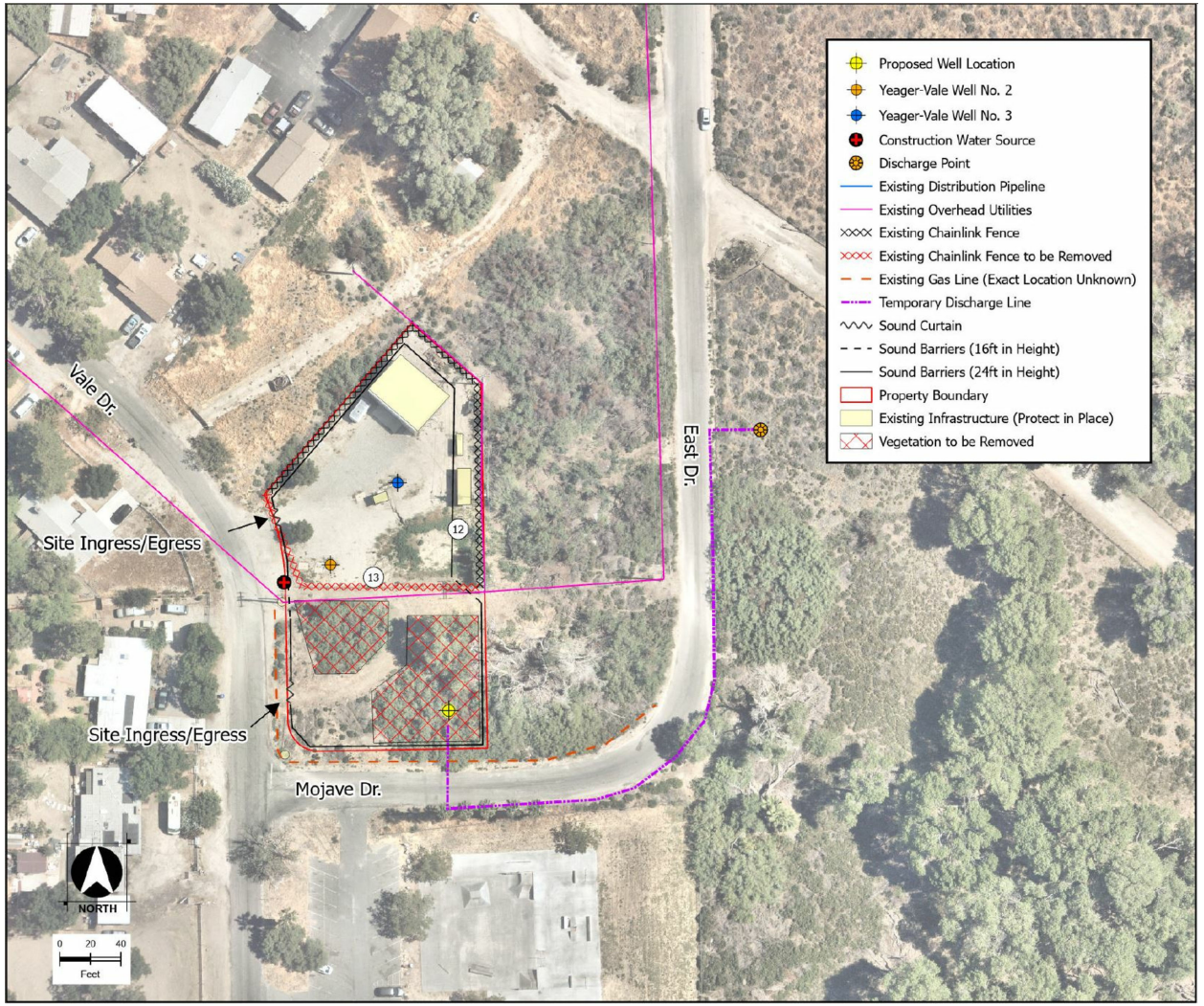
2.4 Regulatory Requirements, Permits, and Approvals

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

- California State Water Resources Control Board, Division of Drinking Water – Approval of plans and specification and Water Supply Permit amendment
- California State Water Resources Control Board, Division of Water Quality – State NPDES General Permit for Drinking Water System Discharges (Order WQ 2014-0194-DWQ, General Order CAG140001)
- County of San Bernardino Land Use Division – Grading Permit
- County of San Bernardino – Construction Noise Ordinance Waiver

2.5 Consultation With California Native American Tribe(s)

The Yuhaaviatam of San Manuel Nation formerly the San Manuel Band of Mission Indians requested consultation pursuant to CEQA. A summary of tribal consultation, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this IS/MND.



GENERAL NOTES:

1. CONTRACTOR SHALL CONFINE ALL CONSTRUCTION ACTIVITIES TO THE SUBJECT PARCEL, ADJACENT EASEMENTS, AND PUBLIC RIGHT-OF-WAY, AND THE CONTRACTOR SHALL NOT ENCROACH ONTO PRIVATE PROPERTY WITHOUT THE PRIOR WRITTEN PERMISSION OF THE PROPERTY OWNER.
2. A TRAFFIC CONTROL PROGRAM SHALL BE IMPLEMENTED TO PROTECT THE ENTRANCE TO THE SITE AND ANY EQUIPMENT OR VEHICLES ON THE ADJACENT ROADWAYS. AT A MINIMUM, THIS PROGRAM SHALL CONSIST OF INSTALLING TRAFFIC CONES AROUND ANY EQUIPMENT PARKED ON ROADWAYS AND AT THE SITE ENTRANCE. CONSTRUCTION AREA SIGNS AND TRAFFIC CONES SHALL BE FURNISHED, INSTALLED, MAINTAINED, AND REMOVED WHEN NO LONGER REQUIRED.
3. PRIOR TO MOBILIZATION, THE CONTRACTOR SHALL PROVIDE THE HYDROGEOLOGIST WITH A NOISE CONTROL PLAN, INCLUDING A LAYOUT SHOWING THE CONFIGURATION OF THE SOUND BARRIERS, AND A REPORT PREPARED BY A REGISTERED STRUCTURAL ENGINEER PROVIDING GEOTECHNICAL AND STRUCTURAL ENGINEERING CALCULATIONS SPECIFIC TO THE PROJECT SITE AND THE TYPE OF SOUND BARRIERS UTILIZED.
4. THE PROJECT WILL REQUIRE FULL CONTAINMENT ALONG THE NORTH, SOUTH, EAST, AND WEST BOUNDARIES OF THE WORK AREA WITH NOISE ATTENUATING STRUCTURES TO MITIGATE NOISE GENERATED DURING EXECUTION OF THE CONTRACT AND TO SHIELD ADJACENT RESIDENTIAL AREAS. SOUND BARRIERS WILL BE A MINIMUM OF 24 FEET IN HEIGHT, EXCEPT FOR WHERE THEY INTERSECT POWER LINES, AND SHALL BE STC-28 RATED. WHERE SOUND BARRIERS BISECT EXISTING OVERHEAD UTILITY, THE STRUCTURE WILL BE A MINIMUM OF 16 FEET IN HEIGHT. THE PROPOSED ORIENTATION OF THE TEMPORARY DISCHARGE LINE INTERSECTS THE SOUTHERN BOUNDARY OF THE PROPOSED SOUND WALL; HOWEVER, IT IS THE CONTRACTOR'S RESPONSIBILITY TO ROUTE THE ORIENTATION OF THE TEMPORARY DISCHARGE LINE WHILE MAINTAINING NOISE MITIGATION DURING CONSTRUCTION AND TESTING ACTIVITIES.
5. THE LAYOUT OF NOISE ATTENUATING STRUCTURES IS ANTICIPATED TO CONSIST OF APPROXIMATELY 625 LINEAR FEET OF 24-FOOT NOISE PANELING, APPROXIMATELY 30 LINEAR FEET OF 24-FOOT SOUND CURTAINS, AND APPROXIMATELY 40 LINEAR FEET OF 16-FOOT NOISE PANELING. HOWEVER, THE CONTRACTOR SHALL EVALUATE THE EXISTING SITE CONDITIONS AND SATISFY THE NECESSARY LEVEL OF REQUIRED NOISE MITIGATION.
6. CONTRACTOR SHALL COMPLY WITH ALL LOCAL SOUND CONTROL AND NOISE LEVEL RULES, REGULATIONS, AND ORDINANCES THAT APPLY TO ANY WORK PERFORMED PURSUANT TO THE CONTRACT.
7. DRILLING FLUIDS SHALL BE CONTAINED AT ALL TIMES. IN NO EVENT SHALL DRILLING FLUIDS BE ALLOWED TO RUN OFF THE PROJECT SITE. WHEN NO LONGER IN USE, DRILLING FLUIDS SHALL BE LEGALLY DISPOSED OF AT AN APPROVED DISPOSAL FACILITY.
8. CONTRACTOR SHALL STOCKPILE DRILL CUTTINGS AT THE PROJECT SITE. AT THE END OF THE PROJECT, THE CONTRACTOR WILL BE REQUIRED TO REMOVE AND LEGALLY DISPOSE OF ALL DRILL CUTTINGS UNLESS OTHER ARRANGEMENTS ARE MADE WITH THE OWNER.
9. CONSTRUCTION WATER IS AVAILABLE FROM A FIRE HYDRANT LOCATED ON THE EAST SIDE OF VALE DRIVE, APPROXIMATELY 135 FEET NORTHWEST OF THE PROPOSED WELL LOCATION. THE OWNER WILL PROVIDE CONSTRUCTION WATER AT NO COST. HOWEVER, THE CONTRACTOR MUST METER ALL WATER USED FOR CONSTRUCTION AND SHALL MAKE ALL EFFORT TO CAREFULLY CONSERVE WATER. ARRANGEMENTS TO OBTAIN A WATER METER CAN BE MADE BY CONTACTING THE OWNER.
10. THE CONTRACTOR SHALL PROVIDE AN APPROVED BACKFLOW PREVENTION (BFP) DEVICE. THE BFP SHALL BE TESTED IN-SITU BY A CERTIFIED BFP TESTER AND THE TEST DATA SHALL BE PROVIDED TO THE HYDROGEOLOGIST AND OWNER FOR THEIR RECORDS.
11. CONTRACTOR SHALL SUPPLY TEMPORARY STORAGE TANKS (E.G., BAKER TANKS), CONNECTED IN SERIES, AND OF SUFFICIENT NUMBER AND CAPACITY TO ADEQUATELY SETTLE SUSPENDED SOLIDS WITHIN THE DISCHARGE PRIOR TO CONVEYANCE TO THE DISCHARGE POINT.
12. THE CONTRACTOR IS REQUIRED TO REMOVE AND SALVAGE ANY CHAIN-LINK FENCING NECESSARY FOR CONSTRUCTION ACCESS AND REINSTALL IT UPON COMPLETION.
13. THE CONTRACTOR SHALL TAKE NECESSARY MEASURES TO ENSURE THE EXISTING INFRASTRUCTURE ONSITE AND ADJACENT TO THE SITE WILL BE PROTECTED THROUGHOUT THE DURATION OF THE PROJECT. EXISTING INFRASTRUCTURE TO BE PROTECTED INCLUDES, BUT IS NOT LIMITED TO, TREATMENT BUILDINGS AND WELLS ON THE PROPERTY, POWER POLES, AND STREET SIGNS.
14. THE FINAL WELL LOCATION SHALL BE STAKED BY THE OWNER.

811 Know what's below. Call before you dig.

THIS PLAN WAS PREPARED BY THE STAFF OF WOOD RODGERS INC. WOOD RODGERS INC MADE A REASONABLE REVIEW OF AVAILABLE RECORDS AND A VISUAL INSPECTION OF THE PROJECT AREA TO COMPLETE THE INFORMATION GIVEN HEREON INCLUDING THE EXISTENCE AND LOCATION OF SUBSTRUCTURES AND UNDERGROUND UTILITY PIPES. HOWEVER WOOD RODGERS INC DOES NOT WARRANTY THE INFORMATION GIVEN HEREON.

THE CONTRACTOR, IN ADDITION TO COMPLYING WITH THE PROCEDURES OF UNDERGROUND SERVICE ALERT, IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT THE ABOVE AND BELOW GROUND STRUCTURES IN THE VICINITY OF THE PROJECT.

BY:	DATE:	REVISION	APPROVED BY:	APPROVED DATE:

CERTIFIED HYDROGEOLOGIST EROS ANTOINE BILYEU No. 1061 STATE OF CALIFORNIA

BUDGET YEAR 2025 GROUP 2025 | SYSTEM MAP NO: MORONGO DEL SUR | DRAWING PREPARED BY: JJH DATE: May 2025
THOMAS GUIDE XXX XX | SCALES: NOT TO SCALE (N.T.S.) | PROCESSED TAX CODE NO. | DESIGN BY: EAB DATE: May 2025
DISTRICT: MORONGO VALLEY | AS-BUILT RECORDS | FIELD CHECK & SERVICE SURVEY BY: DATE:
SYSTEM: MORONGO DEL SUR BY DATE: | DATE:
REVIEWED & APPROVED BY: | DATE: R.C.E. NO.

Golden State Water Company
A Subsidiary of American States Water Company
1920 WEST CORPORATE WAY, ANAHEIM, CA 92801
PHONE: (714) 535-7711 FAX: (714) 535-8685

PROJECT TITLE: DRILLING, CONSTRUCTION, AND TESTING OF YEAGER-VALE WELL NO. 4
JURISDICTION: MORONGO VALLEY
DWG NO: W-2 | SHEET NUMBER: 2 OF 5 SHEET(S)
DWG DESC: WELL LOCATION AND SITE LAYOUT | W.O. 35931126
FRANCHISE NUMBER: -

J:\Jobs\35335_GSWC\35335.046_Yeager_Plant_Well_4\Docs\Specifications\3) Final Bid Package\Plansets\W-2_Yeager4_Site_Layout_20250516.dwg 5/20/2025 9:56 AM Joe Hernandez

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 3. Project Site Plan
2021-055.017 Yeager Well Replacement Project



Photo 1: View of Parcel B from Vale Drive, facing east (August 18, 2023)



Photo 2: View of Parcel A from Vale Drive, facing northeast (August 18, 2023)



Photo 3: View of Parcel A, from Vale Drive, facing east (August 7, 2023)



Photo 4: View of Parcel B from Mojave Drive, facing northwest (August 18, 2023)

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, involving at least one impact that is a *potentially significant impact,* as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Hazards/Hazardous Materials	☐ Recreation
☐ Agriculture and Forestry Resources	☐ Hydrology/Water Quality	☐ Transportation
☐ Air Quality	☐ Land Use and Planning	☐ Tribal Cultural Resources
☐ Biological Resources	☐ Mineral Resources	☐ Utilities and Service Systems
☐ Cultural Resources	☐ Noise	☐ Wildfire
☐ Energy	☐ Paleontological Resources	☐ Mandatory Findings of Significance
☐ Geology and Soils	☐ Population and Housing	
☐ Greenhouse Gas Emissions	☐ Public Services	

Determination

On the basis of this initial evaluation the State Water Board finds 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.

THIS PAGE INTENTIONALLY LEFT BLANK

4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

The Project Site is located on two parcels, one developed and one undeveloped, within a rural residential neighborhood bounded by undeveloped parcels to the north, Vale Drive to the west, East Drive to the east, and Mojave Drive to the south. 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.

4.1.1.1 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 (California Department of Transportation [Caltrans] 2023).

There are no officially designated state scenic highways that traverse the community of Morongo Valley. According to Caltrans, the nearest state scenic highway is a portion of the Twenty-Nine Palms Highway State Route (SR) 62 at the Riverside County border, approximately 1.5 miles southwest of the Project Site. SR-62, which provides the major circulation access to the region, and to the Project Site from Vale Drive, is eligible for Scenic Highway designation but is not presently an officially designated State Scenic Route (Caltrans 2023). It is, however, a designated County Scenic Route in the San Bernadino County General Plan (County of San Bernardino 2007; 2020).

4.1.1.2 Visual Character of the Project Site

The Proposed Project is located within the existing GSWC Yeager Plant site. The Project Site consists of two adjacent parcels and is approximately 0.77 acre. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. The northern parcel, Parcel A, containing the Yeager-2, is developed with facilities associated with the existing well operation, ornamental vegetation, gravel road, chain link fencing, and existing man-made discharge basin. The southern parcel, Parcel B, proposed for Yeager-4 is composed of a mix of native and nonnative vegetation consisting of disturbed *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance, including a 25-foot-tall cottonwood tree. Parcel B contains compact sandy soils, with scattered debris throughout, and a dirt roadway across the site. The Project Site is located near the Big Morongo Canyon Preserve, approximately 174 feet to the east, which is characterized by native desert habitat and elevations ranging from 600 feet on the canyon floor to 3,000 feet at the top of the ridge. The Project Site's land use is designated for low-density residential, and the zoning is Morongo Valley/Single Residential - 10,000 square feet Minimum (MV/RS-10M).

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?	☐	☐	☐	☒

No Impact.

The Project Site is located in proximity to a County-designated scenic vista (SR-62); however, the Project Site is visually obscured from this highway by 1.5 miles of intervening development and vegetation. The topography in the immediate Project Area is relatively flat with distant views of the San Gorgonio Mountains to the west and Little San Bernardino Mountains to the east. Views in the vicinity of the Project Site are largely constrained by structures and trees on adjacent parcels. The Project Area is developed with rural residential and institutional land uses and associated landscaping and roadways. The nature of the Proposed Project (a replacement well) would have no impact on these views because it is small and in keeping with existing conditions. The new well would be concealed in a 3-foot tall steel cover and 5-foot-wide concrete pump base. Temporary settling tanks, storage trailers, and a drill rig would flank the well during construction. This equipment would be removed after drilling is complete. Therefore, the Proposed Project would have no impact on scenic vistas.

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?	☐	☐	☐	☒

No Impact.

No state scenic highways run through the community of Morongo Valley (County of San Bernardino 2020a). Thus, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a scenic highway. The Project would include removal of an on-site 25-foot-tall cottonwood tree, however this tree is not prominently visible from public viewpoints (e.g. highways, trails, parks), is not regionally iconic, and does not have historical, cultural, or landmark significance. Further, this tree is not located within a state scenic highway. No impacts related to scenic resources 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 points). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Less than Significant Impact.

The Project Site and surrounding area are developed with rural residential and institutional land uses that define the visual character of the Project Site and surrounding area. The Project vicinity includes distant views of the San Gorgonio Mountains to the west and Little San Bernardino Mountains to the east. According to the San Bernardino County Development Code Section 81.01.050, the County Development Code does not apply to any uses or activities that are exempt from local regulation under or preempted by state or federal law. GSWC is regulated by the California Public Utilities Commission and is therefore exempt from local regulations. 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
d) Would the project create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project would install new security lighting for the new well site. The lighting would be directed downward. Additionally, the Proposed Project would limit reflective surface areas and the reflectivity of architectural materials used. Structures would be constructed with materials that have minimal potential for generating glare; therefore, the Proposed Project is not expected to create substantial glare impacts. Impacts would be less than significant.

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, as defined by Public Resources Code Section 51104(g), is "…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."

According to the California Department of Conservation (DOC) Important Farmland Finder, the Project Site has not been mapped. Accordingly, the Project Site is not located on or near Prime Farmland, nor is it under a Williamson Act Contract (DOC 2023). The Project Site is zoned Single Family Residential and is not zoned as forest land or agriculture (County of San Bernardino 2007, 2020a). The Project Site and surrounding properties are not currently used for agriculture or timberland production, as defined by the California Public Resources Code.

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?	☐	☐	☐	☒

No Impact.

The Project Site is partially developed as an existing well site, which is located within a rural residential area. The California Mapping and Monitoring Program has not mapped the Project Site. The Site is not, and never has been, utilized for agricultural purposes and is not contained on any official California Farmland Maps. No impacts to prime or unique farmlands will occur. No mitigation measures are

necessary. Therefore, the Proposed Project would not convert 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?	☐	☐	☐	☒

No Impact.

As noted above, the Project Site is zoned for single family residential use, as are all immediately surrounding parcels. No conflicts with existing zoning for agricultural use, or a Williamson Act contract, would occur. No mitigation measures are necessary.

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))?	☐	☐	☐	☒

No Impact.

The Project is located on the existing GSWC Yeager-Vale Plant site and is surrounded by low-density residential and institutional land uses. The Project Site is not located on land designated for forest land, timberland, or timberland zoned Timberland Production. 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?	☐	☐	☐	☒

No Impact.

The Project Site is not zoned for forest land, timberland, or Timberland Production (County of San Bernardino 2020a). Therefore, the Proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use. 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 the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact.

The Project Site and surrounding properties are not designated for agricultural use. Areas to the north, east, south, and west of the Project Area have not been mapped (DOC 2023). Development on the Project Site would not result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. 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 the unincorporated community of Morongo Valley, within San Bernardino County, California. The California Air Resources Board (CARB) divides California into regional air basins according to topographic features. Morongo Valley is in a region identified as the Mojave Desert Air Basin (MDAB) which occupies the desert portions of Kern, Los Angeles, Riverside and San Bernardino counties. The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains that 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 3 and 7 inches of precipitation per year (from 16 to 30 days with at least 0.01 inch of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least 3 months have maximum average temperatures over 100.4 degrees Fahrenheit.

Both the U.S. Environmental Protection Agency (USEPA) and 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 (O_3), carbon monoxide (CO), Particulate Matter (PM), nitrogen oxides (NO_x), sulfur dioxide, 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 portion of San Bernardino County encompassing the Project Site is designated as a nonattainment area for O_3 and Particulate Matter Less than 10 Microns in Diameter (PM_{10}) under federal standards, and a nonattainment area for O_3 and PM_{10} under California standards (CARB 2022).

The local air quality regulating authority in the San Bernardino County portion of the MDAB, which encompasses the Project Site is the Mojave Desert Air Quality Management District (MDAQMD). The MDAQMD's primary responsibility is ensuring that the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) are attained and maintained in the San Bernardino County portion of the MDAB. The MDAQMD's primary responsibilities include, but are not limited to, adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns. All projects are subject to MDAQMD rules and regulations in effect at the time of construction.

MDAQMD rules and regulations that apply to construction activities associated with the Proposed Project include:

- **Rule 401 – Visible Emissions** limits visibility of fugitive dust to less than No. 1 on the Ringelmann 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 micrograms per cubic meter ($\mu g/m^3$) difference between upwind and downwind particulate concentrations.

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?	☐	☐	☐	☒

No Impact.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution 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 NAAQS and CAAQS. 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 San Bernardino County portion of 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 this region is in nonattainment. In order to reduce emissions for which the San Bernardino portion of the MDAB is in nonattainment, the MDAQMD has adopted several air quality plans including MDAQMD Federal 70 Parts per Billion (PPB) Ozone Attainment Plan, 70 PPB Ozone Standard Implementation Evaluation, 2015 8-hour Reasonably Available Control Technology SIP Analysis, and the Mojave Desert Planning Area Federal Particulate Matter (PM_{10}) Attainment Plan (1995), among other plans.

The Mojave Desert Planning Area Federal Particulate Matter Attainment Plan (1995) includes control measures that are applicable to the Proposed Project, specifically construction dust control measures. Several MDAQMD rules may apply to the Project's construction. 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 $\mu g/m^3$ difference between upwind and downwind particulate concentrations. Rule 402 prohibits nuisance due to air quality contaminants and Rule 401 limits visibility of fugitive dust to less than No. 1 on the Ringelmann Chart (i.e., 20 percent opacity). BMP AQ-1 would ensure compliance with all applicable rules and control measures, and as such would be consistent with the emission-reduction goals of the MDAQMD Attainment Plans.

The Proposed Project will 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 during any phase of construction. The Project includes construction of a replacement potable water supply well, which would not substantially contribute to emissions associated with the Project's operations. Additionally, the Proposed Project is consistent with the growth forecast used to inform MDAQMD air quality planning. The Project Site is currently vacant and located adjacent to the current water supply well which has reached its end of service life. The Proposed Project would not introduce any employment or housing growth to the region. The Project would be consistent with the emission-reduction goals of the MDAQMD Attainment Plans.

There would be no impact, and no mitigation is required.

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?	☐	☐	☒	☐

Less than Significant Impact.

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 cumulatively considerable.

4.3.2.1 Construction Emissions

Construction Emissions Analysis

Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including Reactive Organic Gases (ROG), CO, NO_x, PM_{10}, and Particulate Matter Less than 2.5 Microns in Diameter ($PM_{2.5}$). Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through the construction of the Proposed Project: operation of the construction vehicles (e.g., tractors, excavators, and pavers), the generation of fugitive dust during clearing and grading, and well drilling activities. The Project's construction activities would be subject to MDAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, including stabilizing graded surfaces upon completion of grading activities, clean project track out on paved roads, cover loaded haul vehicles, use periodic watering for dust-intensive construction activities, and other measures.

Air pollutant emission impacts were assessed in accordance with methodologies recommended by the MDAQMD. Emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1 where criteria air pollutant quantification was required. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Bernardino County.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 4.3-1. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the MDAQMD's thresholds of significance.

Table 4.3-1. Construction-Related Emissions						
Construction Component	**Pollutant (pounds per day)**					
	ROG	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Daily (maximum pounds per day)						
Construction in Year One	1.23	11.40	11.90	0.02	0.63	0.51
MDAQMD Regional Significance Threshold	*137*	*137*	*584*	*137*	*82*	*65*
Exceed MDAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Annual (maximum tons per year)						
Construction in Year One	0.05	0.51	0.62	<0.005	0.02	0.02
MDAQMD Regional Significance Threshold	*25*	*25*	*100*	*25*	*15*	*12*
Exceed MDAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Notes: CO = carbon monoxide; MDAQMD = Mojave Desert Air Quality Management District; NO_x = nitrogen oxides; PM_{10} = Particulate Matter Less than 10 Microns in Diameter; $PM_{2.5}$ = Particulate Matter Less than 2.5 Microns in Diameter; ROG = Reactive Organic Gases; SO_2 = sulfur dioxide

Source: California Emissions Estimator Model version 2022.1. Refer to Appendix A for Model Data Outputs.

As shown in Table 4.3-1, emissions generated during Project construction would not exceed the MDAQMD's daily or annual thresholds of significance. Therefore, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, and no health effects from Project criteria pollutants would occur. This impact is less than significant.

4.3.2.2 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 emissions from Project operations. The Project includes decommissioning a current well that has reached its end of service lifetime and constructing a replacement well as a municipal water source. The Proposed Project's operations would not require any new crew or staff; therefore, once the Proposed Project is implemented, there would be no increase in automobile trips to the area. While it is anticipated that the Proposed Project would require intermittent maintenance and testing, these trips would be minimal, requiring a negligible number of traffic trips on an annual basis. The proposed well would result in water pumping rates of approximately 400 gpm. Due to the existing well's decreasing capability, this pumping rate would likely increase from current levels, but would roughly equate to the pumping rates that occurred before the existing well began to decline due to production issues. Nevertheless, the increases in any criteria pollutant emissions associated with pumping would not be substantial. Because of these reasons, no impact would occur.

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?	☐	☐	☒	☐

Less than Significant Impact.

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 include 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 age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive land uses to the Project Site are a skate park to the south across Mojave Drive, and residences located directly adjacent to the Project Site's western boundary along Vale Drive. The skate park is approximately 120 feet south and the closest residence is approximately 150 feet west from the proposed location of the new well.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term, Project-generated emissions of Diesel Particulate Matter (DPM), ROG, NO_x, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation or excavation (e.g., clearing, excavating, and material moving); truck traffic; paving; and other miscellaneous activities. The portion of San Bernardino County encompassing the Project Site is designated as a nonattainment area for O_3 and PM_{10} under federal standards, and a nonattainment area for O_3 and PM_{10} under California standards (CARB 2022). Thus, existing O_3 and PM_{10} levels in the MDAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-1, the Project would not exceed the MDAQMD significance thresholds for emissions.

The health effects associated with O_3 are generally associated with reduced lung function. O_3 is not emitted directly into the air but is formed through complex chemical reactions between precursor emissions of ROG and NO_x in the presence of sunlight. The reactivity of O_3 causes health problems because it damages lung tissue, reduces lung function and sensitizes the lungs to other irritants. Scientific evidence indicates that ambient levels of O_3 not only affect people with impaired respiratory systems, such as asthmatics, but healthy adults and children as well. Exposure to O_3 for several hours at relatively low concentrations has been found to significantly reduce lung function and induce respiratory inflammation in normal, healthy people during exercise. This decrease in lung function generally is accompanied by symptoms including chest pain, coughing, sneezing and pulmonary congestion.

Studies show associations between short-term O_3 exposure and non-accidental mortality, including deaths from respiratory issues. Studies also suggest long-term exposure to O_3 may increase the risk of respiratory-related deaths. The concentration of O_3 at which health effects are observed depends on an individual's sensitivity, level of exertion (i.e., breathing rate), and duration of exposure. Studies show large individual differences in the intensity of symptomatic responses, with one study finding no symptoms to

the least responsive individual after a 2-hour exposure to 400 parts per billion of O_3 and a 50 percent decrement in forced airway volume in the most responsive individual. Although the results vary, evidence suggests that sensitive populations (e.g., asthmatics) may be affected on days when the 8-hour maximum O_3 concentration reaches 80 parts per billion. Because the Project would not involve construction activities that would result in O_3 precursor emissions (i.e., ROG or NO_x) in excess of the MDAQMD thresholds, which are set to be protective of human health and account for cumulative emissions in the MDAB, the Project is not anticipated to substantially contribute to regional O_3 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, which are set to be protective of human health and account for cumulative emissions in the SJVAB. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets small enough to enter 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. PM_{10} exhaust, which contains $PM_{2.5}$ exhaust as a subset, is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. As with O_3 and NO_x, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the MDAQMD's thresholds. The increases of these pollutants generated by the Proposed Project would not on their own generate an increase in the number of days exceeding the NAAQS or CAAQS standards. Therefore, PM_{10} and $PM_{2.5}$ emissions, when combined with the existing PM emitted regionally, would have minimal health effect on people located in the immediate vicinity of the Project Site. Additionally, the Project will comply with Rule 403 for fugitive dust control, as described above, which limits the amount of fugitive dust generated during construction. To minimize fugitive dust emissions during construction activities, water trucks will maintain adequate moisture in disturbed soils to prevent dust emissions, especially during grading, excavation, or earthmoving activities. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction 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.

Operational Air Contaminants

Implementation of the Proposed Project would not result in the development of any substantial sources of air toxins. There are no stationary sources associated with the implementation of the Project. The Project would not attract heavy-duty trucks, a substantial source of DPM emissions, which spend long

periods queuing and idling at the site. Therefore, the Project would not be a significant source of TACs after implementation. 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. 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) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less than Significant Impact.

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, or headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies between individuals and overall sensitivity to foul odors is subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor (e.g., an odor, such as from a fast-food restaurant, may be offensive to one person and acceptable to another). Unfamiliar odors are more easily detected and are more likely to cause complaints. This is because of the phenomenon known as *odor fatigue*, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Odor can be described by two properties: quality and intensity. 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 detection or recognition of the odor is 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.

Land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (e.g., farming and livestock), wastewater treatment plants, food processing plants, chemical plants, composting facilities, refineries, landfills, dairies, and fiberglass molding. The Proposed Project does not include any uses that have been identified as being associated with odors. Construction activities associated with the Proposed Project have the potential to generate objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term 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. For these reasons, there is a less than significant impact associated with Project-generated odors.

4.3.3 Best Management Practices

BMP AQ-1 To comply with Rule 401 (Visible Emissions), Rule 402 (Nuisance), and Rule 403 (Fugitive Dust) to reduce fugitive dust emissions during construction, GSWC shall require the construction contractor to implement Mojave Desert Air Basin dust control measures listed below during construction. GSWC shall verify these dust control measures are listed in the construction contract prior to the start of construction.

- Water shall be applied a minimum of twice daily on unpaved/untreated areas and on disturbed soil areas with active construction occurring on the project site, or more frequently as needed to prevent visible dust emissions exceeding 20 percent opacity (Ringelmann No. 1).
- All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour or when ongoing dust plumes occur.
- On-site vehicle speed shall be limited to 15 miles per hour.
- GSWC shall suspend work and implement corrective actions if visible emissions cross the property line or if a public dust complaint is received.

4.4 Biological Resources

In August 2023, ECORP Consulting, Inc. (ECORP) prepared a biological resources due-diligence assessment for the Proposed Project (ECORP 2025b; Appendix B). In March 2025 the biological report was updated with current literature reviews, database searches, and another biological survey was conducted on March 12, 2025.

Prior to conducting the biological reconnaissance surveys, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2025a), the California Native Plant Society's (CNPS') Electronic Inventory (CNPSEI; CNPS 2025a), and the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) to determine the special-status plant and wildlife species that have been documented near the Project Site (USFWS 2025a). ECORP searched CNDDB, CNPSEI, and IPaC records within the Project Site boundaries as depicted on U.S. Geological Survey (USGS) 7.5-minute Morongo Valley topographic quadrangle (quad) and the surrounding 8 quads, which included Yucca Valley South, Yucca Valley North, Rimrock, Onyx Peak, Catclaw Flat, White Water, and Desert Hot Springs. The CNDDB and CNPSEI contain records of reported occurrences of federally and/or state-listed endangered, threatened, proposed endangered or threatened species, CDFW Species of Special Concern (SSC), or sensitive natural communities that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to (ECORP 2025b):

- *State and Federally Listed Endangered and Threatened Animals of California* (CDFW 2025b);

- *Special Animals List* (CDFW 2025c);
- *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012);
- *The Manual of California Vegetation,* 2nd Edition (Sawyer et al. 2009);
- Countywide – All Biotic Resources Overlay Map (County of San Bernardino 2012);
- National Wetlands Inventory (NWI; USFWS 2025b);
- United States Geological Survey National Hydrography Dataset (USGS 2025); and
- Calfora (Calflora 2025).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project Site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are plant taxa considered by CDFW to be "rare, threatened, or endangered in California" and assigned a California Rare Plant Rank (CRPR) of the following:
    - CRPR 1A—Plants presumed to be extinct in California
    - CRPR 1B—Plants that are rare, threatened, or endangered in California and elsewhere
    - CRPR 2A—Plants presumed to be extinct in California but more common elsewhere
    - CRPR 2B—Plants that are rare, threatened, or endangered in California, but more common elsewhere
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Habitat is defined as the composition of various biotic (living) and abiotic (non-living) factors that collectively support the survival, reproduction, and persistence of an animal or plant species. Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project Site based on the following guidelines:

Present: The species was observed onsite during a site visit or focused survey.

High: Suitable habitat (including soils, vegetation communities, and elevation factors) that could support persistence of the species (including foraging, shelter, and breeding) occurs within the Project Site and a known occurrence has recently been recorded (within the last 20 years) within five miles of the area.

Moderate: Suitable habitat (including soils, vegetation communities, and elevation factors) that could support persistence of the species (including foraging, shelter, and breeding) occurs within the Project Site and a documented observation occurs within the database search, but not within five miles of the area; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project Site.

Low: Limited (e.g., small area, scarce) or marginal (e.g., low quality, disturbed) habitat for the species occurs within the Project Site and a recently documented observation occurs within the database search,

but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project Site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

Presumed Absent: Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist onsite; or the known geographic range of the species does not include the Project Site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reasons to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the Natural Resources Conservation Service (NRCS; NRCS 2025a) Web Soil Survey, NRCS Hydric Soils List (NRCS 2025b), NWI (USFWS 2025a), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project Site that potentially fall under the jurisdiction of either federal or state agencies.

The biological reconnaissance survey was conducted by ECORP biologists who walked the entire Project Site to determine the vegetation communities and wildlife habitats present on the Site and a 500-foot survey buffer to assess adjacent areas. The biologists documented the plant and wildlife species present on the Project Site, and the location and condition of the Project Site were assessed for the potential to provide habitat for special-status plant and wildlife species. Additionally, the biologists documented features within the Project Site with the potential to be jurisdictional to the USACE, RWQCB, and/or the CDFW; however, a formal aquatic resources delineation was not performed as part of the survey. Data were recorded in the field utilizing ArcGIS™ Field Maps on a device (smartphone or tablet) connected to a Global Positioning System (GPS) unit, field notebooks, or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project Site. The Project Site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. The biologists documented the vegetation communities present on the Project Site. Vegetation communities were mapped in accordance with the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities* (CDFW 2018). Vegetation communities were classified to the alliance level and followed *A Manual of California Vegetation Online* (CNPS 2025b).

4.4.1 Environmental Setting

The initial biological survey was conducted by ECORP biologist, Shelby Dunn, on August 18, 2023. A second updated survey was conducted on March 12, 2025, by ECORP biologist, Phillip Wasz. The Project Site consisted of a mix of disturbed and developed land. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. The northern parcel, Parcel A, containing the

Yeager-2 well, is developed with facilities associated with the existing well operation, ornamental vegetation, gravel road, chain link fencing, and existing man-made discharge basin. The southern parcel, Parcel B, proposed for the Yeager-4 well is composed of a mix of native and nonnative vegetation consisting of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance (mesquite thickets; a CDFW S3 Rank Sensitive Natural Community), disturbed land that included a compacted dirt road, and some sparse native shrubs, dominated by golden bush (*Isocoma* sp.). The mesquite trees on site cover approximately 47 percent (approximately 0.14 acres) of the parcel on the east and north. The Project Site is located near the Big Morongo Canyon Preserve, which is located about 170 feet to the east. The preserve includes desert riparian and marsh habitat (Big Morongo Creek), which attracts a variety of wildlife, including migratory and special-status bird species.

The Project Site is located within a residential area with localized ongoing disturbance from human activities (e.g., existing facility maintenance, paved roads, trash, introduced nonnative plant species). Parcel A did not contain any natural vegetation communities due to its developed nature. Therefore, Parcel A was assigned a land cover type of developed. One native vegetation community was documented within Parcel B: *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance (mesquite thickets). The *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance within Parcel B has also been affected by the localized ongoing human disturbance within and around the Project Site. Due to the presence of the dirt road, multiple foot paths, scattered trash, introduced nonnative plant species, and evidence of timber cutting, this community is characterized as disturbed and its value as a sensitive natural community may be lessened due to these factors.

4.4.1.1 Potential for Special-Status Plant Species

The literature review was limited to plant species occurring within five miles of the Project Site. Additionally, plant species with a CNPS Rare Plant Rank of 3 or 4 species were eliminated from the analysis because these rankings are considered a review list and a watch list, respectively, and are not likely to be federally or state-listed in the near future. Even if these species were to occur on the Project Site, impacts to California Rare Plant Ranks (CRPRs) 3 and 4 species would likely not be considered significant under the California Environmental Quality Act (CEQA).

The literature review and database searches identified nine special-status plant species as occurring within five miles of the Project Site (CDFW 2025a; CNPS 2025b The Project Site was evaluated for its suitability to support any of the nine special-status plant species on the list.

Of the nine special-status plant species that appeared in the literature review and database searches for the Project Site, five were presumed absent due to the lack of suitable habitat (including elevation and soil) or because the Project Site is located outside of the known range for the species. Four species were determined to have a low potential to occur on the Project Site. A table outlining each species, their designations, and potential for occurrence on the Project Site can be found in Appendix B.

Plant Species with a Low Potential to Occur

The following four species have a low potential to occur within the Project Site due to the presence of limited (e.g., small area, scarce) or marginal (e.g., low quality, disturbed) habitat for the species occurring

within the Project Site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project Site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search:

- Lincoln rockcress (*Boechera lincolnensis*) CRPR 2B.3;
- White-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) CRPR 1B.2;
- Little San Bernardino Mountains linanthus (*Linantus maculatus* ssp. *maculatus*) CRPR 1B.2; and
- Latimer's woodland-gilia (*Saltugilia latimeri*) CRPR 1B.2.

4.4.1.2 Potential for Special-Status Wildlife Species

The literature search identified 33 special-status wildlife species that had previously been documented on or in the vicinity of the Project Site. A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status wildlife species on the list. Of the 33 special-status wildlife species that appeared in the literature review and database searches for the Project Site, 24 wildlife species were presumed absent due to the lack of suitable habitat (including vegetation and soils) or because the Project Site is located outside of the known range for the species. The high level of human disturbance within and adjacent to the Project Site precludes many of these species from occurring. One special-status wildlife species was determined to have a moderate potential to occur and seven special-status wildlife species were determined to have a low potential to occur on the Project Site. A table outlining each species, their designations, and potential for occurrence on the Project Site can be found in Appendix B.

Wildlife Species with a Moderate Potential to Occur

One species was determined to have a moderate potential to occur within the Project Site due to the presence of suitable habitat (including soils, vegetation communities, and elevation factors) that could support persistence of the species (including foraging, shelter, and breeding) within the Project Site and a documented observation occurs within the database search, but not within five miles of the area; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project Site:

- Yellow warbler (*Setophaga petechia*) CDFW SSC

Wildlife Species with a Low Potential to Occur

The following seven species have a low potential to occur within the Project Site due to the presence of limited (e.g., small area, scarce) or marginal (e.g., low quality, disturbed) habitat for the species occurring within the Project Site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project Site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search:

- Crotch bumble bee (*Bombus crotchii*) state candidate for listing (Endangered);
- Red-diamond rattlesnake (*Crotalus ruber*) CDFW SSC;
- Coast horned lizard (*Phrynosoma blainvillii*) CDFW SSC;
- Loggerhead shrike (*Lanius ludocicianus*) CDFW SSC;
- Summer tanager (*Piranga rubra*) CDFW SSC;
- Vermilion flycatcher (*Pyrocephalus rubinus*) CDFW SSC;
- San Diego desert woodrat (*Neotoma lepida intermedia*) CDFW SSC

4.4.1.3 Raptors and Migratory Birds

Potential nesting habitat for migratory birds and raptors protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code is present throughout the Project Site in the form of shrubs, trees, and a wooden telephone line. Suitable nesting habitat for ground-nesting bird species, such as mourning doves, is also present in the Project Site. Due to the presence of suitable nesting habitat, native and migratory birds could use the Project Site during the nesting bird season (typically February 1 through August 31).

4.4.1.4 Aquatic Resources

Although a formal aquatic resources delineation was not performed, a desktop review of the NWI and USGS topographic map did not identify any potentially jurisdictional features or wetlands present on the Project Site (USFWS 2025a; USGS 2025). Off-site improvements include a temporary above-ground discharge pipeline which will be temporarily installed above-ground within the existing developed roadway and shoulder. The pipeline will span approximately 500 linear feet extending east along Mojave Drive and then continuing north along East Drive before terminating south of the East Drive and Covington Drive intersection, with the line discharging into an upland area (see Figure 3). This alignment has been selected to avoid encroachment on sensitive wetland habitat within the Big Morongo Canyon Preserve.

Additionally, there is a small man-made discharge basin located on the existing Yeager-2 site. This feature was investigated during the March 12, 2025 biological survey and was observed to be completely dry and devoid of vegetation. The discharge basin consists of a small man-made earthen lined unvegetated basin, designed to accept discharge from Yeager-2. The basin is an artificial structure, isolated from other natural waterways, and does not support fish, wildlife, or protected plant species due to its unvegetated nature and lack of habitat. Therefore, this feature is not jurisdictional for the Army Corps of Engineers, State Regional Water Quality Control Board, or CDFW.

4.4.1.5 Wildlife Movement Corridors, Linkages, and Native Wildlife Nursery Sites

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, channels and flood control, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat embedded in a dissimilar matrix that connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project Site was assessed for its ability to function as a wildlife corridor. Although the Project Site is adjacent to open undeveloped desert scrub habitat, it is generally surrounded by residential development and less than 0.25 mile southeast of State Route 62 which limits wildlife movement. Wildlife could use portions of the Project Site or areas immediately adjacent to the Project Site for local travel to larger, contiguous blocks of habitat such as the San Bernardino Mountains to the north, but the Project Site itself does not provide wildlife movement corridor or linkage opportunities due to its small size and exposed nature. Additionally, the presence of heavy human activity reduces the Project Site's value as a wildlife movement corridor or linkage.

4.4.1.6 Sensitive Natural Communities

The Project Site contains one vegetation community (*Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance) and two land cover types (developed and disturbed). The *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation community was documented within the southern parcel, Parcel B, proposed for Yeager-4. *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance is a S3 ranked CDFW sensitive natural community. S3 is the lowest of the Sensitive Natural Community ranks and indicates that the vegetation community is vulnerable due to a restricted range, relatively few populations, recent declines, or other factors making them vulnerable to extirpation from the State. Approximately 0.14-acre of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance (disturbed) was present within Parcel B.

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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The Project Site consists of two pieces, Parcel A which consists of a developed existing well site (Yeager-2) and Parcel B which consists of a 0.30-acre area containing *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation and disturbed land. Off-site improvements include a temporary above-ground discharge pipeline which will be temporarily installed above-ground within the existing developed roadway and shoulder. The pipeline will span approximately 500 linear feet extending east along Mojave Drive and then continuing north along East Drive before terminating south of the East Drive and Covington Drive intersection, with the line discharging into an upland area (see Figure 3). This alignment has been selected to avoid encroachment on sensitive wetland habitat within the Big Morongo Canyon Preserve. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. Evidence of past disturbances are present on the Project Site including compacted soils, a dirt roadway across, multiple footpaths, nonnative grasses and plants, and trash were observed throughout the Project Site.

No special-status plant or wildlife species were observed during the biological surveys; however, four special-status plant species (Lincoln rockcress [*Boechera lincolnensis*]; White-bracted spineflower [*Chorizanthe xanti* var. *leucotheca*]; Little San Bernardino Mountains linanthus [*Linantus maculatus* ssp. *maculatus*]; andLatimer's woodland-gilia [*Saltugilia latimeri*]) have a low potential to occur on the Project Site. However, due to the lack of high-quality habitat within the Project Site, the site's history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Site, if present on the Project Site, these four species are only expected to occur in low density and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to Lincoln rockcress, white-bracted spineflower, little San Bernardino Mountains linanthus, and Latimer's woodland-gilia would not be considered significant under CEQA, and additional surveys and mitigation are not necessary.

Of the 33 special-status wildlife species identified in the literature review, one species (yellow warbler) has a moderate potential to occur and seven species (Crotch bumble bee [*Bombus crotchii*], red-diamond rattlesnake [*Crotalus ruber*], coast horned lizard [*Phrynosoma blainvillii*], loggerhead shrike [*Lanius ludocicianus*], summer tanager [*Piranga rubra*], vermilion flycatcher [*Pyrocephalus rubinus*], and San Diego

desert woodrat [*Neotoma lepida intermedia*]) have a low potential to occur on the Project Site. Although these species are not expected to occur on the Project Site, wildlife are mobile and, if present, these species could be subject to direct impacts through ground disturbance and vegetation removal and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. However, impacts to these species would be less than significant with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4 discussed below.

As stated above, Crotch bumble bee (candidate species for listing [endangered] under the California ESA) was determined to have a low potential to occur on the Project Site based on the presence of marginally suitable habitat and recent species records in the vicinity. No Crotch bumble bees were observed during the 2023 and 2025 biological surveys. However, if present on the Project Site, this species could be subject to direct impacts through ground disturbance and vegetation removal and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Site. Any direct impacts to Crotch bumble bee associated with Project implementation would be considered significant under CEQA. However, implementation of Mitigation Measures BIO-1, BIO-3 and BIO-4 will reduce impacts to Crotch bumble bee to a level that is less than significant.

The trees and large shrubs on the Project Site, as well as the trees immediately adjacent to the Project Site, could provide nesting habitat for nesting birds and raptors protected by the MBTA and California Fish and Game Code, including yellow warbler. Furthermore, the Project Site could provide nesting habitat for ground-nesting bird species. 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 MBTA and their nests through the removal of habitat on the Project Site, and indirectly through increased noise, vibrations, and increased human activity. However, impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-1, BIO-2, and BIO-4.

Due to the Project Site's history of disturbance and lack of high-quality habitat, none of the plant or wildlife species with a low potential are expected to occur on the Project site. Therefore, it is not likely that the Project would require a mechanism for "take" of federally or state-listed plant or wildlife species. Therefore, significant impacts to special-status plant or wildlife species are not expected to occur and with the implementation of Mitigation Measures BIO-1, BIO-2, BIO-3, and BIO-4, all potential Project related impacts to candidate, sensitive, or special-status plant and wildlife species would be reduced to a less than significant threshold.

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?	☐	☐	☒	☐

Less than Significant Impact.

The Project Site contained one vegetation community (*Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance(mesquite thickets) and two land cover types (developed and disturbed). The *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation community was documented within the southern parcel, Parcel B, proposed for Yeager-4. *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance is a S3 ranked CDFW sensitive natural community. S3 is the lowest of the Sensitive Natural Community ranks and indicates that the vegetation community is vulnerable due to a restricted range, relatively few populations, recent declines, or other factors making them vulnerable to extirpation from the State. Approximately 0.14-acre of disturbed *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance was present within Parcel B. *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation was also observed on adjacent lands and is a prominent vegetation community with the Big Morongo Canyon Preserve. The *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance on the Project Site is located within a disturbed environment that is constantly exposed to human disturbance and impacts, which lessens its conservation value. Additionally, with the prominence of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation in the surrounding area and within conserved/protected areas like the Big Morongo Canyon Preserve, removal of 0.14-acre of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance would not threaten the community's long-term viability and would not create a substantial adverse effect. Therefore, the loss of 0.14-acre of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance vegetation would be a less than significant impact under CEQA.

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?	☐	☐	☐	☒

No Impact.

Although a formal aquatic resources delineation was not performed, a desktop review of the NWI and USGS topographic map did not identify any potentially jurisdictional features or wetlands present on the Project Site (USFWS 2025a; USGS 2025). Off-site improvements include a temporary above-ground discharge pipeline which will be temporarily installed above-ground within the existing developed roadway and shoulder. The pipeline will span approximately 500 linear feet extending east along Mojave Drive and then continuing north along East Drive before terminating south of the East Drive and Covington Drive intersection, with the line discharging into an upland area (see Figure 3). This alignment has been selected to avoid encroachment on sensitive wetland habitat within the Big Morongo Canyon Preserve.

Additionally, there is a small man-made discharge basin located on the existing Yeager-2 site. This feature was investigated during the March 12, 2025 biological survey and was observed to be completely dry and devoid of vegetation. The discharge basin consists of a small man-made earthen lined unvegetated basin, designed to accept discharge from Yeager-2. The basin is an artificial structure, isolated from other natural waterways, and does not support fish, wildlife, or protected plant species due to its unvegetated nature and lack of habitat. Therefore, this feature is not jurisdictional for the Army Corps of Engineers, State Regional Water Quality Control Board, or CDFW.

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?	☐	☐	☐	☒

No Impact.

The Project Site was assessed for its ability to function as a wildlife corridor. Although the Project Site is adjacent to open undeveloped desert scrub habitat, it is generally surrounded by residential development and less than 0.25 mile southeast of the Project Site is State Route 62 which limits wildlife movement. Wildlife could use portions of the Project Site or areas immediately adjacent to the Project Site for local travel to larger, contiguous blocks of habitat but the Project Site itself does not provide wildlife movement corridor or linkage opportunities due to its small size and exposed nature. Additionally, the presence of heavy human activity reduces the Project Site's value as a wildlife movement corridor or linkage

The Project Site is partially developed as an existing GSWC well site and is located within a rural urbanized area. Due to the presence of natural vegetation on the southern Parcel B, wildlife could use portions of the Project Site or areas immediately adjacent to the Project Site for local travel to larger, contiguous blocks of habitat. However, due to the Project Site's small size, exposed nature, and the existing residential and community services developments to the north, south and west, the Project Site does not function as a corridor for the movement of native resident or migratory animals or impede the use of native wildlife nursery sites. Additionally, the presence of heavy human activity reduces the Project Site's value to wildlife as a movement corridor or linkage. Thus, the Proposed Project would not interfere with wildlife movement or use of native wildlife nursery sites. 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?	☐	☐	☐	☒

No impact.

The County of San Bernardino has established a Plant Protection and Management Code (Chapter 88.01) to help protect and preserve desert vegetation, which includes all species of the genus *Prosopis* (mesquites). If impacts to the mesquite trees are unavoidable then a Tree or Plant Removal Permit issued in compliance with Section 88.01.050 (Tree or Plant Removal Requirements) would be required for the removal of the regulated tree. However, Section 88.01.030 exempts public utilities regulated by the Public Utilities Commission when removal is required for the safe maintenance and operation of the facility, therefore no impacts are anticipated.

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 Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Impact.

The Project Site is not located within any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plan, and none are located in proximity to the Project Site. Consequently, no conflicts with such plans would occur. No mitigation measures are necessary, and no impacts are anticipated.

4.4.3 Mitigation Measures

BIO-1 **Pre-Construction Special-Status Wildlife Survey.** To ensure impacts to special-status wildlife species, including red-diamond rattlesnake *(Crotalus ruber*), coast horned lizard (*Phrynosoma blainvillii*), and San Diego desert woodrat (*Neotoma lepida intermedia*), are less than significant, a pre-construction special-status wildlife survey shall be conducted no more than three days prior to the initiation of construction activities (e.g., equipment staging, ground disturbance, vegetation removal, and/or heavy equipment work). The survey shall be conducted by a qualified biologist, experienced in identifying special-status wildlife species and determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures. The survey shall also be conducted during the appropriate time of day and weather conditions and shall encompass the entire project site and a 500-ft buffer, where access is permissible. Areas

where access is not permissible will be scanned with binoculars. If special-status species are identified on the Project Site, the biologist should coordinate with the State Water Resources Control Board, CDFW, and/or USFWS to develop and implement appropriate measures. These may include establishing protective buffer zones, rescheduling activities to avoid sensitive periods, or other measures.

BIO-2 **Pre-Construction Nesting Bird Survey.** To avoid disturbance of nesting and special-status birds, or migratory bird species protected by Sections 3503, 3503.5, and 3513 of the CFGC and the MBTA, activities related to project construction, including but not limited to vegetation and/or tree removal, should occur outside of the bird breeding season (February 1 through August 31). If ground disturbance, vegetation and tree removal, or heavy equipment work must begin in the breeding season, then a pre-construction nesting bird survey shall be conducted no more than three days prior to the initiation of construction activities. The survey shall be conducted at the appropriate time of day, during appropriate weather conditions, no more than three days prior to the initiation of Project activities such as vegetation removal and/or initial ground disturbance. The survey shall encompass the Project Site and a 250-foot buffer for passerines and a 500-foot buffer for raptors. The survey shall be conducted by a qualified biologist familiar with the identification of avian species known to occur in the region. An additional survey shall be conducted following any lapse in construction activity of seven or more days during the bird breeding season. The survey shall cover all suitable areas including trees, shrubs, bare ground, burrows, cavities, and structures. Survey duration should take into consideration the size of the Project Site; density, and complexity of the habitat; number of survey participants; survey techniques employed; and it shall be sufficient to ensure the data collected is complete and accurate. The survey should be conducted by a qualified biologist experienced in identifying local and migratory bird species; conducting bird surveys using appropriate survey methodology; nesting surveying techniques, recognizing breeding and nesting behaviors, locating nests and breeding territories, and identifying nesting stages and nest success; determining/establishing appropriate avoidance and minimization measures; and monitoring the efficacy of implemented avoidance and minimization measures.

If no nesting birds are observed during the survey, Project Site preparation and construction activities may begin.

If active nests are found, a qualified biologist shall establish a suitable avoidance buffer around the nest, with specific buffer widths to be determined by a qualified biologist. The buffer shall be delineated and flagged, and no construction activity shall occur within the buffer area until a qualified biologist determines the nestlings have fledged and/or the nest is no longer active, the nest has failed, or the nest has otherwise been determined inactive. The buffer shall be established to ensure nesting activity is not disturbed by construction activity and determined by the qualified biologist based on the species' known tolerances, the proposed work activity, and existing disturbances associated with land uses outside of the Project Site. The buffer(s) shall be demarcated by the biologist and the boundary marked

with bright construction fencing, flagging, construction lathe, or other means. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. Encroachment into the buffer shall occur only at the discretion of a qualified biologist and with monitoring of the active nest to ensure construction activities are not disrupting nesting behavior. If a qualified biologist determines that such Project activities may be causing an adverse reaction, the qualified biologist shall adjust the buffer accordingly or implement alternative avoidance and minimization measures, such as redirecting or rescheduling construction or erecting sound barriers. Work can resume within these avoidance areas when no other active nests are found, or the nest is determined to be inactive.

BIO-3 **Pre-Construction Crotch Bumble Bee Survey.** Prior to construction activities or vegetation disturbance, a qualified biologist shall conduct a habitat assessment for Crotch bumble bee within 50 feet of the project work area. The habitat assessment shall identify potential foraging, nesting, and/or overwintering resources. If suitable habitat is present, those areas shall be avoided to the extent feasible.

If suitable habitat is unavoidable, prior to the start of initial ground-disturbing activities (including, but not limited to, site preparation, staging and mobilization, vegetation clearance/mowing/trimming, grading, and excavation), a qualified biologist shall conduct a protocol-level presence/absence survey for Crotch bumble bee in areas of suitable habitat during the peak active period for Crotch bumble bee (highest detection probability). The peak active period for Crotch bumble bee in the project area is anticipated to be April through August given the expected desiccation of Crotch bumble bee floral resources within the project area by late-summer, though this timing could depend on annual climatic factors. Survey methodology shall be based on Section 4.1.1 of CDFW's 2023 Survey Considerations for CESA Candidate Bumble Bee Species, or the most current CDFW guidance in effect at the time.

If Crotch bumble bee is present, the qualified biologist shall identify the location of nests in in the survey area, to the extent feasible. If nests are identified, the qualified biologist shall determine the need to establish a no-disturbance buffer around the nest, where feasible, to reduce the risk of disturbance or accidental take. The buffer shall provide at least 50 feet (15 meters) of clearance around active nest entrances. If project component activities may result in disturbance or potential take, the qualified biologist, in coordination with CDFW, shall expand the buffer zone as necessary to prevent disturbance or take. If establishment of a no-disturbance buffer is feasible, construction activities shall not occur within the buffer until a qualified biologist determines the colony is no longer active (i.e., no Crotch bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive, construction activities within the no-disturbance buffer(s) shall be allowed to resume. Otherwise, the no-disturbance buffer shall be maintained for the duration of project component construction activities in each work

area and shall be removed only after the conclusion of all grading, clearing, and construction activities at each construction site.

If Crotch bumble bee is determined to be present on the project site, floral resources associated with the species that will be removed or damaged by project construction, shall be replaced at a minimum 1:1 ratio.

BIO-4 **Biological Monitoring.** A qualified biologist shall be present to monitor all initial ground disturbing and vegetation-clearing activities conducted for the Project. During each monitoring day, the biological monitor shall perform clearance survey "sweeps" at the start of each workday that vegetation clearing takes place to minimize impacts on special-status species with potential to occur. The monitor will be responsible for ensuring that impacts to special-status species, nesting birds, and active nests will be avoided to the greatest extent possible. Biological monitoring shall take place until the Project Site has been completely cleared of any vegetation. If an active nest is identified, the biological monitor shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed no longer active by the biologist. If listed (candidate, threatened, or endangered) wildlife species are detected during biological monitoring activities, then consultation with the USFWS and/or CDFW shall be conducted, and a mitigation plan shall be developed to avoid and offset impacts to these species. Mitigation measures may consist of work restrictions and/or additional biological monitoring activities after ground-disturbing activities are complete.

4.5 Cultural Resources

4.5.1 Environmental Setting

ECORP conducted a cultural resources study of the Project area (ECORP 2025c; Appendix C). The study includes a records search of California Historical Resources Information System (CHRIS), a Sacred Lands File (SLF) search at the Native American Heritage Commission (NAHC), Native American outreach, and field inspection. An archaeological literature and records search was conducted at the South Central Coastal Information Center (SCCIC), of the California Historical Resources Information System (CHRIS) housed at the California State University, Fullerton on December 5, 2023 with a one-mile buffer around the Project Site. The CHRIS search also included searching the lists of resources on or determined eligible for the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), California State Historical Landmarks, and California Sate Points of Historical Interest. The results of this search indicated that no cultural resource studies have been completed within the Project Site and no cultural resources were recorded within the Project Site. Because the area is close to an oasis and in mesquite habitat, an archaeological test excavation was also conducted by ECORP and monitored by the Yuhaaviatam of San Manuel Nation (formerly the San Manuel Band of Mission Indians) to confirm that no archaeological resources were present at the Project Site that were not visible during the pedestrian survey. The results of the report conclude that the Project site does not have subsurface archaeological deposits.

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

No Impact.

No historical or unique archaeological resources were found during the cultural resources study, pedestrian survey, or archaeological excavation. Therefore, there would be no impact on historical or archaeological resources from the Proposed Project.

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?	☐	☐	☒	☐

Less than Significant Impact.

No human remains were identified onsite and there was no evidence found in the course of preparing the cultural resources report or archaeological test excavation that the area has been used as a cemetery or burial ground in the past. While unlikely, if human remains are discovered during Project construction, State law prescribes protective measures that must be taken when human remains are discovered. Specifically, Section 7050.5 of the California Health and Safety Code requires that the County Coroner shall be immediately notified of the discovery and no further excavation or disturbance of the site or any nearby area may continue until the County Coroner has determined, within two working days of notification of the discovery, the appropriate treatment and disposition of the human remains. If the County Coroner determines that the remains are, or are believed to be, Native American, he or she is required to notify the NAHC in Sacramento within 24 hours. In accordance with California Public Resources Code, Section 5097.98, the NAHC must immediately notify those persons it believes to be the most likely descendant from the deceased Native American. The most likely descendant shall complete their inspection within 48 hours of being granted access to the site. The designated Native American representative would then determine, in consultation with the property owner, the disposition of the human remains. Compliance with state and federal law would ensure that there would be less than significant impacts on human remains that may be discovered during construction.

4.5.3 Best Management Practices

BMP CUL-1 Archaeological Discovery. If archaeological resources are discovered during project activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the project outside of the buffered area may continue during this assessment period. Additionally, the Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or historic-era finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input regarding significance and treatment.

BMP CUL-2 Monitoring and Treatment Plan. If significant pre-contact and/or historic-era cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan (Plan), the drafts of which shall be provided to YSMN for review and comment, as detailed within TCR-1. The archaeologist shall monitor the remainder of the project and implement the Plan accordingly.

BMP CUL-3 Human Remains. If human remains or funerary objects 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 shall be enforced for the duration of the project.

4.6 Energy

4.6.1 Environmental Setting

Energy consumption is analyzed in this IS/MND according to the potential direct and indirect environmental impacts associated with the construction and operation of the Project. Such impacts include the depletion of nonrenewable resources (e.g., oil, natural gas, coal, etc.) and emissions of pollutants during the construction phase and the use of electricity during the normal operation of the plant. The impact analysis focuses on the sources of energy that are relevant to the Proposed Project, which includes the electricity consumed during the pumping and conveyance of water and the equipment fuel necessary for Project construction.

4.6.1.1 Energy Types and Sources

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with the majority of its electricity, followed by renewables, large hydroelectric, and nuclear (California Energy Commission [CEC] 2021). Southern California Edison (SCE) provides electrical services to unincorporated San Bernadino 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 50,000 square miles.

The California Public Utilities Commission (CPUC) regulates SCE. The CPUC has developed energy efficiency programs such as smart meters, low-income programs, distribution generation programs, self-generation incentive programs, and a California solar initiative. Additionally, the CEC maintains a power plant database that describes all of the operating power plants in the state by county. San Bernardino County contains numerous power plants generating electricity, of which a large majority are solar powered (CEC 2021).

4.6.1.2 Existing Transmission and Distribution Facilities

The components of transmission and distribution systems include the generating facility, switching yards and stations, primary substation, distribution substations, distribution transformers, various sized transmission lines, and the customers. The United States contains more than 0.25 million miles of transmission lines, most of them capable of handling voltages between 115 and 345 kilovolts (kV), and a handful of systems of up to 500 and 765 kV capacity. Transmission lines are rated according to the amount of power they can carry, the product of the current (rate of flow), and the voltage (electrical pressure). Generally, transmission is more efficient at higher voltages. Generating facilities, hydro-electric dams, and power plants usually produce electrical energy at fairly low voltages, which is increased by transformers in substations. From there, the energy proceeds through switching facilities to the transmission lines.

At various points in the system, the energy is *stepped down* to lower voltages for distribution to customers. Power lines are either high voltage (115, 230, 500, and 765 kV) transmission lines or low voltage (12, 24, and 60 kV) distribution lines. Overhead transmission lines consist of the wires carrying the electrical energy (conductors), insulators, support towers, and grounded wires to protect the lines from lightning, (called shield wires).

Towers must meet the structural requirements of the system in several ways. They must be able to support both the electrical wires, the conductors, and the shield wires under varying weather conditions, including wind and ice loading, as well as a possible unbalanced pull caused by one or two wires breaking on one side of a tower. Every mile or so, a *dead-end* tower must be able to take the strain resulting if all the wires on one side of a tower break. Every change in direction requires a special tower design. In addition, the number of towers required per mile varies depending on the electrical standards, weather conditions, and the terrain. All towers must have appropriate foundations and be available at a fairly regular spacing along a continuous route accessible for both construction and maintenance.

A right-of-way is a fundamental requirement for all transmission lines. A right-of-way must be kept clear of vegetation that could obstruct the lines or towers by falling limbs or interfering with the sag or wind sway of the overhead lines. If necessary, land acquisition and maintenance requirements can be substantial. The dimensions of a right-of-way depend on the voltage and number of circuits carried and the tower design. Typically, transmission line rights-of-way range from 100 to 300 feet in width. The electric power supply grid within San Bernardino County is part of a larger supply network operated and maintained by SCE that encompasses nearly the entire Southern California region. This system ties into yet a larger grid known as the California Power Pool, which connects with the San Diego Gas and Electric and Pacific Gas and Electric companies. These companies coordinate the development and operation, as well as purchase, sale, and exchange of power throughout the State of California. Within San Bernardino County, SCE owns most of the transmission and distribution facilities.

4.6.1.3 Energy Consumption

Electricity use is typically measured in kilowatt-hours (kWh). Fuel use in internal-combustion engine vehicles is typically measured in gallons (e.g., of gasoline or diesel fuel) and energy use in electric vehicles is measured in kWh.

Table 4.6-1 shows the electricity consumption associated with all non-residential uses in San Bernardino County from 2018 to 2022. As indicated, the demand has increased since 2018.

Table 4.6-1. Non-residential Electricity Consumption in San Bernardino County 2018-2022

Year	Non-residential Electricity Consumption kilowatt-hours)
2022	10,327,755,820
2021	10,137,255,897
2020	9,797,575,011
2019	9,926,183,260
2018	10,158,958,013

Source: California Energy Commission 2021

Table 4.6-2 shows on-road automotive fuel consumption in San Bernardino County from 2019 to 2023. The fuel consumption for on-road vehicles has increased since 2019.

Table 4.6-2. Automotive Fuel Consumption in San Bernardino County 2019-2023	
Year	**Total Fuel Consumption (gallons)**
2023	1,158,084,711
2022	1,162,510,166
2021	1,160,066,096
2020	1,045,730,714
2019	1,171,853,887

Source: California Air Resources Board 2024

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?	☐	☐	☒	☐

Less than Significant Impact.

This impact analysis focuses on the sources of energy that are relevant to the Proposed Project: the equipment fuel necessary for Project construction and material hauling (construction) and the electricity consumed during the pumping and conveyance of water. Addressing energy impacts requires an agency to determine 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 purposes of this analysis, the amount of fuel necessary for Project construction is calculated and compared to all fuel consumed in San Bernardino County. 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 (Appendix D). Construction fuel consumption associated with the Proposed Project is summarized in Table 4.6-3.

Table 4.6-3. Proposed Project Fuel Consumption		
Activity	**Annual Energy Consumption**	**Percentage Increase Countywide**
Automotive Fuel Consumption		
Project Construction Year One	9,557 gallons	0.0008 percent

Notes: The Project increase in construction fuel consumption is compared with the countywide fuel consumption in 2023, the most recent full year of data.

Source: Climate Registry 2016. See Appendix D.

Fuel necessary for Project construction would be required for the operation and maintenance of construction equipment and the transportation of materials to the Project Site. The fuel expenditure necessary to construct the physical building and infrastructure would be temporary, lasting only as long as Project construction. As shown in Table 4.6-3, the Project's fuel consumption during construction is estimated to be 9,557 gallons. This would increase the combined annual countywide fuel use by a negligible amount (0.0008 percent) for the Proposed Project's construction activities. As such, Project construction would have a nominal effect on local and regional energy supplies. 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 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 similar in nature.

The Proposed Project would include replacement of an existing well, which at its peak was pumping approximately 415 gpm. The proposed replacement well would result in a pumping rate of approximately 400 gpm. Thus, the amount of electricity needed for water pumping and conveyance would generally remain the same as when the existing well was pumping at full capacity, before it had approached its end of service decline. According to the CEC Recommended Revised Estimates for Water Embedded Energy (2007), the energy consumption related to Proposed Project's 400 gpm water pumping rate would result in approximately 5,603 kWh of energy per day, or 2,045,095 kWh annually. This energy consumption due to water conveyance is not likely to increase substantially beyond the previous energy consumption related to pumping, as the pumping rates would be roughly at similar levels to the existing well before its decline. It is noted that the construction of the new well would likely include updated, energy efficient pumping equipment, which would reduce the amount of energy consumption from previous levels. The Proposed Project would not include new buildings or any other substantial energy-consuming components. The Project would not substantially increase the number of gasoline-consuming vehicle trips over existing levels. Therefore, by its nature, the Project would not cause wasteful, inefficient, and unnecessary consumption of energy from long-term operations over existing conditions.

Any potential increases in electricity consumption as a result of the Proposed Project, which aims to provide adequate clean water to the service area, would not result in the inefficient, wasteful, or unnecessary consumption of energy.

For these reasons, this impact 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?	☐	☐	☒	☐

Less than Significant Impact.

The Project would comply with the County's relevant energy conservation policies. The Proposed Project would replace the current well infrastructure and pump with new and modern equipment that is likely more energy efficient than the existing equipment. The Proposed Project would support Policy RE-1.2 of the General Plan's Renewable Energy and Conservation Element, which aims to optimize energy efficiency in the built environment. Furthermore, the Project would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. The Project would be built to the Energy Efficiency Standards for Residential and Nonresidential Buildings, as specified in Title 24, Part 6, of the CCR (Title 24). The Project's mandatory compliance with all applicable building standards would result in the Project not obstructing any state or local plan for renewable energy or energy efficiency.

This impact would be less than significant.

4.6.3 Mitigation Measures

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

4.7 Geology and Soils

4.7.1 Environmental Setting

Morongo Valley is situated along SR-62 between the Big Morongo Canyon Preserve and the San Gorgonio Mountains. The Morongo Valley plan area sits at an approximate elevation of 2,538 feet above mean sea level. 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 2007).

4.7.1.1 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 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). The nearest Alquist-Priolo fault trace includes the Morongo Valley Fault located approximately 0.50 mile southeast of the Project Site. The Project lies within the Alquist-Priolo Fault Zone for this fault (DOC 2025).

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 State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☐	☒

No Impact.

i) Based on the USGS Quaternary Faults web viewer, the Morongo Valley Fault is situated parallel to the south side of Highway 62 (USGS 2023). The Project Site is located approximately 850 feet north of the fault and is just within the state designated Alquist-Priolo Special Studies Zone (DOC 2023b). Ground shaking originating from earthquakes along other active faults in the region is expected to induce lower horizontal accelerations due to smaller anticipated earthquakes and/or greater distances to other faults.

Although the Project includes construction of a replacement water well, the Project Site is not habitable and would not pose a substantial risk to people or other structures. Evacuation from the site after a major earthquake event would be available on Vale Drive to SR-62, approximately 670 feet to the north. No impact would occur.

Less than Significant Impact.

ii) In general, Southern California is a seismically active region that contains many earthquake faults. the Project area. The nearest fault, the Morongo Valley fault, is located approximately 0.5 mile to the southeast. Other faults within the area include the Pinto Mountain, San Andres and Mesquite Lake faults (DOC 2023b).

Moderate to strong ground shaking due to seismic activity is expected at the site during the life span of the Project. Special detailing and design techniques would be incorporated to ensure the well and other structures can sufficiently withstand the estimated level of distortion without structural failure during an earthquake. For example, flexible casing materials (e.g., high-strength carbon steel) would be used to accommodate ground movement. Additionally, all structures and onsite facilities would be designated in accordance with the California Building Code (CBC) and USGS seismic design criteria for the peak site ground acceleration. The Project is not expected to directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death. Impacts would be less than significant.

No Impact.

iii) Seismically induced liquefaction is a phenomenon in which cyclic stresses, produced by earthquake-induced ground motion, create excess pore pressures in soils. According to the San Bernardino County Geologic Hazards Overlay Map F128C, the Project Site is not located in an area susceptible to liquefaction (County of San Bernardino 2019). Additionally, the County has implemented the California Building Code seismic safety standards for structural construction. The Proposed Project facilities would be designed to withstand geologic conditions anticipated to occur in the Project Area. No impact would occur.

No Impact.

iv) According to the San Bernardino County Geologic Hazards Overlay Map F128C, the Project Site is not located in an area susceptible to landslides (County of San Bernardino 2019). Therefore, landslides are unlikely to occur due to the flat topography adjacent to the Project Site. 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?	☐	☐	☒	☐

Less than Significant Impact.

Construction of the Proposed Project would require ground disturbing activities, such as vegetation removal around the proposed well site, that have the potential to result in soil erosion or the loss of topsoil. Stormwater drainage in the area primarily consists of overland flow over the ground and roadway

surfaces that concentrate in roadways and detention basins, such as the on-site discharge basin. Surfaces on Parcel B would be covered in gravel once construction is complete to ensure there is no long-term erosion.

GSWC would implement BMP's, GSWC shall implement BMP HYD-1 and HYD-2 as described in Section 4.10.4. Because the Project would comply with current regulations to limit erosion-related water quality impacts during and after construction, there would be a less than significant impact.

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?	☐	☐	☒	☐

Less than Significant Impact.

Strong ground shaking can cause settlement, lateral spreading, or subsidence by allowing sediment particles to become more tightly packed, thereby reducing pore space. Land surface subsidence can be induced by both natural and human phenomena. Natural phenomena include subsidence resulting from tectonic deformations and seismically induced settlements, soil subsidence from consolidation, hydro compaction, rapid sedimentation subsidence from oxidation or dewatering of organic-rich soils, and subsidence related to subsurface cavities. Subsidence related to human activity includes subsurface fluid or sediment withdrawal. Pumping of water for residential, commercial, and agricultural uses from subsurface water tables causes the majority of the identified subsidence in the U.S.

As discussed above, the County has implemented the California Building Code seismic safety standards for structural construction. The County will continue to enact these and other seismic safety programs to minimize hazards from earthquakes and other seismic hazards. The Proposed Project's facilities would be designed to withstand geologic conditions anticipated to occur in the Project Area. Therefore, the Proposed Project would not contribute to a new exposure of people or structures to substantial adverse effects associated with an on-site or offsite 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?	☐	☐	☐	☒

No Impact.

According to the Natural Resources Conservation Service (NRCS) Web Soil Survey, soils at the site have not been mapped (NRCS 2025). However, the Project does not include constructing habitable structures that would create substantial risks to life. The Proposed Project's facilities would be designed to withstand geologic conditions anticipated to occur in the Project Area. Therefore, no impacts are anticipated, and no mitigation is required.

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 waste water disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Impact.

The Proposed Project does not include installation of septic systems or alternative wastewater disposal systems. No impact would occur.

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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

Policy CR 2.3 of the Countywide Plan protects paleontological resources from loss or destruction and requires that new development include appropriate mitigation to preserve the quality and integrity of these resources, avoid them when possible, and salvage and preserve them if avoidance is not possible (County of San Bernardino 2019).

ECORP obtained a paleontological records search from the Western Science Center on February 14, 2024 and is included as Appendix E. The record search stated that the museum does not have any localities within one mile of the Proposed Project Area. The geologic units underlying the Project Area are mapped primarily as alluvial deposits of silt, sand, and gravel from the Holocene epoch. Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits (Appendix E). Further, excavation at the site is not planned to exceed four feet below the surface with the exception of the well bore and no fossils were encountered by the archaeological test excavations that went to a depth of four feet below surface.

Excavation activity associated with the development of the Project Area is unlikely to be paleontologically sensitive, but caution during development should be observed. While the presence of any fossil material is

unlikely, if excavation activity disturbs sediment dating to the earliest parts of the Holocene or Late Pleistocene periods, fossil material could be scientifically significant.

According to Project plans, the replacement well could reach approximately 600 feet in depth. Younger alluvium is too young to preserve fossil resources in the upper soil layers, but deeper layers and underlying sediments have high paleontological sensitivity. If paleontological resources are encountered and destroyed, then a significant impact may occur. With the implementation of Mitigation Measure GEO-1, impacts would be less than significant.

4.7.3 Mitigation Measures

GEO-1 **Unanticipated Discovery of Paleontological Resources.** If paleontological resources are discovered during construction, all work must halt within a 100-foot radius of the discovery and a qualified paleontologist will be retained to evaluate the find. The paleontologist shall notify the GSWC and lead agency if the find is significant. The paleontologist shall evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The qualified paleontologist will evaluate the significance of the find and recommend appropriate measures for the disposition of the find (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site while evaluation and treatment of the paleontological resource takes place.

4.8 Greenhouse Gas Emissions

4.8.1 Environmental Setting

Greenhouse Gas (GHG) emissions 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 (CO_2), methane (CH_4), nitrous oxide (N_2O), 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 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. CH_4 traps over 25 times more heat per molecule than CO_2. N_2O absorbs 298 times more heat per molecule than CO_2. Estimates of GHG emissions are often presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in CO_2e 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 CO_2 were being emitted.

The Proposed Project is also compared for consistency with the County of San Bernardino GHG Reduction Plan (GHG Plan). This Plan was originally adopted in 2011 based on the premise that the County and the community it represents are uniquely capable of addressing emissions associated with sources under the County's jurisdiction and that the County's emission reduction efforts should coordinate with the state

strategies of reducing emissions in an efficient and cost-effective manner. The GHG Plan identifies GHG emissions reduction goals, objectives, and strategies categorized in six sectors, including building energy, transportation and land use, solid waste/landfills, stationary sources, agricultural and resource conservation, and water conservation. The March 2015 update of the GHG Emissions Development Review Process updated the performance standard language, bringing it up to date with current code; improved upon the menu of options within the screening tables proportioning point values to more accurately account for expected GHG reductions; and revised the descriptions of the energy efficiency related options to better describe the physical improvements that would be made in choosing that option. A screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually was adopted under this update. The numeric bright line threshold was developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies when determining if GHG emissions from a proposed project are significant.

In September 2021, the County adopted an additional round of updates since the state has enacted new climate change regulations, most notably the Senate Bill (SB) 32, which provides statewide targets to reduce GHG emissions to 40 percent below 1990 levels by 2030. The County has updated its targets to ensure conformity with the latest state climate change regulations. The 2021 Update serves as a comprehensive roadmap to outline strategies that the County will implement to continue achieving its GHG emissions reductions into the year 2030 and beyond, thereby ensuring sustainable and healthy growth. In 2021 the County updated the GHG Plan to summarize the County's historic and future GHG emissions, and the reduction targets the County has established; the local reduction strategies that will be implemented and benefit at the community level to meet the reduction targets; and the implementation of the measures, potential funding sources, and how the GHG Plan Update will be monitored and updated over time.

For the purposes of this analysis, Project construction GHG emissions are compared against the daily and annual significance thresholds adopted by the MDAQMD. Project operational emissions are evaluated against the County GHG Reduction Plan. The Project is assessed for consistency with the County GHG Reduction Plan by comparing Project operational GHG emissions against the screening level numeric bright-line threshold of 3,000 metric tons of CO_2e annually.

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?	☐	☐	☒	☐

Less than Significant Impact.

4.8.2.1 Construction GHG Emissions

A source of GHG emissions associated with the Proposed Project would be the combustion of fossil fuels during construction activities. Construction activities associated with the Proposed Project are temporary but would result in GHG emissions from the use of heavy construction equipment and construction-related vehicle trips.

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., tractors, loaders, bore drills, and excavators). Table 4.8-1 illustrates the specific construction generated GHG emissions that would result from the construction of the Project.

Table 4.8-1. Construction-Related Greenhouse Gas Emissions

Emissions Source	Metric Tons of CO_2e per Year
Construction Year One Project Total	**97**
Significance Threshold	*3,000*
Exceed Significance Threshold?	No

Notes: CO_2e = carbon dioxide equivalents
Source: California Emissions Estimator Model version 2022.1. Refer to Appendix A for Model Data Outputs.

As shown in Table 4.8-1, Project construction would result in the generation of approximately 97 $MTCO_2e$ during year one. This is less than the 3,000 $MTCO_2e$ per year significance threshold. Once construction is complete, the generation of these GHG emissions would cease.

4.8.2.2 Operational GHG 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 GHG emissions from Project operations beyond existing conditions. The Project includes decommissioning a current well that has reached its end of service lifetime and would construct a replacement well as a municipal water source. The Proposed Project's operations would not require any new crew or staff beyond existing conditions; therefore, once the Proposed Project is implemented, there would be no

increase in automobile trips to the area. While it is anticipated that the Proposed Project would require intermittent maintenance and testing, these trips would be minimal requiring a negligible number of traffic trips on an annual basis. The proposed well would result in water pumping rates of approximately 400 gpm. Due to the existing well's decreasing capability, this pumping rate would likely represent an increase from current levels but would roughly equate to the pumping rates that occurred before the existing well began to decline due to production issues. Nevertheless, the increases in any GHG emissions associated with pumping would not be substantial. Because of these reasons, 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?	☐	☐	☐	☒

No Impact.

The County of San Bernardino has adopted a GHG Reduction Plan to reduce local GHG emissions and implement goals to comply with the statewide GHG reduction targets. The County's GHG Plan assists the state's overall goal to reduce GHG emissions to 40 percent below 1990 levels by the year 2030 (California SB 32) and 80 percent below 1990 levels by the year 2050 (Executive Order S-3-05). As shown in Table 4.8-1, Project-generated GHG emissions would not surpass the significance threshold of 3,000 $MTCO_2e$ established by the GHG Plan. The County's bright-line threshold of 3,000 metric tons of CO_2e annually is based, in part, on the statewide GHG-reducing target established for the year 2030 under the Assembly Bill 32 Scoping Plan. Additionally, once the implementation of the Project is complete, it would not be a source of operational GHG emissions beyond existing conditions. Therefore, the GHG emissions generated by the Proposed Project would not surpass GHG significance thresholds established by the County's GHG Plan. Therefore, there is no impact.

4.8.3 Mitigation Measures

No significant impacts were identified. Therefore, 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?	☐	☐	☒	☐

Less than Significant Impact.

Construction of the Proposed Project may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, and other similar materials. All of these materials are commonly used in the construction industry and construction process, and their transport, handling, use, and disposal would occur within specifications as outlined by their respective manufactures. The transport of hazardous materials by truck is regulated by federal safety standards under the jurisdiction of the U.S. Department of Transportation. To minimize hazardous material spills or releases during construction, all construction equipment and vehicles would be fueled offsite. No vehicle fuel would be stored onsite. 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 well site. Construction contractors would comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the U.S. Environmental Protection Agency (USEPA), Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board. The CCR Title 8 addresses workplace regulations involving the use, storage, and disposal of hazardous materials, and specific applications for construction workers. CCR Titles 22 and 26 set forth environmental health standards for hazardous materials management. California Health and Safety Code Chapter 6.95 sets forth enabling legislation for the application of CCR Titles 8, 22, and 26. Safety precautions for the prevention of fire hazards associated with the use and storage of hazardous materials are addressed in the Uniform Fire Code. Compliance with applicable federal, state, and local regulations including, but not limited to, CCR Titles 8, 22, and 26, the Uniform Fire Code, and California Health and Safety Code Chapter 6.95 would ensure that the Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. 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?	☐	☐	☒	☐

Less than Significant Impact.

As discussed above, no fuel storage or vehicle refueling would occur onsite. However, the Project may result in a potential risk of upset or accidental release of fuel (e.g., diesel and gasoline) and/or hydraulic fluid during the use of heavy construction equipment on the Project Site. However, all transport, handling, and disposal of such substances would comply with all federal, state, and local laws regulating the management and use of hazardous materials. Furthermore, many of the manufacturers' recommendations are based on regulations promulgated by federal and state government. Best management practices (BMPs) to prevent construction-related pollutants and products from violating any water quality standard or waste discharge requirements would be prepared for the Proposed Project. BMPs would consist of measures such as a stabilized construction entrance to avoid tracking soils offsite and straw wattles and silt filter bags to prevent offsite runoff onto public roadways or drainage outlets.

During operation, the Project will follow all applicable federal, State, and local regulations pertaining to hazardous materials, which would minimize the risk of hazardous material release during routine operations or in the event of an accident. As discussed above, compliance with applicable federal, state, and local regulations (including CCR Titles 8, 22, and 26, the Uniform Fire Code, and California Health and Safety Code Chapter 6.95) would ensure that the Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions. The impact would be less than significant.

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?	☐	☐	☐	☒

No Impact.

The Project Site is located 0.6-mile from Morongo Valley Elementary School. As discussed above, the transport, use, and storage of construction-related pollutants and products would comply with all federal, state, and local laws regulating management and use of hazardous materials. 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 that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒

No Impact.

Government Code Section 65962.5 requires the DTSC, the State Department of Health Services, the State Water Board, 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.

The California Environmental Protection Agency's (CalEPA's) Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated on the Project Site or the adjacent properties and businesses (CalEPA 2024). The list, although mostly covering the requirements of Section 65962.5, has always been incomplete because it does not indicate if a specific site was at one time included in the abandoned site program.

The list is a compilation of five separate websites that include:

1. DTSC's EnviroStor – identifies waste or hazardous substances sites.
2. GeoTracker – 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.
5. A list of hazardous waste facilities subject to corrective action.

DTSC's EnviroStor indicated that the Project Site was not identified as a hazardous waste or substances site (DTSC 2023).

GeoTracker did not identify the site as an underground storage tank 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 (State Water Board 2023).

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

The list of cease-and-desist orders and clean-up and abatement orders did not include the Project Site location.

The list of hazardous facilities subject to corrective action does not include the Project Site location.

As the Proposed Project is not listed on one of the five websites provided to fulfill the Cortese List, the Proposed Project would 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:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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?	☐	☐	☐	☒

No Impact.

Project Site is not located within a land use plan area or within two miles of a public airport or public use airport. The nearest airport is the Yucca Valley Airport (approximately 10.5 miles east of the Project Site). Therefore, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Less than Significant Impact.

The County of San Bernardino prepared an Emergency Operations Plan in 2013. It is an all-hazard plan describing how the County will organize and respond to emergency incidents. Additionally, Chapter 8 of the Morongo Valley Community Plan is intended to reduce the potential risk of death, injuries, property damage, and the economic and social dislocation resulting from hazards, such as fires and floods. It serves as a guide for the community and the general public in understanding the hazards facing the community and how to reduce the impacts of those hazards. According to the plan, residents' primary concerns regarding safety in their community revolve around fire protection and the need for improved evacuation routes (County of San Bernardino 2007).

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 onsite. Grading activities would occur on-site prior to the commencement of work. Access to local residences would be maintained at all times.

Upon completion, vehicular access to the Project Site would be provided by an existing driveway and local access road located on Vale Drive Avenue that currently serve as access to the existing site. During the course of the County's required review of the Proposed Project's applications, the site plan would be reviewed to ensure that adequate access to and from the site is provided for emergency vehicles.

No change or interference with emergency response plans or related policies would occur as a result of the Project. The Project would not change the primary circulation system which could affect evacuation plans. Therefore, the potential for impacts that could impair the 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?	☐	☐	☐	☒

No Impact.

The Project Site is located adjacent to natural open space and fire-prone desert vegetation. However, due to the nature of the Project, it is not anticipated that the Project would expose people or structures to a significant risk of wildland fires. The Project Site is located immediately adjacent to Vale Drive which would provide circulation access to SR-62, a dedicated emergency access route. Only low-density single-family and commercial development exists in the vicinity. The Proposed Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No direct impacts from wildland fire are anticipated and no mitigation measures are necessary.

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 Regional Hydrology

Responsibility for the protection of surface water and ground water quality in California rests primarily with the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards. The community of Morongo Valley is under the jurisdiction of the Colorado River Regional Water Quality Control Board (CRRWQCB).

The Project Site is located within the Colorado River Basin Region. The basin covers approximately 13 million acres (20,000 square miles) in the southeastern portion of California, including all of Imperial County and portions of San Bernardino, Riverside, and San Diego Counties. Geographically, the basin represents only a small portion of the total Colorado River drainage area, which includes portions of Arizona, Nevada, Utah, Wyoming, Colorado, New Mexico, and Mexico (CRRWQCB 2023).

The Colorado River is the most important waterway in the basin. The river supplies water for use within the Region and elsewhere. Regional drainage to the river is from a strip about 200 miles long, with a watershed which (in California) ranges from 7 to 40 miles in width. This watershed strip is referred to as the East Colorado River Basin. The Salton Sea, which is replenished principally by irrigation drainage and stormwater, is the largest body of water in the West Basin. Much of the northern portion of the West Basin drains to several individual internal sinks or playas, while the southern portion generally drains to the Salton Sea (CRRWQCB 2023).

4.10.2 Site Hydrology and On-Site Drainage

The Project Site is vacant and relatively flat, with elevations ranging from approximately 2,535 to 2,539 feet above mean sea level. Stormwater runoff from the Project Site flows to the onsite detention basin and into roadways. According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map 06071C8850H, the Project Site is located within the Special Flood Hazard Area Zone A, which is subject to 100-year floods (FEMA 2024).

4.10.3 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 groundwater quality?	☐	☐	☒	☐

Less than Significant Impact.

The Project Site is located within the jurisdiction of the CRRWQCB, which sets water quality standards for all ground and surface waters within its region. Water quality standards are defined under the Clean Water Act 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 (i.e., water quality objectives). Water quality standards for all ground and surface waters overseen by the CRRWQCB are documented in the Water Quality Control Plan for the Colorado River Basin (Basin Plan; CRRWQCB 2023). The Basin Plan contains the water quality regulations for the Colorado River Basin Region and programs to implement those regulations. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the CRRWQCB 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.

Construction of the Proposed Project would require ground disturbing activities, such as grading and vegetation removal, that have the potential to result in soil erosion or the loss of topsoil. 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. Grading is anticipated to be minimal for construction of the replacement well site.

The Project would have a total disturbance area of approximately 0.3 acre. Stormwater drainage in the area primarily consists of overland flow over the ground and roadway surfaces that concentrate in man-made drainage elements, including the existing detention basin within the Yeager-Vale Well Site. To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline will be installed. The pipeline will span approximately 500 linear feet, terminating south of the East Drive and Covington Drive intersection (see Figure 3). This alignment has been selected to avoid encroachment on wetland habitat within the Big Morongo Canyon Preserve.

GSWC maintains regulatory coverage for this discharge under the NPDES General Permit for Drinking Water System Discharges (Order No. WQ 2014-0194-DWQ, WDID No. 4DW0623), administered by the State Water Board. As outlined in BMP HYD-1 below, two temporary settling tanks would be deployed on Parcel B to remove suspended solids, reduce turbidity, and decrease flow velocity prior to discharge. These tanks operate based on gravitational sedimentation principles, and serve as a best management practice for the discharge. The temporary discharge pipeline and settling infrastructure would be fully decommissioned and removed upon completion of construction activities.

During operation, the Proposed Project would not generate runoff that could substantially degrade surface or groundwater quality. Because the Project would comply with current regulations to limit erosion-related water quality impacts during and after construction, there would be a less than significant impact.

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?	☐	☐	☒	☐

Less than Significant Impact.

The Sustainable Groundwater Management Act 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 (California Department of Water Resources [DWR] 2024). The Proposed Project falls within the Morongo Valley Groundwater Basin, Basin 7-020. The basin covers 7,288.1 acres (DWR 2024). 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 2024). 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 consists of construction of a replacement well. The new well, Yeager-4, is planned to replace the Yeager-2 well, which has reached the end of its service life. According to an assessment conducted by GSWC in April 2023, Yeager-2 has reached the end of its useful service life due to a 50 percent decline in specific capacity and pumping water levels following a rehabilitation event in 2015. The Proposed Project would address the damaged Yeager-2 well and maintain a reliable supply of water for the GSWC Morongo del Sur System. The overall capacity required by the Morongo del Sur System would be the same as existing conditions and the Proposed Project would be in a fully developed urban area with a stable customer base; therefore, there would be no capacity increase. The purpose of the Project is to repair a damaged water well and not to increase overall capacity or meet an increase in demand.

Therefore, the Proposed Project 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;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐

Less than Significant Impact.

i-iv) The site is vacant and relatively flat, with elevations ranging from approximately 2,535 to 2,539 feet above mean sea level. Drainage from the Project Site flows to existing detention basins and roadways in the Project vicinity. No jurisdictional features, hydric soils, or wetlands are located on the Project Site. According to FEMA, the Project Site is located within the Special Flood Hazard Area, Zone A, which is subject to 100-year floods (FEMA 2024). However, the nature of the Project (constructing a replacement

well) would have minimal impacts in the event of a flood. As such, the Proposed Project would not significantly increase the rate or amount of surface runoff, nor would it impede or redirect flood flows.

The Proposed Project would require grading and vegetation removal for installation of the replacement well and associated facilities. Grading of the Project Site could 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 Project would have a total disturbance area of approximately 0.3 acre and would not be subject to coverage under the State Water Board Construction General Permit. Stormwater drainage in the area primarily consists of overland flow over the ground and roadway surfaces that concentrate in man-made drainage elements, such as the detention basin on-site. Surfaces would be covered in dirt and gravel once construction is complete to ensure there is no long-term erosion. Because the Project would comply with current regulations to limit erosion-related water quality impacts during and after construction, there would be a less than significant impact.

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?	☐	☐	☒	☐

Less than Significant Impact.

A *seiche* is a standing wave in an enclosed or partially enclosed body of water. Seiches and seiche-related phenomena have been observed on lakes, reservoirs, swimming pools, bays, and seas. The key requirement for formation of a seiche is that the body of water be at least partially bounded, allowing the formation of the standing wave. The community of Morongo Valley is not subject to seiche because no significant water bodies exist within the community.

A *tsunami* is a great sea wave, commonly referred to as a *tidal wave*, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. The City is not subject to tsunamis because it is located inland. The Project Site is located more than 70 miles inland from the Pacific Ocean coastline and is therefore not subject to a tsunami.

According to FEMA, the Project Site is located within the Special Flood Hazard Area, Zone A, which is subject to 100-year floods. Wells located in flood zones must be equipped with sanitary seals that meet flood-resistant specifications. These seals are designed to prevent surface water and floodwater from entering the well casing, protecting the groundwater from contamination. Proper sealing typically includes a watertight well cap that extends above the expected flood level and grouting of the annular space around the well casing. These specifications would ensure that the Project would have a minimal prospect of releasing pollutants due to inundation. Impacts would be less than significant.

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?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project consists of construction of a replacement well. The new well, Yeager-4, is planned to replace the Yeager-2 well, which has reached the end of its service life. According to an assessment conducted by GSWC in April 2023, Yeager-2 has reached the end of its useful service life due to a 50 percent decline in specific capacity and pumping water levels following a rehabilitation event in 2015. The Proposed Project would address the damaged Yeager-2 well and maintain a reliable supply of water for the GSWC Morongo del Sur System. The overall capacity required by the Morongo del Sur System would be the same as existing conditions and the Proposed Project would be in a fully developed urban area with a stable customer base; therefore, there would be no capacity increase. The purpose of the Project is to repair a damaged water well and not to increase overall capacity or meet an increase in demand. Therefore, the Proposed Project 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.

The Project Site is located within the Morongo Valley Groundwater Basin, which is designated as a very low priority basin by the California Department of Water Resources (DWR 2025). Under the Sustainable Groundwater Management Act (SGMA), very low priority basins are not required to form a Groundwater Sustainability Agency (GSA) or develop a Groundwater Sustainability Plan (GSP). As such, the Morongo Valley Groundwater Basin is not currently managed under a GSA and does not have an adopted GSP or Alternative Plan in place. Therefore, the Proposed Project would not conflict with an adopted GSP or SGMA-related groundwater management objectives, as none are applicable to this basin.

Water quality standards for all ground and surface waters overseen by the CRRWQCB are documented in the 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 CRRWQCB 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. Surfaces would be constructed and maintained to ensure there is no long-term erosion. Because the Project would comply with current regulations to limit erosion-related water quality impacts during and after construction, there would be a less than significant impact.

4.10.4 Best Management Practices

BMP HYD-1 To ensure compliance with the National Pollutant Discharge Elimination System Permit, two temporary settling tanks would be deployed on Parcel B to remove suspended solids, reduce turbidity, and decrease flow velocity prior to discharge. These tanks operate based on

gravitational sedimentation principles. The temporary discharge pipeline and settling infrastructure would be fully decommissioned and removed upon completion of construction activities.

BMP HYD-2 Sediment control practices shall be used to filter and trap sediment particles to prevent them from reaching receiving waters. Erosion control practices shall be used to protect soil surfaces at the discharge point of the temporary discharge pipeline. Such controls shall minimize the energy of discharges by managing flow velocities and volumes and shall be appropriately designed so that the discharge does not exceed the hydraulic capacity of the areas downstream of the discharge point.

4.11 Land Use and Planning

4.11.1 Environmental Setting

The Proposed Project is located at the existing GSWC Yeager Well site at 11083 Vale Drive and a southern-adjacent parcel (APNs 058326108 and 058326107) in the community of Morongo Valley, San Bernardino County. The Project Site is located approximately 0.15 mile southwest of highway 62, immediately east of Vale Drive, north of Mojave Drive, and west of East Drive (Figures 1 and 2).

The Project Site consists of two adjacent parcels totaling approximately 0.77 acre. The Project Site is surrounded by roadways, residential development to the west, a skatepark and playground to the south, undeveloped lots to the northeast, and Big Morongo Canyon Preserve to the east. The northern parcel, Parcel A, containing the Yeager-2, is developed with facilities associated with the existing well operation, ornamental vegetation, gravel road, chain link fencing, and existing man-made discharge basin. The southern parcel, Parcel B, proposed for Yeager-4 is composed of a mix of native and nonnative vegetation consisting of *Prosopis glandulosa - Prosopis velutina - Prosopis pubescens* Woodland Alliance and disturbed land. Parcel B contains compact sandy soils, with scattered debris throughout, and a dirt roadway across the site. The Project Site is located near the Big Morongo Canyon Preserve, approximately 0.03 miles to the east. The Project Site's land use is designated for low-density residential, and the zoning is Morongo Valley/Single Residential - 10,000 square feet Minimum (MV/RS-10M).

4.11.2 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?	☐	☐	☐	☒

No Impact.

The Proposed Project would not physically divide an established community because the Proposed Project involves the construction of a replacement well within existing GSWC property located at the edge of the community abutting a park and the Big Morongo Canyon Preserve. No part of the Proposed Project

would extend beyond the existing site boundaries or create a barrier to movement within the established communities. Therefore, 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?	☐	☐	☐	☒

No Impact.

According to the County of San Bernardino General Plan Land Use Map, the Project Site is currently zoned as Morongo Valley/Single Residential - 10,000 square feet Minimum (MV/RS-10M). The Project includes construction of a replacement well within GSWC property. The Proposed Project does not propose to change the General Plan land use designation or existing use of the Project Site; therefore, no conflicts with any applicable land use plan, policy, or regulation would occur.

4.11.3 Mitigation Measures

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

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the Project Area. The conservation, extraction, and processing of mineral resources is essential to meeting the needs of society.

The Surface Mining and Reclamation Act of 1975 (SMARA) states that cities and counties shall adopt ordinances "...that establish procedures for the review and approval of reclamation plans and financial assurances and the issuance of a permit to conduct surface mining operations..." (PRC Section 2774). The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (PRC Section 2712).

SMARA requires the State Geologist to classify land into Mineral Resource Zones (MRZs) according to the known or inferred mineral potential of that land. The process is based solely on geology, without regard to existing land use or land ownership. The primary goal of mineral land classification is to ensure that the mineral potential of land is recognized by local government decision makers and considered before land use decisions, which could preclude mining, are made. Areas subject to California mineral land

classification studies are divided into the following MRZ categories that reflect varying degrees of mineral potential:

- MRZ-1: Areas of no mineral resource significance
- MRZ-2: Areas of identified mineral resource significance
- MRZ-3: Areas of undetermined mineral resource significance
- MRZ-4: Areas of unknown mineral resource significance

At present, there are no mineral extraction activities on or near the Project Site. The nearest MRZ-3 zone is located approximately 2 miles northeast of the Project Site (County of San Bernardino 2019).

4.12.2 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?	☐	☐	☐	☒

No Impact.

According to the Countywide General Plan Draft Programmatic Environmental Impact Report (PEIR), no known mineral resources are located within the Project Area (County of San Bernardino 2019). Therefore, implementation of the Proposed Project would not result in the loss of any known mineral resources. 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?	☐	☐	☐	☒

No Impact.

According to the Countywide General Plan Draft PEIR, no locally important mineral resource recovery sites are located within the Project Area (County of San Bernardino 2019). Therefore, implementation of the Proposed Project would not result in the loss of any such resources or resource recovery sites. No impact would occur.

4.12.3 Mitigation Measures

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

4.13 Noise

4.13.1 Environmental Setting

4.13.1.1 Noise Fundamentals

Noise is generally defined as a 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 Level/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:

- **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.
- **L_{dn}** is a 24-hour average L_{eq} with a 10-A-weighted decibels (dBA) weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. 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}.
- **CNEL** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. and a 10-dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively.

Noise can be generated by a number of sources, including mobile sources (e.g., automobiles, trucks, and airplanes) and stationary sources (e.g., such as construction sites, machinery, and industrial operations).

Sound spreads or *propagates* uniformly outward in a spherical pattern, and the sound level decreases or *attenuates* at a rate of approximately 6 decibels (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, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). Soft surfaces, such as soft dirt or grass, can absorb sound; therefore, an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (FHWA 2011).

The way older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (Hanson et. al. 2006).

4.13.1.2 Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. 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). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in the level of at least 5.0 dBA is required before any noticeable change in community response would be expected. An increase of 5.0 dBA is typically considered substantial.
- A 10.0-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

4.13.1.3 Noise-Sensitive Land Uses

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 hospitals, historic sites, cemeteries, and certain 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.

Numerous single-family residences surround the Project Site, with the closest located directly adjacent to the western Project Site boundary, approximately 150 feet from the center of the Project Site.

4.13.1.4 Vibration Fundamentals

Ground vibration can be measured in several ways to quantify the amplitude of vibration produced. This can be through Peak Particle Velocity (PPV), or root mean square velocity. These velocity measurements measure the 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.

4.13.1.5 Existing Ambient Noise Environment

The portion of unincorporated San Bernardino County that encompasses the Project Site is impacted by various noise sources and is subject to typical suburban noise, such as noise generated by traffic, day-to-day outdoor activities, as well as noise generated from the various land uses (e.g., residential, commercial, institutional, and recreational). In close proximity to the Project Site is the Twentynine Palms Highway, which is likely a source of mobile vehicle noise. Additionally, to the south of the Project Site, there is a Community Center which has various recreational activities that likely generate sport activity noise.

The San Bernardino County's Development Code Section 83.01.080 has established noise thresholds for stationary noise sources that affect residential land uses. Specifically, from 10:00 p.m. – 7:00 a.m., stationary sources of noise may not exceed 45 dBA Leq at residential noise receptors, and from 7:00 a.m. – 10 p.m., stationary sources of noise may not exceed 55 dBA Leq at residential noise receptors.

The American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present" provides a table of approximate background sound levels in CNEL, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density. The ANSI standard estimation divides land uses into six distinct categories. Descriptions of these land use categories, along with the typical daytime and nighttime levels, are provided in Table 4.13-1. At times, one could reasonably expect the occurrence of periods that are both louder and quieter than the levels listed in the table. ANSI notes, "95% prediction interval [confidence interval] is on the order of ±10 dB." As previously stated, the majority of the area surrounding the Project Site consists of residential and community land uses. Thus, the Project vicinity would be considered ambient noise Category 3 or 4 and generally experiences noise levels of 55 dBA L_{dn} at a maximum. Furthermore, the Project Site may experience noise levels as low as 44 dBA.

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
1	Noisy Commercial & Industrial Areas and Very Noisy Residential Areas	Very heavy traffic conditions, such as in busy, downtown commercial areas; at intersections for mass transportation or other vehicles, including elevated trains, heavy motor trucks, and other heavy traffic; and at street corners where many motor buses and heavy trucks accelerate.	63,840	67 dBA	66 dBA	58 dBA
2	Moderate Commercial & Industrial Areas and Noisy Residential Areas	Heavy traffic areas with conditions similar to Category 1, but with somewhat less traffic; routes of relatively heavy or fast automobile traffic, but where heavy truck traffic is not extremely dense.	20,000	62 dBA	61 dBA	54 dBA
3	Quiet Commercial, Industrial Areas and Normal Urban & Noisy Suburban Residential Areas	Light traffic conditions where no mass-transportation vehicles and relatively few automobiles and trucks pass, and where these vehicles generally travel at moderate speeds; residential areas and commercial streets, and intersections, with little traffic, compose this category.	6,384	57 dBA	55 dBA	49 dBA

Table 4.13-1. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
4	Quiet Urban & Normal Suburban Residential Areas	These areas are similar to Category 3, but for this group, the background is either distant traffic or is unidentifiable; typically, the population density is one-third the density of Category 3.	2,000	52 dBA	50 dBA	44 dBA
5	Quiet Residential Areas	These areas are isolated, far from significant sources of sound, and may be situated in shielded areas, such as a small, wooded valley.	638	47 dBA	45 dBA	39 dBA
6	Very Quiet Sparse Suburban or rural Residential Areas	These areas are similar to Category 4 but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound.	200	42 dBA	40 dBA	34 dBA

Notes: ANSI = American National Standards Institute; L_{dn} = Average Daily Noise Level; L_{eq} = Average Hourly Noise Level

Source: ANSI 2013.

Ground-borne vibration levels associated with implementation-related activities for the Project were evaluated utilizing typical ground-borne vibration levels associated with construction equipment obtained from Caltrans and Federal Transit Administration (FTA) guidelines described below. Potential ground-borne vibration impacts related to structural damage and human annoyance were evaluated, considering the distance from earthwork activities to nearby land uses.

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

Less than Significant Impact with Mitigation Incorporated.

4.13.2.1 Construction Noise Impacts

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, 24-hour well drilling, 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., site preparation, grading, or well drilling). Noise generated by construction equipment, including excavators, material handlers, and well drilling equipment, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full-power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (e.g., dropping large pieces of equipment or the hydraulic movement of machinery lifts). Construction noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

As previously stated, numerous single-family residences surround the Project Site, with the closest located to the west of the Project Site approximately 150 feet from the center of the site. The County of San Bernardino Development Code Title 8, Division 3, Section 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 Development Code does not promulgate numeric thresholds pertaining to the noise associated with construction because construction noise is temporary, short term, intermittent in nature, and would cease on completion of the Proposed Project. However, portions of the Proposed Project's well construction/drilling activities would require nonstop drilling, which may extend for a continuous period of several days, including drilling outside the hours allowed under the ordinance. Project construction noise would not be exempt from noise standards after 7:00 p.m. and before 7:00 a.m. on weekdays and Saturdays or at any time on Sundays and federal holidays. The San Bernardino County's Development Code Section 83.01.080 has established noise thresholds for stationary noise sources that affect residential land uses. Specifically, from 10:00 p.m. – 7:00 a.m., stationary sources of noise may not exceed 45 dBA L_{eq} at residential noise receptors. The Proposed

Project would be required to adhere to this threshold, established by the San Bernardino Development Code, when construction activities occur anytime between 10:00 p.m. and 7:00 a.m.

Construction Noise Levels

In order to estimate the worst-case noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity as a result of Project construction, and in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, ECORP calculated predicted noise levels associated with the site preparation and grading phases utilizing the FHWA's Roadway Construction Noise Model version 1.1 (RCNM) (2006) and construction information assumptions based on the size of the site and the types of construction activities. The RCNM is a computer-based tool used to estimate noise levels produced during various construction activities and accounts for factors such as the distance from noise sensitive receptors, the time of day, and usage percentage. The model outputs are presented in Appendix F. The RCNM was used to analyze the effect that the Project's daytime construction noise (broken down into site preparation, grading, and daytime well construction phases) and well drilling outside the daytime construction hours would have on the nearby residences in the area surrounding the Project Site.

After modeling the construction noise and well drilling noise generated using the RCNM, the SoundPLAN 3D noise model, version 8.2, was used to calculate the propagation of such noise (Appendix F). The SoundPLAN 3D model is a separate model that predicts noise levels based on the location, noise level, and frequency spectra of the noise sources as well as the geometry and reflective properties of the local terrain, buildings and barriers. This 3D noise modeling was employed to calculate daytime construction and after hours well drilling noise since the 24-hour well drilling phase of construction is unique compared with typical construction activities. It would contain the most equipment and would generate the highest level of sound power at the source, compared to the site preparation and grading phases. A point source at the center of the well site (Parcel B) has been modeled in SoundPLAN to account for the proposed well drilling. Furthermore, construction noise mitigation identified in the Project Draft Site Evaluation (Wood Rodgers 2023) includes the required use of a 24-foot-high temporary noise barrier to reduce noise impacts at the noise-sensitive receptors closest to the Project Site. For a conservative estimate, the 24-foot-high temporary sound barrier was accounted for in the SoundPLAN modeling scenario of proposed well drilling with a Sound Transmission Class of 28. Project construction equipment noise levels during the daytime are 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) to estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity and evaluate the potential health-related effects (e.g., physical damage to the ear) from construction noise (see Table 4.13-2). NIOSH, a division of the U.S. Department of Health and Human Services, 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; the exposure time is halved for every 3-dBA increase. 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 existing and future planned sensitive receptors.

As previously described, ECORP calculated the anticipated short-term construction noise levels generated for Project Site preparation and grading equipment using the RCNM (Appendix F). Consistent with FTA recommendations for calculating construction noise, the construction noise was measured from the center of the Project Site (FTA 2018), which is approximately 150 feet from the nearest residential receptor to the west. Table 4.13-2 presents the anticipated short-term construction noise levels generated from Project construction equipment for the site preparation and grading phases.

Table 4.13-2 also presents the anticipated short-term construction noise levels generated from Project construction equipment for the well construction/drilling phase at several of the closest noise sensitive receptors during daytime construction. As previously mentioned, the SoundPLAN 3D noise model was used to calculate the propagation of construction noise associated with the well drilling phase, as this phase is unique compared with typical construction activities, would contain the most equipment and would generate the highest level of sound power at the source, compared to the site preparation and grading phases.

Table 4.13-2. Construction Average (dBA) Noise Levels – Daytime			
Construction Phase	**Estimated Exterior Construction Noise Level at Noise Sensitive Receptors (dBA)**	**Construction Noise Standard (dBA L_{eq})**	**Exceeds Standards?**
Site Preparation[1]	74.0	85	No
Grading[1]	75.0	85	No
Well Drilling[2]			
#1: Residence north of Project Site	42.5	85	No
#2: Residence northwest of Project Site	42.5	85	No
#3: Residence northwest of Project Site	45.1	85	No
#4: Residence west of Project Site	46.2	85	No
#5: Residence southwest of Project Site	45.7	85	No
#6: Residence south of Project Site	40.5	85	No

Notes: dBA = A-weighted decibels; FHWA = Federal Highway Administration; FTA = Federal Transit Administration; L_{eq} = Average Hourly Noise Level
The Site Preparation and Grading phases do not account for the noise-reducing 24-foot-high temporary noise barrier due to the use of mobile equipment during these phases. The Well Drilling Phase does account for this noise barrier. Consistent with FTA recommendations for calculating construction noise, the construction noise associated is measured from the center of the Project Site (FTA 2018), which is approximately 150 feet from the nearest residential receptor to the west.

Source: [1]Site Preparation and Grading Phase noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix F for Model Data Outputs.
[2]Well drilling Phase noise levels were calculated by ECORP Consulting, Inc. using the SoundPLAN 3D Model version 8.2. Refer to Appendix F for Model Data Outputs.

As shown in Table 4.13-2, no individual or cumulative piece of construction equipment would exceed the NIOSH threshold of 85 dBA L_{eq} at the nearby sensitive receptors during in the daytime; therefore, no health effects from these activities would occur.

Well-Drilling Noise Outside Construction Exempt Hours

In order to estimate the worst-case noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity as a result of Project construction outside construction exempt hours, predicted noise levels associated with proposed well drilling have been calculated with the SoundPLAN 3D model as described above. As previously described, Project construction noise would not be exempt from noise standards between the hours of 7:00 p.m. and 7:00 a.m. on Weekdays and Saturdays or at any time on Sundays and federal holidays. The San Bernardino County's Development Code Section 83.01.080 has established noise thresholds for stationary noise sources that affect residential land uses. Specifically, from 10:00 p.m. – 7:00 a.m. on weekdays and Saturdays, and all day on Sundays, stationary sources of noise may not exceed 45 dBA L_{eq} at residential noise receptors. A point source at the center of the Project Site has been modeled in SoundPLAN to account for the proposed well drilling. Furthermore, the 24-foot-high temporary sound barrier was accounted for in the SoundPLAN modeling scenario, with an approximate sound transmission class of 28. Table 4.13-3 presents the anticipated short-term construction noise levels

generated from Project construction equipment for the well construction/drilling phase at several of the closest noise sensitive receptors during nighttime construction.

Table 4.13-3. Unmitigated Construction Average (dBA) Noise Levels – Nighttime

Location	Well Construction Noise Levels (dBA L_{eq})	Nighttime Stationary Source Standard (dBA L_{eq})	Exceeds Nighttime Standard?
Well Drilling			
#1: Residence north of Project Site	42.5	45	No
#2: Residence northwest of Project Site	42.5	45	No
#3: Residence northwest of Project Site	45.1	45	Yes
#4: Residence west of Project Site	46.2	45	Yes
#5: Residence southwest of Project Site	45.7	45	Yes
#6: Residence south of Project Site	42.8	45	No

Notes: dBA = A-weighted decibels; FTA = Federal Transit Administration; L_{eq} = Average Hourly Noise Level
The Well Drilling Phase accounts for the noise-reducing 24-foot-high temporary noise barrier. Consistent with FTA recommendations for calculating construction noise, the construction noise was measured from the center of the Project Site (FTA 2018), which is approximately 150 feet from the nearest residential receptor to the west.

Source: Well drilling Phase noise levels were calculated by ECORP Consulting, Inc. using the SoundPLAN 3D Model version 8.2. Refer to Appendix F for Model Data Outputs.

The identified noise levels account for the reductions provided by the 24-foot-high sound wall and the topography of the Project Area and would range from 42.5 to 46.2 dBA at the nearest residences in the Project Area. As shown in Table 4.13-3, these noise levels would exceed the County's 45 dBA nighttime threshold for stationary sources outside exempt construction hours. Therefore, Mitigation Measure NOI-1 is required. Mitigation Measure NOI-1 would ensure that the well drill is the only piece of equipment operating outside the exempt construction hours by prohibiting the use of all other mechanical equipment. Normal well construction, operation of other equipment, and usual construction noises may resume during the noise exempt construction hours.

Table 4.13-4 presents the anticipated mitigated short-term construction noise levels generated from the operation of the well drill rig exclusively, outside the exempt construction hours, as experienced at several of the closest noise sensitive receptors. Additionally, a noise contour graphic has been prepared to provide a visual depiction of the predicted noise levels in the Project Area as a result of Project's nighttime drilling. Depictions of daytime and nighttime noise levels can be found in Figures 5 and 6 below and in Appendix F.



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 5. Daytime Noise Generation
2021-055.017 Yeager Well Replacement Project



ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 6. Nighttime Noise Generation
2021-055.017 Yeager Well Replacement Project

Table 4.13-4. Mitigated Construction Average (dBA) Noise Levels – Nighttime			
Location	**Well Construction Noise Levels (dBA L_{eq})**	**Nighttime Stationary Source Standard (dBA L_{eq})**	**Exceeds Nighttime Standard?**
Well Drilling			
#1: Residence north of Project Site	35.6	45	No
#2: Residence northwest of Project Site	36.0	45	No
#3: Residence northwest of Project Site	37.7	45	No
#4: Residence west of Project Site	39.3	45	No
#5: Residence southwest of Project Site	38.4	45	No
#6: Residence south of Project Site	34.4	45	No

Notes: dBA = A-weighted decibels; FTA = Federal Transit Administration; L_{eq} = Average Hourly Noise Level
The Well Drilling Phase accounts for the noise-reducing 24-foot-high temporary noise barrier. Consistent with FTA recommendations for calculating construction noise, the construction noise was measured from the center of the Project Site (FTA 2018), which is approximately 150 feet from the nearest residential receptor to the west.

Source: Well drilling Phase noise levels were calculated by ECORP Consulting, Inc. using the SoundPLAN 3D Model version 8.2. Refer to Appendix F for Model Data Outputs.

Project construction, consisting of grading, well drilling, and equipping, would begin in July 2025 and take approximately six months to complete. Drilling would occur for approximately 150 days. Some components of the well drilling would require 24-hour operations. As shown in the table above, with the implementation of Mitigation Measure NOI-1, the well drilling outside the construction noise exempt hours would remain below the County's 45 dBA nighttime threshold for residences subjected to noise associated with stationary source. Therefore, with the application of mitigation measure NOI-1, the Proposed Project would have a less than significant impact due to construction noise on the Project Site.

Operational Onsite Noise Impacts

The Project includes the replacement and construction of a new well at an existing well site. Once the Project is complete, the facility operation would not generate noise beyond current conditions. There would be no impact from operational noise.

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?	☐	☐	☒	☐

Less than Significant Impact.

Construction-Generated Vibration

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project would be primarily associated with short-term, construction-related activities. Project construction, consisting of grading, well drilling, and equipping, would begin in August 2025 and take approximately six months to complete. Drilling would occur for approximately 150 days. Some components of the well drilling would require 24-hour operations. Construction on the Project Site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude as the distance from the source increases.

Construction-related ground vibration is normally associated with impact equipment, such as pile drivers and jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Pile drivers would not be used during Project construction. Vibration decreases rapidly with distance and construction activities would occur throughout the Project Site and would not be concentrated at the point closest to sensitive receptors. Table 4.13-5 summarizes groundborne vibration levels associated with construction equipment.

Table 4.13-5. Representative Vibration Source Levels for Construction Equipment

Equipment Type	PPV at 25 Feet (inches per second)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Hoe Ram	0.089
Jackhammer	0.035
Small Bulldozer/Tractor	0.003
Vibratory Roller	0.210

Notes: PPV = Peak Particle Velocity

Source: California Department of Transportation 2020; Federal Transit Administration 2018

This impact discussion utilizes the County of San Bernardino's recommended standard of 0.2-inches-per-second PPV with respect to the prevention of structural damage for normal buildings, as contained in Development Code Title 8, Division 3, Section 83.01.090. This is also the level at which vibrations may

begin to annoy people in buildings. Consistent with FTA recommendations for calculating construction vibration, construction vibration was measured from the center of the Project Site (FTA 2018). The nearest structure to the construction site, which could be affected by groundborne vibrations, is a residence located approximately 150 feet from the Project Site's center.

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-5 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

$$[PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}]$$

Table 4.13-6 presents the expected Project related vibration levels at a distance of 150 feet.

Table 4.13-6. Construction Vibration Levels at 150 Feet

Receiver PPV Levels (inches/second)[1]					Peak Vibration	Threshold	Exceed Threshold
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jackhammer	Small Bulldozer	Vibratory Roller			
0.0061	0.0052	0.0024	0.0002	0.014	0.014	0.2	No

Notes: PPV = Peak Particle Velocity
[1]Based on the Vibration Source Levels of Construction Equipment included on Table 4.13-2 (Federal Transit Administration 2018).
Distance to the nearest structure is approximately 150 feet measured from the center of the Project Site.

As shown in Table 4.13-6, vibration resulting from construction activities would not exceed 0.2 PPV at the nearest structure; therefore, Project construction would not exceed the recommended threshold. A less than significant impact would occur.

Operational-Generated Vibration

Project operations would not include the use of any large-scale, stationary equipment that would result in excessive vibration levels; therefore, the Project would not result in ground-borne vibration impacts during operations. 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?	☐	☐	☐	☒

No Impact.

The Project Site is located approximately 10.6 miles southwest of the Yucca Valley Airport. According to Section 5.6, *Noise*, of the General Plan Environmental Impact Report (County of San Bernardino 2010), is located outside the 60 CNEL contour; therefore, construction of the Proposed Project would not affect airport operations nor expose people working on the Project Site to an increased exposure to aircraft noise. No impact would occur.

4.13.3 Mitigation Measures

NOI-1: Temporary Construction Noise Barriers

- All construction noise, except for well drilling, shall be 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. Only operation of the well drilling rig may occur outside the construction noise exempt hours. Other mechanical equipment shall be prohibited from operating outside construction noise exempt hours.
- Prior to the initiation of construction activities at the project site, the contractor shall install temporary noise barriers along the north, south, east, and west boundaries of the work area to mitigate noise generated during execution of the contract and to shield adjacent residential areas. Sound barriers will be a minimum of 24 feet in height, except for where they intersect power lines, and shall be rated Sound Transmission Class 28 or higher. Where sound barriers bisect existing overhead utilities, the structure will be a minimum of 16 feet in height. The proposed orientation of the temporary discharge line intersects the southern boundary of the proposed sound wall; however, it is the contractor's responsibility to route the orientation of the temporary discharge line while maintaining noise mitigation during construction and testing activities. The layout of noise attenuating structures is anticipated to consist of approximately 625 linear feet of 24-foot noise paneling, approximately 30 linear feet of 24-foot sound curtains, and approximately 40 linear feet of 16-foot noise paneling.
- Temporary construction noise barriers may be removed when the well drilling has been completed, and all construction occurs within noise exempt hours.

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 the extension of roads or other infrastructure)?	☐	☐	☐	☒

No Impact.

The Project does not propose to construct 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. The new well, Yeager-4, is planned to replace the Yeager-2 well, which has reached the end of its service life. According to an assessment conducted in April 2023, Yeager-2 has reached the end of its useful service life due to a 50 percent decline in specific capacity and pumping water levels following a rehabilitation event in 2015. The Project is intended to replace an existing well and would not increase the current capacity or supply of the existing public water system. 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?	☐	☐	☐	☒

No Impact.

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 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?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

No Impact.

4.15.2 Fire Services

The San Bernardino County Fire Department provides emergency mitigation and management for fire suppression, emergency medical services (paramedic and non-paramedic), ambulance services, hazardous materials response, arson investigation, technical rescue, winter rescue operations, hazard abatement, and response to terrorism and weapons of mass destruction. County Fire's services and programs include helicopter rescue, a dozer, fire abatement hand crews, an inmate hand crew specialized program, and an honor guard. County Fire also provides for the management of community safety services such as fire prevention, building construction plans and permits, household hazardous waste disposal, and local oversight and collection program for hazardous materials (County of San Bernardino 2019). The fire station closest to the Project Area is Morongo Valley Fire Station #461 located at 11207 Ocotillo Street, approximately 0.4 miles driving distance south of the Project Site.

The replacement of one drinking water well with another would not require additional fire services. Due to the nature of the Proposed Project, it is not anticipated to require additional fire services, necessitate the construction of new facilities or increase the demand on fire protection services, or result in extended response times for fire protection services. No impact would occur.

4.15.3 Police Services

The San Bernardino County Sheriff's Department provides police protection services for the Morongo Valley including the Project Site. The unincorporated portions of San Bernardino County near the Project Site are served by the Twentynine Palms Patrol Station, located at 63665 Twentynine Palms Highway

(SR-62), in the community of Joshua Tree. The Sheriff's Department reviews staffing needs on a yearly basis and adjusts service levels as needed to maintain an adequate level of public protection.

The replacement of one drinking water well with another 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.

4.15.4 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 Project Site is located 0.6-mile from Morongo Valley Elementary School.

The employment associated with the Proposed Project is minimal and the types of jobs provided can be filled from the existing employee base in the Project Area. Because the Proposed Project does not include the development of any residential land uses, no increase in residential population is anticipated. 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.

4.15.5 Parks and Other Public Facilities

No residential development is included as part of the Proposed Project; therefore, the Proposed Project would not create demand for parks, recreational facilities, library services, or other public facilities. It is assumed that GSWC maintenance staff would instead visit parks and public facilities near their homes during non-work hours. No impact related to public services would occur.

4.15.6 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?	☐	☐	☐	☒

No Impact.

As previously stated, the Proposed Project includes construction of a replacement drinking water well. No residential development is included as part of the Proposed Project; therefore, the Proposed Project would not create demand for parks and recreational facilities. It is assumed that GSWC staff maintaining the Proposed Project would instead visit parks near their homes during non-work hours. Therefore, no impacts related to this issue 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?	☐	☐	☐	☒

No Impact.

The Proposed Project does not include the development of any parks or recreational facilities. A temporary above-ground discharge pipe will be connected to the adjacent recreational area Big Morongo Preserve. This line would handle large water discharge volumes during the development phase that cannot be accommodated by the existing basin. GSWC has coverage for this discharge line under the Statewide General Permit for Discharges from Drinking Water Systems. This discharge pipe would be removed after construction. Therefore, no impacts related to recreational facilities 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 2007).

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?	☐	☐	☒	☐

Less than Significant Impact.

4.17.2.1 Morongo Valley Community Action Guide

The Community Action Guide (County of San Bernardino 2020b) 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."

4.17.2.2 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 relates to transportation facilities.

4.17.2.3 Construction Impacts

The Proposed Project would generate short-term construction related vehicle trips. Construction and worker traffic would utilize SR-62 and Vale Drive, a non-artery residential neighborhood street, to access the Project Site. 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 would be staged on-site just prior to commencing work. Solid waste generation and soil export during the six-month construction period would be minimal (approximately 85 cubic yards), and as such traffic generated from hauling materials off-site would be negligible.

Vale Drive is a local road with a speed limit of 25 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. Vale Drive, Mojave Drive, and East Drive 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 approximately six-month construction period. 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.

4.17.2.4 Operational Impacts

Operational impacts are anticipated to be similar to existing conditions because the Proposed Project would replace an existing use. The Proposed Project's operations would not require any new crew or staff; therefore, once the Proposed Project is implemented, there would be no increase in automobile trips to the area. While it is anticipated that the Proposed Project would require intermittent maintenance and testing, these trips would be minimal, requiring a negligible number 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)?	☐	☐	☐	☒

No Impact.

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

Section 15064.3 Subdivision (b) of the CEQA Guidelines specify that 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 includes construction of a replacement water well. Operation and maintenance of the Proposed Project would require one daily visit to the Project Site, as is the case under existing conditions. The Proposed Project would generate short-term construction-related vehicle trips, which would utilize SR-62 and Vale Drive to access the Project Site. Temporary construction activities associated with the Proposed Project would not physically impair access to other existing roadways within the Project vicinity. All construction staging areas would be onsite. Grading activities stage would be onsite just prior to commencing work. Access to local residences would be maintained at all times. Furthermore, solid waste generated during construction and operation would be minimal; therefore, traffic generated from the 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). No impact would occur.

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)?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project includes construction of a replacement water well. Access to the Project Site would be provided via driveways along Vale Drive. The Project entrances would be designed by a registered professional engineer and would not increase hazards due to a geometric design feature. Furthermore, the Proposed Project is located on an existing water utility site and does not propose incompatible uses. 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?	☐	☐	☒	☐

Less than Significant Impact.

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 Vale Drive to access the Project. However, the negligible increase in traffic during operation and maintenance of the Proposed Project would not result in inadequate access to SR-62.

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 onsite. Grading activities would be staged onsite just prior to commencing work. Access to local residences would be maintained at all times. A traffic control program shall be implemented to protect the entrance to the site and any equipment or vehicles on the adjustment roadways. At a minimum, this program shall consist of installing traffic cones around any equipment parked on roadways and at the site entrance. Construction area signs and traffic cones shall be furnished, installed, maintained, and removed when no longer required.

Upon completion of the Project, vehicular access to the Project Site would be provided via a driveway and access road located on Vale Drive, which now serves as access to the existing site. During the County's required review of the Proposed Project's applications, the site plan would be reviewed to ensure that adequate access to and from the site and around the proposed buildings is provided for emergency vehicles.

No change or interference with emergency response plans or related policies would occur as a result of the Project. The Project would not change the primary circulation system which could affect evacuation

plans. Therefore, the potential for impacts that could result in inadequate emergency access is 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 November 22, 2024, Project notification letters with invitations to consult on the Project along with Project location and site design maps and the cultural resources survey report were sent by email to representatives of the three tribes on the State Water Board's Assembly Bill (AB) 52 list for the Project area: the Yuhaaviatam of San Manuel Nation (YSMN, formerly the San Manuel Band of Mission Indians), Colorado River Indian Tribes, and Morongo Band of Mission Indians. No response has been received by the State Water Board from the Colorado River Indian Tribes and the Morongo Band of Mission Indians. Follow-up emails were sent on December 16, 2024, but no responses were received. The YSMN requested consultation in an email on December 16, 2024 and requested a testing plan and to monitor the testing. The State Water Board responded to the tribe via email on the same day. The requested draft test plan was sent and a consultation meeting was scheduled for January 3, 2025 between the YSMN and the State Water Resources Board.

The YSMN representative agreed with the State Water Board that an archaeological test was needed to confirm the negative survey, despite no known tribal cultural resources on the Project Site. The YSMN and State Water Board collaborated on the test plan and the tribe monitored the subsurface testing. The draft test report was sent to YSMN for review, and YSMN confirmed the subsurface testing report was satisfactory. The tribe agreed with the State Water Board's that the Project would not have significant impacts on tribal cultural resources (TCRs) and provided avoidance and minimization measure language for incorporation into this IS/MND. Those measures were incorporated into the Cultural Resources Section and this section of the IS/MND.

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	☐	☐	☒	☐
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.	☐	☐	☒	☐

Less than Significant.

No tribal cultural resources were identified during the cultural resources study, pedestrian survey, archaeological excavation, or consultation. Therefore, there would be a less than significant impact to tribal cultural resources from the Proposed Project. While impacts are expected to be less than significant, the implementation of standard best management practices as described below and in Section 4.5, will ensure any impacts to finds made during construction would be further reduced.

4.18.3 Best Management Practices

BMP TCR-1 Notification and Monitoring. The YSMN Cultural Resources Management Department shall be contacted, as detailed, in CUL-1, of any pre-contact and/or historic-era cultural resources discovered during project implementation, and shall be provided information regarding the nature of the find, so as to provide Tribal input regarding significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan (Plan) shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to be present that represents YSMN for the remainder of the project, should YSMN elect to place a monitor on-site.

BMP TCR-2 Document Review. Any and all archaeological/cultural documents created as part of this project (including but not limited to isolate records, site reports, survey reports, and testing reports) shall be supplied to the Project Proponent and Lead Agency for dissemination to YSMN. The Lead Agency and Project Proponent shall, in good faith, consult with YSMN 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?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project is the construction of a replacement well. Therefore, the Proposed Project would not require additional construction of new or expanded water facilities.

The Project would produce wastewater discharge during well drilling. To manage excess water volumes generated during the well development phase that exceed the capacity of the existing discharge pond, a temporary above-ground high-capacity discharge pipeline would be installed. the pipeline alignment would discharge excess water into an upland area within the Big Morongo Preserve. The site would not include bathrooms for workers. The only wastewater that would be produced by operation of the Proposed Project would occur during periodic operations and maintenance of the well site and is similar to current conditions. Therefore, maintenance of the replacement well would not result in the need for new or expanded wastewater treatment facilities.

The Project would not require or result in the relocation or construction of new or expanded storm water facilities. The Project Site is relatively flat. Stormwater drainage from the Project Site flows to the existing drainage detention basin on the Project Site and into nearby roadways. The Proposed Project would not involve substantial changes in topography and would maintain existing storm drainage patterns. Impacts would be less than significant.

The Proposed Project would not cause substantial unplanned population growth (Section 4.14), would not result in wasteful or inefficient use of energy (Section 4.6), and would not require or result in the construction of new electric power, natural gas, or telecommunication facilities or expansion of existing facilities. 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. 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) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project falls within the Morongo Valley Groundwater Basin, Basin 7-020. 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 2024). 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 consists of construction of a replacement well. The new well, Yeager-4, is planned to replace the Yeager-2 well, which has reached the end of its service life. The overall capacity required by the Morongo del Sur System would be the same as existing conditions and the Proposed Project would be in a fully developed urban area with a stable customer base; therefore, there would be no capacity increase. The purpose of the Project is to replace a damaged water well and not to increase overall capacity or meet an increase in demand. Therefore, the Proposed Project would not require the construction of new or expanded water facilities. 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
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?	☐	☐	☐	☒

No Impact.

No sewer service lines exist on the Project Site. As discussed previously in the response to 4.19 (a) above, the site would not include bathrooms for workers. The only wastewater that would be produced by the Proposed Project would occur during periodic maintenance of the well site, and this water would be discharged into the onsite basin. The Proposed Project would not result in the need for wastewater treatment facilities. No impact would occur.

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?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project involves the construction of a replacement well. Any solid waste debris resulting from the construction of the Proposed Project would be minimal and would be disposed of at a permitted landfill. 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?	☐	☐	☐	☒

No Impact.

Waste generated by the construction of 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 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

Public Resources Code 4201-4204 directs the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazard severity zones within State Responsibility Areas (SRA) based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones (FHSZ), classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone. The Project Site is located in a Moderate FHSZ (CAL FIRE 2025).

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?	☐	☐	☐	☒

No Impact.

The Project Site is not located on land designated as VHFHSZ (CAL FIRE 2025). 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
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?	☐	☐	☐	☒

No Impact.

As described above, the Proposed Project involves the construction of a replacement well and does not propose habitable structures. The Proposed Project is located on two relatively flat parcels consisting of a GSWC plant site and one undeveloped parcel. Due to the nature of the Proposed Project, the Project would not expose any occupants to pollutant concentrations from wildfire as a result of slope, prevailing winds, or other factors. Furthermore, the Project Site is not located on land designated as VHFHSZ (CALFIRE 2025). 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?	☐	☐	☐	☒

No Impact.

The Proposed Project includes construction of a replacement well and associated structures on an existing GSWC well site; therefore, the Proposed Project would not exacerbate fire risk resulting in temporary or ongoing impacts to the environment. Furthermore, the Project Site is not located on land designated as VHFHSZ (CALFIRE 2025). 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
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?	☐	☐	☐	☒

No Impact.

The Proposed Project is located on relatively flat 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. 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. Furthermore, the Project Site is not located on land designated as VHFHSZ (CALFIRE 2025). No impact would occur.

4.20.3 Mitigation Measures

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

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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The Proposed Project would not substantially degrade the quality of the environment or substantially reduce the habitat of a fish or wildlife species. With Mitigation Measures BIO-1 through BIO-4 (Section 4.4), 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 Measure GEO-1 (Section 4.7) the Proposed Project would not eliminate important examples of the major periods of California's prehistory. Therefore, the Proposed Project would have a less than significant impact with mitigation incorporated.

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)?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

As described in the impact analyses in this IS/MND, the impacts identified as potentially significant impacts of the Proposed Project would be reduced to a less than significant level by implementing the required mitigation. Accordingly, the Proposed Project would not otherwise combine with impacts of

related development to considerably add 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 Proposed 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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The checklist categories of Air Quality, Greenhouse Gas Emissions, Hazards and Hazardous Materials, Cultural, Geology and Soils, Hydrology and Water Quality, Population and Housing, Public Services, Recreation, Tribal Cultural, Noise, Transportation, and Wildfire evaluate the Proposed Project's impacts that may have adverse effects on human beings, either directly or indirectly. The environmental impacts to Paleontology, Noise, and Tribal Cultural Resources, both direct and indirect, that are attributable to the Proposed Project were identified and will be mitigated to a less than significant level. Therefore, the Proposed Project would not directly or indirectly cause substantial adverse effects on human beings because the 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 IS/MND.

THIS PAGE INTENTIONALLY LEFT BLANK

5.0 LIST OF PREPARERS

5.1 State Water Resources Control Board

Lead Agency

Wendy Pierce, Senior Environmental Scientist

Braden Elliott, Environmental Scientist

5.2 Golden State Water Company

Project Applicant

Omar Tinoco, Associate Water Quality Engineer

5.3 ECORP Consulting, Inc.

CEQA Documentation/Air Quality/Biological Resources/Cultural Resources/Greenhouse Gas/Noise

Lindsay Buck, Staff Environmental Planner/Project Manager

Anne Surdzial, AICP, QA/QC

Rosemary Worden, Staff Environmental Planner

Seth Myers, Senior Air Quality/Greenhouse Gas/Noise Analyst

Philip Wasz, Senior Biologist

Lisa Westwood, RPA, Vice President/Director of Cultural Resources

Sonia Sifuentes, RPA, Southern California Cultural Resources Manager

Niranjala Kottachchi, Ph.D., Senior Paleontologist, Principal Investigator

THIS PAGE INTENTIONALLY LEFT BLANK

6.0 BIBLIOGRAPHY

Baldwin, B. G., G. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, Eds. 2012. *The Jepson Manual; Vascular Plants of California*, Second Edition. Berkeley, CA, University of California Press.

Calflora. 2025. Information on California plants for education, research and conservation. [Web application]. Berkeley, California: *The Calflora Database* [a non-profit organization], http://www.calflora.org/.

California Air Pollution Control Officers Association. 2022. *California Emissions Estimator Model* (CalEEMod), version 2022.1

California Air Resources Board (CARB). 2024. EMFAC2021 *Web Database Emissions Inventory*. https://arb.ca.gov/emfac/?utm_medium=email&utm_source=govdelivery.

_____. 2022. *State and Federal Area Designation Maps*. http://www.arb.ca.gov/desig/adm/adm.htm.

California Department of Conservation (DOC). 2023. *California Important Farmland Finder*. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed November 20, 2023.

_____. 2025. *Earthquake Zones of Required Investigation*. Available at https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/#data_s=id%3AdataSource_4-191d87d69be-layer-20%3A815. Accessed May 5, 2025.

California Department of Fish and Wildlife (CDFW). 2025a. *RareFind California Department of Fish and Game Natural Diversity Database* (CNDDB). Sacramento. California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed March 2025.

_____. 2025b. *State and Federally Listed Endangered and Threatened Animals of California*. Sacramento. State of California, Natural Resources Agency, Department of Fish and Wildlife. Accessed March 2025.

_____. 2025c. *Special Animals List*. Sacramento. State of California, Natural Resources Agency, Department of Fish and Game. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406. Accessed March 2025.

_____. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline. Accessed March 2025.

California Department of Forestry and Fire Protection (CAL FIRE). 2025. *State of California Fire Hazard Severity Zone Viewer*. https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed May 6, 2025.

California Department of Toxic Substances Control (DTSC). 2023. *EnviroStor Database*. https://www.envirostor.dtsc.ca.gov/public/. Accessed November 27, 2023.

California Department of Transportation (Caltrans). 2023. *California Scenic Highway Mapping System. Officially Designated Scenic Highway.* https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed November 4, 2023.

_____. 2020. *Transportation and Construction-Induced Vibration Guidance Manual.*

_____. 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol.*

_____. 2002. *California Airport Land Use Planning Handbook.*

California Department of Water Resources (DWR). 2024. *SGMA Basin Prioritization Dashboard*. https://gis.water.ca.gov/app/bp-dashboard/final/. Accessed January 8, 2024.

California Environmental Protection Agency (CalEPA). 2024. *Cortese List Data Resources*. https://calepa.ca.gov/sitecleanup/corteselist/. Accessed January 21, 2024.

California Energy Commission (CEC). 2021. *California Electric Transmission Lines – Interactive Map*. https://cecgis-caenergy.opendata.arcgis.com/datasets/260b4513acdb4a3a8e4d64e69fc84fee_0/explore?filters=eyJrVl9Tb3J0IjpbMjg4Ljc3LDUwMF19&location=34.576503%2C-118.367944%2C9.74

_____. 2007. *Water-Related Energy Use in California. CEC-999-2007-008.* http://sustainround.com/library/sites/default/files/Krebs_2007-02.pdf.

California Native Plant Society (CNPS). 2025a. *Inventory of Rare and Endangered Plants of California* (online edition, v9.5). Sacramento. http://www.rareplants.cnps.org. Accessed March 2025.

_____. 2025b. *A Manual of California Vegetation*, Online Edition. http://www.cnps.org/cnps/vegetation/. Sacramento. Accessed March 2025.

Climate Registry. 2016. *General Reporting Protocol for the Voluntary Reporting Program*, version 2.1. January 2016.

Colorado River Regional Water Quality Control Board (CRRWQCB). 2023. *Water Quality Control Plan for the Colorado River Basin*. Effective March 30, 2023. https://www.waterboards.ca.gov/coloradoriver/water_issues/programs/basin_planning/docs/2023/rb7-basin-plan-e032023.pdf. Accessed January 4, 2024.

Department of Water Resources. 2025. Sustainable Groundwater Management Act. Available at https://water.ca.gov/programs/groundwater-management/sgma-groundwater-management. Accessed May 2025.

ECORP Consulting, Inc. 2025a. *Air Quality and Greenhouse Gas Emissions Modeling*. January 2024.

_____. 2025b. *Results of Biological Resources Surveys conducted at Morongo Del Sur, Yeager Well Replacement Project*. May 2025.

_____. 2025c. *Cultural Resources Inventory*. October 2024.

_____. 2025d. *Energy Consumption Modeling*. January 2024.

_____. 2025e. *Paleontological Records Search*. February 2024.

_____. 2025f. *Noise Impact Assessment Modeling*. May 2025.

Federal Emergency Management Agency (FEMA). 2024. *Flood Insurance Rate Map: 06071C8850H*. https://msc.fema.gov/portal/search?AddressQuery=morongo%20valley. Accessed January 11, 2024.

Federal Highway Administration (FHWA). 2011. *Effective Noise Control During Nighttime Construction*. http://ops.fhwa.dot.gov/wz/workshops/accessible/schexnayder_paper.htm.

_____. 2006. *Roadway Construction Noise Model Version 1.1*.

Federal Transit Administration (FTA). 2018. *Transit Noise and Vibration Impact Assessment*.

Hanson, Carl E., David A. Towers, and Lance D. Meister.2006. *Transit Noise and Vibration Impact Assessment (No. FTA-VA-90-1003-06)*.

https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf.

Mojave Desert Air Quality Management District (MDAQWMD). 2024. *Current Rule Book*. https://www.mdaqmd.ca.gov/rules/rule-book.

_____. 1995. Desert Planning Area Federal Particulate Matter (PM10) Attainment Plan.

Natural Resources Conservation Service (NRCS). 2025a. *Web Soil Survey*. http://websoilsurvey.nrcs.usda.gov.

_____. 2025b. *Soil Data Access Hydric Soils List*. https://www.nrcs.usda.gov/publications/query-by-ssa.html.

San Bernardino, County of. 2025a. *Chapter 82.11: Biotic Resources (BR) Overlay*. https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-168253.

_____. 2025b. *Countywide – All Biotic Resources Map*. http://www.sbcounty.gov/Uploads/lus/BioMaps/cnty_all_biotic_resources_map_final.pdf. Accessed September 2024.

_____. 2023. *County of San Bernardino Development Code*. https://codelibrary.amlegal.com/codes/sanbernardino/latest/sanberncty_ca/0-0-0-167976#JD_82.04.040. Accessed December 12, 2023.

_____. 2021. *Greenhouse Gas Reduction Plan Update*. Adopted September 21, 2021. https://www.sbcounty.gov/uploads/LUS/GreenhouseGas/GHG_2021/GHG%20Reduction%20Plan%20Update-Greenhouse%20Gas%20Reduction%20Plan%20Update%20-%20Adopted%209-21-2021.pdf. Accessed January 18, 2024.

_____. 2020a. *Countywide Policy Plan*. Adopted October 2020. https://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf. Accessed November 24, 2023.

_____. 2020b. *Morongo Valley Community Action Plan*. October 2020. https://countywideplan.com/wp-content/uploads/sites/68/2020/10/14_Morongo-Valley_CAG_2020.pdf?x23421. Accessed January 11, 2024.

_____. 2019. *San Bernardino Countywide Draft PEIR*. Published June 17, 2019. https://countywideplan.com/resources/document-download/. Accessed January 8, 2024.

_____. 2013. *Countywide Emergency Operations Plan*. February 26, 2013. https://orange-arrl.org/wp-content/uploads/2020/11/SanBernardino-Emergency-Operations-Plan.pdf. Accessed January 8, 2024.

_____. 2010. General Plan Environmental Impact Report. Available at https://countywideplan.com/resources/document-download/. Accessed December 12, 2023.

_____. 2007. *Morongo Valley Community Plan*. Adopted March 13, 2007. https://www.sbcounty.gov/Uploads/lus/CommunityPlans/MorongoCP.pdf. Accessed November 24, 2023.

Sawyer, J. O., T. Keeler-Wolf, and J. M. Evens. 2009. *A Manual of California Vegetation*, 2nd ed. California Native Plant Society, Sacramento, CA. Sibley, D. A. (2003).

State Water Resources Control Board (State Water Board). 2023. *Geotracker Database*. https://geotracker.waterboards.ca.gov/. Accessed November 27, 2023.

U.S. Fish and Wildlife Service (USFWS). 2025a. Information for Planning and Consultation (IPaC). https://ipac.ecosphere.fws.gov/location/index

_____. 2025b. *National Wetlands Inventory Mapper*. https://www.fws.gov/wetlands/data/mapper.html.

_____. 2025c. *Critical Habitat Mapper*. https://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77.

U.S. Geological Survey (USGS). 2025. *National Hydrology Dataset*. https://www.arcgis.com/home/webmap/viewer.html?url=https://hydro.nationalmap.gov/arcgis/rest/services/NHDPlus_HR/MapServer&source=sd.

_____. 2023. *U.S. Quaternary Faults Web App Viewer*. https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf88412fcf. Accessed December 12, 2023.

Wood Rodgers. 2023. *Golden State Water Company – Well Siting Evaluation for the Proposed Yeager-Vale Well No. 4*.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF APPENDICES

Appendix A – Air Quality/Greenhouse Gas Modeling Output

Appendix B – Biological Resources Assessment

Appendix C – Cultural Resources Assessment (*confidential; available by request)*

Appendix D – Energy Modeling Output

Appendix E – Paleontological Assessment

Appendix F – Noise Impact Modeling Output