DRAFT

Initial Study and Mitigated Negative Declaration

ROSETON PLANT NEW TANK AND BOOSTER STATION PROJECT

Artesia, California

Lead Agency:



State Water Resources Control Board

500 N Central Ave, Suite 500 Glendale, CA 91203

Prepared for:

Golden State Water Company 12035 Burke Street, Suite 1 Santa Fe Springs, CA 90670

Prepared by:



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March 2023

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DRAFT MITIGATED NEGATIVE DECLARATION

Lead Agency:	State Water Resources Control Board (SWRCB)
Project Proponent:	Golden State Water Company (GSWC)
Project Location:	The Proposed Project is located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue in the City of Artesia. The 0.6-acres Project Area is located on a previously graded flat parcel with two modern wells, a backwash tank, a disinfection building, a motor control center, and associated structures. Residential development surrounds the Project Area to the north, east, and south of Roseton Avenue with an elementary school to the west of the Project Area. The existing Project Site is bordered by a concrete block wall with five (5) ornamental trees along the western fence line, and three (3) palm trees at the site frontage along Roseton Avenue. The site's land use designation is Low-Density Residential and zoning Single Family Residential.

Project Description:

Golden State Water Company (GSWC) proposes to construct a 750,000-gallon above-ground potable water storage tank, a booster pump station, a stationary emergency generator, associated fencing, lighting, control panels, and appurtenances located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue in the City of Artesia (City). The water storage tank would measure approximately 70-feet in diameter and a maximum of 30feet high. Existing plant site piping would be modified as needed. The Proposed Project would also relocate the existing motor control center. No structure demolition is proposed. The facility would not require a crew or staff; therefore, no bathroom facilities would be built.

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: Pre-Construction Nesting Bird Survey: If construction, tree removal, or tree trimming activities are scheduled to occur during the bird breeding season (February 15 through August 31), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests will not be disturbed or destroyed on the Project Site. The survey shall be completed no more than three days prior to the initial ground disturbance or tree work, whichever is first. If an active nest is identified, the biologist shall establish an appropriately sized disturbance limit buffer around the nest using flagging or staking (typically 300-foot circumference for passerines and 500-foot circumference for raptors and listed species).

Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

Cultural Resources

- **CUL-1: Archaeological Discovery**. If archaeological materials or artifacts are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric or historic archaeologist, as appropriate shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius, as appropriate and using professional judgment. The following notifications shall apply, depending on the nature of the find:
 - If the professional archaeologist determines that the find is not a historical or unique archaeological resource, work may resume immediately, and no agency notifications are required.
 - If the professional archaeologist recommends that the find is an historical or unique archaeological resource, the professional archaeologist shall immediately notify the Lead Agency and the landowner. If the resource is a tribal cultural resource, the Lead Agency will notify the Tribe and the Tribe will be consulted regarding the eligibility determination for the resource. The Lead Agency shall determine, as defined in sections 15064.5(a) & (c) of the CEQA Guidelines if the site is a historical resource or a unique archaeological resource. If so, contingency funding and time allotment sufficient to allow for the implementation of avoidance measures or appropriate mitigation consisting of data recovery shall be available. Work may continue on other parts of the building site while the mitigation takes place.

Geology and Soils

- **GEO-1: Geotechnical Report Recommendations.** The Project Applicant shall implement the Conclusions and Recommendations as listed in the final site-specific geotechnical report (Geotechnical Exploration Report: Roseton Plant Reservoir and Booster Station, 17456 South Roseton Avenue Artesia, California, Leighton Consulting 2022) or most recent site-specific geotechnical evaluation.
- **GEO-2: 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.

Tribal Cultural Resources

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- The project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all the project locations site (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity.
- The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any newly discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Lead Agency within 30 days of the completion of construction.
- On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.
- Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes. Documentation of the discovery will be immediately reported to the Lead Agency and CUL-1 shall be implemented.

TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects

- If human remains are discovered during Project activities, the procedures specified in California Health and Safety Code section 7050.5 must be followed. Section 7050.5 of the Health and Safety Code requires that in the event of discovery or recognition of any human remains, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains and the Los Angeles County Coroner (Coroner) shall be called immediately. For purposes of this project, the initial stop work zone will be 200 feet away from possible Native American human remains. The Coroner shall determine, within two working days of notification of the discovery if the remains are within their jurisdiction or if the human remains are those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC pursuant to Public Resources Code 5097.98. Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended (MLD) from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The MLD shall complete their inspection and make recommendations or preferences for treatment 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.
- Native American human remains are defined in Public Resources 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods while mitigation is taking place, if the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination in writing.

TCR-3: Procedures for Burials and Funerary Remains

- If the Kizh Nation is determined to be the MLD by the NAHC, the Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, the burials may be removed and relocated.
- In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
- As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
- If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
- The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
- In the case where discovered human remains cannot be fully documented and removed on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours.
- Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags, provided by the Tribe. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.
- The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery of human remains is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation

pertaining to human remains and associated grave goods shall be approved in advance by the Tribe. If any data recovery is performed on human remains, once complete, a final confidential report shall be submitted to the Tribe, the NAHC, the Lead Agency, and the landowner. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

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LIST OF ACRONYMS AND ABBREVIATIONS

Acronym/Abbreviation	Description
AB	Assembly Bill
ABCUSD	ABC Unified School District
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
BMP	Best Management Practice
CAAQS	California Ambient Air Quality Standards
CAISO	California Independent System Operator
CalEEMod	California Emissions Estimator Model
CALFIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBMWD	Central Basin Municipal Water District
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CH₄	Methane
CHRIS	California Historical Resources Information System
CNEL	Community Noise Equivalent Level
СО	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CPUC	California Public Utilities Commission
CY	Cubic Yards
Districts	Sanitation Districts of Los Angeles County
DOC	California Department of Conservation
DPM	Diesel Particulate Matter
DTSC	Department of Toxic Substances Control
DWR	Department of Water Resources
ECORP	ECORP Consulting, Inc.
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	Greenhouse Gas
GSWC	Golden State Water Company
I	Interstate
IS/MND	Initial Study and Mitigated Negative Declaration
kV	Kilovolt
LACFD	Los Angeles County Fire Department
LRA	Local Responsibility Areas
LST	Localized Significance Threshold
MG	Million Gallons
MLD	Most Likely Descendent
MND	Mitigated Negative Declaration
MTCO ₂ e	Metric Tons of Carbon Dioxide Equivalent
MWD	Metropolitan Water District of Southern California

Acronym/Abbreviation	Description
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NHMLAC	Natural History Museum of Los Angeles County
NIOSH	National Institute for Occupational Safety and Health
NO _x	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
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
PPV	Peak Particle Velocity
PRC	Public Resource Code
ROG	Reactive Organic Gas
ROW	Right-of-Way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
LARWQCB	Los Angeles Regional Water Quality Control Board
SB	California Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SoCAB	South Coast Air Basin
SR	State Route
SRA	Source Receptor Area
SWRCB	State Water Resources Control Board
The Working Group	GHG CEQA Significance Threshold Working Group
TPD	Tons per Day
U.S.	United States of America
USACE	United States Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U. S. Fish & Wildlife Service
VHFHSZ	Very High Fire Hazard Severity Zone
VOC	Volatile Organic Compound
WRP	Water Reclamation Plant

1.0 BACKGROUND

1.1 Summary

Project Title:	Roseton Plant New Tank and Booster Station Project			
Lead Agency Name and Address:	State Water Resources Control Board 500 N Central Ave, Suite 500 Glendale, CA 91203			
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:	Phuong Nguyen Water Quality Engineer Central District Office: (562) 907-9200 x 404 Cell: (562) 325-2955			
Project Location:	The Proposed Project is located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue, Artesia, California.			
General Plan Designation:	Low-Density Residential			
Zoning:	Single Family Residential			

1.2 Introduction

The State Water Resources Control Board (SWRCB) 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 Roseton Plant New Tank and Booster Station Project (Project or Proposed Project). This document has been prepared to satisfy the California Environmental Quality Act (CEQA) (Public Resource Code [PRC], Section 21000 et seq.) and CEQA Guidelines (14 California Code of Regulations 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 IS/MND 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 [ND], Mitigated Negative Declaration [MND], or Environmental Impact Report [EIR]).

1.3 Surrounding Land Uses/Environmental Setting

Surrounding land uses include low-density residential, institutional (Luther Burbank Elementary School), and general commercial land uses. The Project Site is a generally flat, highly urbanized area bordered by Roseton Avenue to the west and single-family homes to the north, south, and east (Figures 1 and 2). No significant geological or topographical features are in the area.

The 0.6-acre Project Area is located on a previously graded flat parcel with two modern wells, a backwash tank, a disinfection building, a motor control center, and associated structures. The Project Site also contains five (5) crepe myrtle trees along the western fence line. The existing Project Area is bordered by a concrete-block wall, with three (3) palm trees located at the front of the Project site along Roseton Avenue. The Project Site's land use designation is Low-Density Residential, and the zoning is Single Family Residential.



Map Date: 1/25/2022 Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P. NRCan, Euri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thalland), NGCC, (c) QenShreeMute, contributions, and the GIS User Community



Figure 1. Project Vicinity 2021-055.008 Roseton Plant New Tank and Booster Station



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Figure 2. Project Location 2021-055.008 Roseton Plant New Tank and Booster Station

2.0 **PROJECT DESCRIPTION**

2.1 **Project Characteristics**

The Proposed Project is located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue, Artesia, California. The Project would construct a 750,000-gallon above-ground potable water storage tank, booster pump station, and associated fencing, lighting, control panels, and appurtenant structures. The water storage tank would measure approximately 70-feet in diameter and 30-feet high. Existing plant site piping would be modified, as needed. The Proposed Project would also relocate the existing motor control center. The Project includes removal of the five (5) ornamental trees along the western fence line. No structure demolition is proposed. The facility would not require a crew or staff; therefore, no bathroom facilities would be built.

The Project also proposes an emergency backup, diesel-powered generator. This generator would not be operational during the majority of days and would only operate during an emergency involving a power outage at the Roseton Plant site. The emergency backup generator is proposed to be equipped with a noise enclosure that fully wraps around the unit, as well as a noise suppressor on the exhaust.

Small amounts of debris, solid waste, and/or wastewater may be generated and would be transported to an approved solid waste disposal facility. Earthwork would be balanced and consist of approximately 1,684 cubic-yards (CY) of cut and 1,684 CY of fill. Grading is anticipated to be minimal for the construction of the water storage tank, booster station, emergency generator, and appurtenant structures. The maximum depth of excavation would be four feet.

2.2 Project Purpose and Need

The Proposed Project would be part of GSWC's Artesia System, which serves portions of the cities of Artesia, Cerritos, Hawaiian Gardens, Lakewood, Los Alamitos, and Long Beach. The system consists of seven wells with a total capacity of approximately 11.3 million gallons (MG) per day. Per the GSWC Master Plan, increased storage is required to address the existing storage deficiency, add redundancy to the existing system, and maintain an uninterrupted supply of water for the system. The overall capacity required by the Artesia System would be the same as existing conditions; therefore, no capacity increase is required because the Proposed Project would be located in a fully developed urban area with a stable customer base. The inclusion of the storage tank is needed to increase storage within the Artesia System and not to increase overall capacity or meet an increase in demand.

2.3 Project Timing

Project construction would begin in June 2023 and take approximately 12 months to complete.





Figure 3. Project Site Plan 2021-055.008 Roseton Plant New Tank and Booster Station

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 Domestic Water Supply Permit Amendment
- South Coast Air Quality Management District Permit to Construct
- South Coast Air Quality Management District Permit to Operate

2.5 Consultation With California Native American Tribe(s)

The following California Native American tribes traditionally and culturally affiliated with the Project Area have been notified of the Project: Gabrieleno Band of Mission Indians – Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, and the Quechan Tribe of the Fort Yuma Indian Reservation. The Gabrieleno Band of Mission Indians – Kizh Nation has requested consultation pursuant to Public Resources Code Section 21080.3.1. A summary of the consultation process, including the determination of significance of impacts to tribal cultural resources, is provided in Section 4.18 of this IS/MND.

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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.

4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

The City of Artesia is primarily built out and the City's aesthetic character is urbanized. The density of development is relatively low for all types of development in the City. Cities surrounding Artesia are also fully developed and urbanized, with similar land use patterns, density, and character. The predominant land uses within the city are residential, commercial, and industrial (City of Artesia 2010a).

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] 2019).

There are no officially designated state scenic highways or eligible state scenic highways that traverse the City of Artesia. No designated scenic vistas or other scenic resources are present within the City of Artesia (City of Artesia 2010a, 2010b).

4.1.1.1 Visual Character of the Project Site

The Proposed Project is located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue in the City of Artesia. The 0.6-acre Project Area is located on a previously graded, flat parcel with two modern wells, a backwash tank, a disinfection building, a motor control center, and associated structures. The site also contains five (5) ornamental trees along the western fence line. Residential development surrounds the Project Area to the north, east, and south, and Roseton Avenue and an elementary school bound the Project Area to the west. The existing Project Site is bordered by a concrete block wall on three sides, with an iron fence and three (3) street trees located at the site frontage along Roseton Avenue. The Project Site's land use designation is Low-Density Residential and zoning is Single Family Residential.

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?				\square

No Impact.

There are no officially designated scenic vistas within the City (City of Artesia 2010a, 2010b). The topography in the Project Area is relatively flat. Views in the vicinity of the Project Site are largely constrained by structures on adjacent parcels, California State Route 91 (SR-91), and Interstate 605 (I-605).

The Project Area is developed, with residential and commercial land uses and associated landscaping and roadways. Therefore, the Proposed Project would have no impact on scenic vistas.

Exce 2109	ept as provided in Public Resources Code Section 99, 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 City (City of Artesia 2010a, 2010b). The Project Site is not located within or along a City-designated scenic route. No historic structures are located near the Project Site. Thus, the Project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a 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?				

No Impact.

The Project Site and surrounding area are developed with urban land use, primarily comprising a mix of residential, institutional, and commercial land uses that define the visual character of the Project Site and surrounding area. The site itself is zoned for Single Family Residential; therefore, the proposed structures would be compatible with uses under City Municipal Code Chapter 2, Article 28, Section 9-2.2804(h) (City of Artesia 2021). The Proposed Project would not be located in a non-urbanized area. 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 lighting for the water storage tank, booster station, and appurtenant structures. The lighting would be directed downward. Additionally, the Proposed Project would limit reflective surface areas and the reflectivity of architectural materials used. Buildings would be constructed with materials that have minimal potential for generating glare; therefore, the Proposed Project is not expected to create unusual or isolated 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 is classified as Urban and Built-Up Land. The site is not located on or near Prime Farmland, nor is it under a Williamson Act Contract (DOC 2018). The Project Site is zoned Single Family Residential and is not zoned as forest land or agriculture (City of Artesia 2010a). The Project Site and surrounding properties are not currently used for agriculture or timberland production, as defined by the California Public Resources Code.

Wo	uld 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?				

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

No Impact.

According to the Artesia General Plan 2030 Land Use Diagram, no land in the City is zoned for agricultural uses (City of Artesia 2010a). The Project Site is currently developed as an existing well site, which is located within a developed, urbanized area. The California Mapping and Monitoring Program, Important Farmlands Map lists the Project Site as Urban and Built-Up Land. 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?				\boxtimes

No Impact.

The Project Site is not located on land zoned for agricultural use. According to the California Important Farmland Finder, the Project Site is mapped as Urban and Built-Up Land and not an agricultural preserve subject to a Williamson Act contract (DOC 2018). The Proposed Project would not conflict with zoning for agricultural use or a Williamson Act contract. No impact would occur.

Woi	uld 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 Roseton Plant site and is surrounded by low-density residential, institutional, and commercial land uses. The Project Site is not located on land designated for forest land, timberland, or timberland zoned Timberland Production. No impact would occur.

Wou	ıld 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 (DOC 2018). 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.

Woi	uld 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 are on land designated as Urban and Built-Up Land (DOC 2018). 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 City of Artesia, within Los Angeles County, California. The California Air Resource Board (CARB) divides California into regional air basins according to topographic features. The City of Artesia is in a region identified as the South Coast Air Basin (SoCAB) which occupies the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The SoCAB is on a coastal plain with connecting broad valleys and low hills. It is bounded by the Pacific Ocean on the southwest, with high mountains forming the remainder of the perimeter. The mountain ranges to the east affect the diffusion of pollutants by inhibiting the eastward transport of pollutants. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal Southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions.

Both the United States (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 (O₃), carbon monoxide (CO), Particulate Matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO₂), and lead. Areas that meet ambient air quality standards are classified as *attainment areas*, while areas that do not meet these standards are classified as *nonattainment areas*. The portion of Los Angeles County encompassing the Project Site is designated as a nonattainment area for O₃ and PM less than 2.5 microns in diameter (PM_{2.5}) under the federal standards, and a nonattainment area for O₃, PM less than 10 microns in diameter (PM₁₀), and PM_{2.5} under California standards (CARB 2019).

The local air quality regulating authority in the Los Angeles County portion of the SoCAB is the South Coast Air Quality Management District (SCAQMD). The SCAQMD'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 Los Angeles County portion of the SoCAB. The SCAQMD'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 SCAQMD rules and regulations in effect at the time of construction.

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

- Rule 201 & Rule 203 (Permit to Construct & Permit to Operate) Rule 201 requires a Permit to Construct prior to the installation of any equipment that may cause the issuance of air contaminants. Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.
- Rule 402 (Nuisance) This rule prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply

to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- Rule 403 (Fugitive Dust) This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and prohibits all forms of visible PM from crossing any property line. This rule is intended to reduce PM₁₀ emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM₁₀ suppression techniques include the following:
 - 1. Portions of a construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized.
 - 2. All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.
 - 3. All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
 - 4. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.
 - 5. Where vehicles leave a construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the workday to remove soil tracked onto the paved surface.
- Rule 1108 (Volatile Organic Compounds) This rule governs the sale, use, and manufacturing of asphalt and limits the volatile organic compound (VOC) content in asphalt used in the Basin. This rule also regulates the VOC content of asphalt used during construction. Therefore, all asphalt used during the construction of the site-specific development and infrastructure projects permitted by the Transit-Oriented Development Plans must comply with SCAQMD Rule 1108.
- Rule 1113 (Architectural Coatings) This rule limits the VOC content of architectural coatings used in the SCAQMD. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content exceeding the values specified in the Table of Standards 1 incorporated in the Rule.
- Rule 1143 (Paint Thinners and Solvents) This rule governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.
- Rule 1401 (New Source Review of Toxic Air Contaminants) This rule requires a new source review of any new, relocated, or modified permit units that emit toxic air contaminates (TACs). The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

Wo	uld 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?				\square

4.3.2 Air Quality (III) Environmental Checklist and Discussion

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 Los Angeles County portion of the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD 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 Los Angeles portion of the SoCAB is in nonattainment, the SCAQMD has adopted the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP establishes programs of rules and regulations directed at reducing air pollutant emissions and achieving the NAAQS and CAAQS. Pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including the Southern California Association of Governments' (SCAG's) latest Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. According to the SCAQMD, in order to determine consistency with SCAQMD's air quality planning, two main criteria must be addressed:

Criterion 1:

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis forecast whether a project would contribute to air quality violations or delay attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new air quality violations?

As shown in Tables 4.3-1 and 4.3-2 below, the Proposed Project would not result in emissions that would exceed the SCAQMD regional and localized thresholds during construction. The 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.

Thus, the Proposed Project would not result in an increase in the frequency or severity of existing air quality violations and would not have the potential to cause or affect a violation of the ambient air quality standards.

b) Would the project delay the timely attainment of air quality standards, or the interim emissions reductions specified in the AQMP?

As shown in Table 4.3-1 below, the Proposed Project would be below the SCAQMD regional thresholds for construction. Because the Project would result in less than significant regional emission impacts, it would not delay the timely attainment of air quality standards or AQMP emissions reductions.

Criterion 2:

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the SoCAB focuses on the attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether the Project exceeds the assumptions utilized in preparing the forecasts presented in its air quality planning documents. Determining whether a project exceeds the assumptions reflected in the 2016 AQMP involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the 2016 AQMP?

A project is consistent with regional air quality planning efforts in part if it is consistent with the population, housing, and employment assumptions that were used in the development of the SCAQMD air quality plans. Generally, three sources of data form the basis for the projections of air pollutant emissions in the City of Artesia. Specifically, SCAG's Growth Management Chapter of the Regional Comprehensive Plan provides regional population forecasts for the region and SCAG's latest RTP/SCS provides socioeconomic forecast projections of regional population growth. The City of Artesia's General Plan is referenced by SCAG in order to assist in forecasting future growth in the City.

The Project is proposing the installation of a 750,000-gallon above-ground potable water storage tank, booster pump station, and associated fencing, lighting, control panels, and appurtenances at the existing Roseton Well Site. Existing plant site piping would be modified, as needed, and no structure demolition is proposed. The Project does not involve the development of new housing or employment centers. As such, the Project would not be contributing to an increase in population, housing, or employment growth. Therefore, the Project would not conflict with the land use assumptions or exceed the population or job growth projections used by SCAQMD to develop the 2016 AQMP.

b) Would the project implement all feasible air quality mitigation measures?

In order to further reduce emissions, the Project would be required to comply with emission reduction measures promulgated by the SCAQMD, such as SCAQMD Rules 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge, from any source whatsoever, in such quantities of air contaminants or other

material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement the Best Available Control Measures for all sources, and all forms of visible PM are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM₁₀ emissions from any transportation, handling, or construction activity that has the potential to generate fugitive dust. As such, the Proposed Project meets this consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth by SCAQMD air quality planning efforts?

The determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts. SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. As shown in Tables 3.3-1 and 3.3-2 below, the Proposed Project would not exceed applicable SCAQMD thresholds of significance during implementation and would have no contribution to operational-related emissions beyond existing conditions. The Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The Project's long-term influence would also be consistent with the goals, objectives, and strategies of the SCAQMD's 2016 AQMP.

The Project would be consistent with the emission-reduction goals of the 2016 AQMP. There would be no impact, and no mitigation is required.

Wou	Id 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.

Construction Emissions

Regional Construction Emissions Analysis

Construction associated with the Proposed Project would generate short-term emissions of criteria air pollutants, including reactive organic gas (ROG), CO, NO_X, PM₁₀, and PM_{2.5}. 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 the use of asphalt or other oil-based substances during paving activities. Construction activities would be subject to SCAQMD Rule 403, which requires taking reasonable precautions to prevent the emissions of fugitive dust, such as using water or chemicals, where possible, for control of dust during the clearing of land and other construction activities.

Construction-generated emissions associated with the Proposed Project were calculated using the CARBapproved California Emissions Estimator Model (CalEEMod) computer program, which is designed to model emissions for land use development projects based on typical construction requirements (California Air Pollution Control Officers Association [CAPCOA] 2020). Appendix A provides more information regarding the construction assumptions, including construction equipment and duration provided by the Project proponent used in this analysis.

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 SCAQMD's thresholds of significance.

······································								
Construction Component	Pollutant (pounds per day)							
construction component	ROG	NO _x	со	SO ₂	PM ₁₀	PM _{2.5}		
Construction in Year One	2.61	21.87	23.21	0.06	1.28	0.83		
SCAQMD Regional Significance Threshold	75	100	550	150	150	55		
Exceed SCAQMD Regional Threshold?	Νο	No	Νο	No	No	No		

Table 4.3-1. Construction-Related Emissions (Regional Significance Analysis)

Source: CalEEMod version 2020.4.0. Refer to Appendix A for Model Data Outputs. (CAPCOA 2020)

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; watering exposed surfaces three times daily; and limiting speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emissions were taken from summer or winter, whichever is greater.

As shown in Table 4.3-1, emissions generated during Project construction would not exceed the SCAQMD's regional 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.

Localized Construction Emissions Analysis

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases, such as asthma, emphysema, and bronchitis. The nearest sensitive land uses to the Project Site include multiple single-family residences, with the closest being directly adjacent to the eastern and southern Project Site boundary.

In order to identify localized, air toxic-related impacts to sensitive receptors, the SCAQMD recommends addressing Localize Significance Thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects.

For this Project, the appropriate Source Receptor Area (SRA) for the localized significance thresholds is the South Coastal Los Angeles County, SRA 4. LSTs apply to CO, NO₂, PM₁₀, and PM_{2.5}. The SCAQMD produced lookup tables for projects that disturb 1, 2, and 5 acres. The Project Site's building and storage tank footprint are approximately 0.25-acres; however, the additional area will likely be used during the construction process. Thus, the LST threshold values for a 1-acre site were used.

LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. The single-family residences closest to the Project Site are located directly adjacent to the Project boundary. Notwithstanding, the SCAQMD Methodology explicitly states: "It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters." Therefore, this analysis used LSTs for receptors located at 25 meters. The SCAQMD's methodology clearly states that "...offsite mobile emissions from a project should not be included in the emissions compared to LSTs." Therefore, for purposes of the construction LST analysis, only emissions included in the CalEEMod *onsite* emissions outputs were considered. Table 4.3-2 presents the results of localized emissions. The LSTs reflect a maximum disturbance of the entire Project Site daily at 25 meters from sensitive receptors.

Table 4.3-2. Construction-Related Emissions (Localized Significance Analysis)							
A -41- 14-	Pollutant (pounds per day)						
Activity	NOx	СО	PM ₁₀	PM _{2.5}			
Project Demolition	6.49	6.75	0.27	0.24			
Project Site Preparation	5.98	6.92	0.26	0.22			
Project Grading	5.79	6.64	0.30	0.22			
Project Construction	12.88	13.44	0.49	0.45			
Project Painting	8.89	9.53	0.38	0.35			
Total	40.03	43.28	1.7	1.48			
SCAQMD Localized Significance Threshold (1.0 acre of disturbance)	57	585	4	3			
Exceed SCAQMD Localized Threshold?	No	No	No	No			

Source: CalEEMod version 2020.4.0. Refer to Appendix A for Model Data Outputs. (CAPCOA 2020)

Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SCAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include the following: sweeping/cleaning adjacent roadway access areas daily; washing equipment tires before leaving the construction site; watering exposed surfaces three times daily; and limiting speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emissions were taken from summer or winter, whichever is greater.

Table 4.3-2 shows that the emissions of these pollutants on the peak day(s) of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during construction activities. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. The Environmental Justice Program is divided into three categories, with the LST protocol promulgated under Category I: Further-Reduced Health Risk. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM₁₀, and PM_{2.5} demonstrates that the Project would not adversely impact Project vicinity receptors. This impact is less than significant.

Long-Term Operational Emissions

Regional Operational Emissions Analysis

The Project would result in an increase in water pumping above baseline levels; however, the increase in pumping would result in negligible criteria air pollutant emissions. In addition, the implementation of the Proposed Project would result in a minimal increase in automobile trips to the area from one Water System Operator. An assumption of one vehicle trip per day was used in the modeling for a conservative analysis. Although it is anticipated that the Proposed Project would require intermittent maintenance to be conducted by GSWC staff, maintenance would be minimal and would require a negligible amount of new vehicle trips on an annual basis.
The Project proposes an emergency backup diesel-powered generator. This generator would not be operational except during an emergency involving a power outage. In the case of an extended power outage (24 hours or more), the maximum daily criteria air pollutants that would be emitted from the emergency backup diesel-powered generator equate to 6.8 pounds per day of the O₃ precursor, reactive organic gas (ROG), 19 pounds per day of the O₃ precursor, nitrogen oxide (NOx), 24.7 pounds per day of CO, and one pound per day of each PM₁₀ and PM_{2.5} (CAPCOA 2020), as shown in Table 4.3-3.

Table 4.3-3. Operational-Related Emissions (Regional Significance Analysis)

Fraincing Course	Pollutant (pounds per day)						
Emission Source	ROG	NO _X	СО	SO ₂	PM ₁₀	PM _{2.5}	
Total	6.81	19.04	24.72	0.03	1.00	1.00	
SCAQMD Regional Significance Threshold	55	55	550	150	150	55	
Exceed SCAQMD Regional Threshold?	Νο	No	No	No	No	No	

Source: CalEEMod version 2020.4.0. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections are predominately based on CalEEMod model defaults for Los Angeles County. Operational trip generation rates were calculated from the ITE 10th Edition Trip Generation Manual. This total accounts for emissions from the emergency generator as well as 1 vehicle trip per day.

The significance criteria established by the applicable air quality management or air pollution control district (SCAQMD) may be relied upon to make CEQA impact determinations. As shown, Project emergency generator emissions would be below the SCAQMD daily thresholds of significance for operational activities of land use development projects. Long-term impacts would be less than significant.

Localized Operational Emissions Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operations of a project only if the project includes stationary sources or attracts substantial amounts of heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses; therefore, the operational LST protocol is not applied. While the Project is proposing an emergency backup diesel-powered generator, this generator would not be operational during the majority of days and would only operate during an emergency involving a power outage at the Roseton Plant site. It is noted that diesel-powered generators are regulated by SCAQMD Rule 1401, which provides for the review of TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Pursuant to SCAQMD Rule 1401, stationary sources having the potential to emit TACs, including diesel-powered generators, are required to obtain permits from the SCAQMD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAQMD rules and regulations. As part of the permitting process, the SCAQMD estimates the risk and hazard impacts of the particular source based on Health Risk Screening Assessments employing conservative

modeling parameters for the particular source. SCAQMD's permitting procedures require substantial control of emissions, and permits are not issued unless the district's assessment can show that risks are not significant. No impact would occur.

		Potentially	Less than Significant With	Less than	
Wou	ld the Project:	Significant Impact	Mitigation Incorporated	Significant Impact	No Impact
c)	Expose sensitive receptors to substantial pollutant concentrations?			\square	

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 use to the Project Site are residences located directly adjacent to the Project Site's southern and eastern boundaries. Additional sensitive receptors in the Project Vicinity include the Luther Burbank Elementary School buildings located southwest of the Project Site across Roseton Avenue.

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 PM₁₀ 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 the SoCAB which encompasses the Project Area is designated as a nonattainment area for federal O₃ and PM_{2.5} standards and state O₃, PM₁₀, and PM_{2.5} standards (CARB 2019). Thus, existing O₃, PM₁₀, and PM_{2.5} levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Tables 4.3-1 and 4.3-2, the Project would not exceed the SCAQMD regional or localized significance thresholds for emissions.

The health effects associated with O_3 are generally associated with reduced lung function. 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 SCAQMD thresholds, 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 SCAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM₁₀ and PM_{2.5}) contains microscopic solids or liquid droplets 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 TAC of concern. PM₁₀ 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 O₃ and NOx, the Project would not generate emissions of PM₁₀ or PM_{2.5} that would exceed the SCAQMD's thresholds. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants. Additionally, the Project would be required to comply with Rule 403 for fugitive dust control, as described above, which limits the amount of fugitive dust generated during construction. Accordingly, the Project's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants. For polect's PM₁₀ and PM_{2.5} emissions are not expected to cause any increase in related regional health effects for these pollutants.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no consistently operating stationary sources associated with the operations of the Project; nor would the Project attract mobile sources that spend long periods queuing and idling at the site. While the Project is proposing an emergency backup, diesel-powered generator, this generator would not be operational during the majority of days and would only operate during an emergency involving a power outage at the Roseton Plant site. As previously described, diesel-powered generators are regulated by SCAQMD Rule 1401, which provides for the review of TAC emissions in order to evaluate potential public exposure and health risk, to mitigate potentially significant health risks resulting from these exposures, and to provide net health risk benefits by improving the level of control when existing sources are modified or replaced. Pursuant to SCAQMD Rule 1401, stationary sources having the potential to emit TACs, including diesel-powered generators, are required to obtain permits from the SCAQMD. Permits may be granted to these operations provided they are operated in accordance with applicable SCAQMD rules and regulations. As part of the permitting process, the SCAQMD estimates the risk and hazard impacts of the particular source based on Health Risk Screening Assessments employing conservative modeling parameters for the particular source. SCAQMD's permitting procedures require substantial control of emissions, and permits are not issued unless the district's assessment can show that risks are not significant.

Furthermore, the Project does not propose any land uses that trigger the SCAQMD operational LST protocol. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative. The SCAQMD Environmental Justice Enhancement Initiative program seeks to ensure that everyone has the right to equal protection from air pollution. According to the SCAQMD LST methodology, LSTs would apply to the operations of a project only if the project includes stationary sources or attracts substantial amounts of heavy-duty trucks that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project does not include such uses; therefore, no impact would occur.

In summary, the Project would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. 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
 Result in other emissions (such as to odors) adversely affecting a su number of people? 	those leading			

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.

According to the SCAQMD, 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 identified by the SCAQMD 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 Mitigation Measures

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

4.4 **Biological Resources**

4.4.1 Environmental Setting

The City of Artesia is highly urbanized and landscaped with mostly non-native species. No rare or endangered plant or animal species have been identified within the City. There are no significant natural habitats in the City. Wildlife species present in the City are typical of any disturbed, highly urbanized setting and are not considered rare, endangered, or threatened (City of Artesia 2010a, 2010b).

The City is also devoid of wetland and riparian habitats. The City's most significant plant resources are imported trees and ornamental plants. Although these resources offer only limited biological value, they do contribute to the aesthetic and historical character of the City (City of Artesia 2010a, 2010b).

The Project Site is an existing GSWC well site, which is completely covered in gravel, structures, and paved driveways with the exception of a landscaped area adjacent to Roseton Avenue that has five (5) ornamental trees. Due to the urban setting of the Project Site, nearby construction activity, and the developed nature of the site, the Project Site contains little to no habitat for most wildlife species. No native habitat is observed on or adjacent to the Project Site. However, the ornamental trees on the Project Site and adjacent properties could provide habitat for nesting birds.

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 is currently developed as a GSWC well facility, which is located within a developed, urbanized area of the City of Artesia. No rare or endangered plant or animal species have been identified within the City. The City's most significant plant resources are its ornamental species. The extensive urban landscaping that occurs within the City provides habitat for small animals; however, the urbanized nature of the City provides a less-than-ideal habitat (City of Artesia 2010a, 2010b). Furthermore, the City of Artesia does not have any sensitive or special status species (City of Artesia 2010a, 2010b). No candidate,

sensitive, or special status species are identified in local plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or the U. S. Fish & Wildlife Service (USFWS). Therefore, no direct impacts to sensitive or special-status species would occur.

Ornamental trees on and near the Project Site could provide habitat for nesting birds. Nesting birds are protected under both the Migratory Bird Treaty Act and the California Fish and Game Code (Sections 3503, 3503.5, 3513, and 3800) and cannot be subjected to take (as defined in California Fish and Game Code) during the bird breeding season, which typically runs from February 15 through August 31. The Project would require five (5) onsite ornamental trees to be removed. If construction of the Proposed Project or tree removal occurs during the bird breeding season, ground-disturbing construction activities could directly affect native and nongame birds and their nests through direct removal of nests and indirectly through increased disturbances associated with the Project such as noise, ground vibrations, and human and vehicular activity. Impacts would be less than significant with the implementation of Mitigation Measure BIO-1.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
 b) Have a substan habitat or othe identified in loc regulations, or Fish and Wildlif 	tial adverse effect on any riparian r sensitive natural community al or regional plans, policies, by the California Department of e or U.S. Fish and Wildlife Service?				

No Impact.

There are no known natural communities identified in local or regional plans or policies or by the CDFW or USFWS on the Project Site or in the Project vicinity. The Proposed Project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.

No riparian habitat occurs on or in the immediate vicinity of the Project Site (USFWS 2022). Riparian habitats or other sensitive natural communities do not exist within the City of Artesia (City of Artesia 2010a, 2010b). No impact to sensitive habitats would occur.

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

No Impact.

The Project Site is currently developed as an existing GSWC site, which is located within a developed, urbanized area. No federally protected wetlands (e.g., emergent, forested/shrub, estuarine and marine deep water, estuarine and marine, freshwater pond, lake, or riverine) occur on or in the immediate vicinity of the Project Site (USFWS 2022). Therefore, the Proposed Project would not result in the direct removal, fill, or hydrological interruption of a federally protected wetland as defined by Section 404 of the Clean Water Act. No impact would occur.

Woι	ıld 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 is currently developed as an existing GSWC site, which is located within a developed, urbanized area. There is no native habitat on or adjacent to the Project Site and, due to the existing urban development surrounding the site, the Project Site does not function as a corridor for the movement of native or migratory animals. No native wildlife nurseries are located in the Project Area. Furthermore, I-605 (located 4,000 feet west of the site) and SR-91 (located 1,500 feet north of the site) function as artificial barriers to any potential wildlife movement. Thus, the Proposed Project would not interfere with wildlife movement or native wildlife nursery sites. No impact would occur.

Wou	ld 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 City of Artesia has not enacted specific policies regarding biological resources, including a treepreservation ordinance. No impacts are anticipated.

Woι	uld 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 would not conflict with any Habitat Conservation Plans, Natural Community Conservation Plans, or any other local, regional, or state Habitat Conservation Plan because no areas governed by such plans encompass or are near the Project Site. No impacts are anticipated.

4.4.3 Mitigation Measures

BIO-1: Pre-Construction Nesting Bird Survey: If construction, tree removal, or tree trimming activities are scheduled to occur during the bird breeding season (February 15 through August 31), a pre-construction nesting-bird survey shall be conducted by a qualified avian biologist to ensure that active bird nests will not be disturbed or destroyed on the Project Site. The survey shall be completed no more than three days prior to the initial ground disturbance or tree work, whichever is first. If an active nest is identified, the biologist shall establish an appropriately sized disturbance limit buffer around the nest using flagging or staking (typically 300-foot circumference for passerines and 500-foot circumference for raptors and listed species). Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

4.5 Cultural Resources

4.5.1 Environmental Setting

ECORP Consulting, Inc. (ECORP) prepared a Cultural Resources Report for the Proposed Project to determine if cultural resources were present in or adjacent to the Project Area and assess the sensitivity of the Project Area for undiscovered or buried archaeological resources (Appendix B). Appendix B provides the cultural context of the Project Area, including regional and local prehistory, ethnography, and regional and Project Area histories.

The cultural report includes a California Historical Resources Information System (CHRIS) records search from the South Central Coastal Information Center at California State University, Fullerton on December 10, 2021, with a 1-mile buffer around the Project Area. The purpose of the CHRIS records search is to identify previously recorded historical and archaeological resources in and near the Project Area. None were identified in or adjacent to the Project Area.

ECORP also requested a search of the Sacred Lands File from the Native American Heritage Commission (NAHC) on December 10, 2021, for an area consisting of two townships within the unsectioned Los Coyotes Land Grant, an area of 72 square-miles. On February 8, 2022, the NAHC responded saying the SLF search returned positive results and included a list of tribes to contact. The State Water Board sent AB 52 letters and invitations to consult on the Project to the Gabrieleno tribes who have requested project notifications. See Section 4.18 Tribal Cultural Resources for details.

Because the site is covered with gravel and highly disturbed, a formal pedestrian survey for cultural resources was not conducted.

4.5.2 Cultural Resources (V) Environmental Checklist and Discussion

Cultural resources are defined as pre-contact (prehistoric) and historic sites, buildings, objects, structures, and districts or any other physical evidence associated with human activity considered important to a culture, or a community for scientific, traditional, or religious reasons.

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?				

Less Than Significant with Mitigation Incorporated.

The cultural resources report did not identify historical resources in the Project Area. However, there is a potential to encounter and impact previously unknown resources that may meet the definition of historical and/or unique archaeological resources during construction. The types of cultural resources that may potentially be affected by construction activities include pre-colonial and historic-era archaeological sites, human remains (discussed under c), and tribal cultural resources. Implementation of mitigation

measures CUL-1 and TCR-1 (see Section 4.18.3 for TCR mitigation measures.) would reduce potential impacts to historical resources to less than significant levels.

Wou	ıld the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?		\boxtimes		

Less than Significant with Mitigation Incorporated.

The cultural report included a records search of the CHRIS from the South Central Coastal Information Center at California State University, Fullerton, and a sacred lands file search. The entirety of the site has been the subject of previous grading and development. The grading would have destroyed any surface and near-surface archaeological sites that may have been present prior to development. However, there may be a potential for buried pre-contact archaeological sites below the level of previous disturbance (depth unknown). Implementation of mitigation measures CUL-1 and TCR-1 would reduce impacts to less than significant.

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 with Mitigation Incorporated.

No human remains were identified on or near the proposed Project site and there was no evidence found while preparing the cultural resources assessment that the Project site has been used as a cemetery or burial ground in the past. Regardless, it is possible that human remains may be present at subsurface levels. State law prescribes protective measure that must be taken if 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 (MLD) from the deceased Native American. The MLD 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 law as outlined above and in mitigation measure TCR-2 and if the Kizh Nation are determined to be the MLDs, implementing mitigation Measure TCR-3, would ensure that

impacts to human remains would be mitigated to less than significant levels. See Section 4.18.3 for TCR mitigation measures.

4.5.3 Mitigation Measures

- **CUL-1: Archaeological Discovery**. If archaeological materials or artifacts are discovered during construction, all work must halt within a 100-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric or historic archaeologist, as appropriate shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius, as appropriate and using professional judgment. The following notifications shall apply, depending on the nature of the find:
 - If the professional archaeologist determines that the find is not a historical or unique archaeological resource, work may resume immediately, and no agency notifications are required.
 - If the professional archaeologist recommends that the find is an historical or unique archaeological resource, the professional archaeologist shall immediately notify the Lead Agency and the landowner. If the resource is a tribal cultural resource, the Lead Agency will notify the Tribe and the Tribe will be consulted regarding the eligibility determination for the resource. The Lead Agency shall determine, as defined in sections 15064.5(a) & (c) of the CEQA Guidelines if the site is a historical resource or a unique archaeological resource. If so, contingency funding and time allotment sufficient to allow for the implementation of avoidance measures or appropriate mitigation consisting of data recovery shall be available. Work may continue on other parts of the building site while the mitigation takes place.

Also see TCR-1, TCR-2, and TCR-3 in section 4.18.3.

4.6 Energy

4.6.1 Environmental Setting

Introduction

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, the electricity consumed during the one-time filling of the above-ground water tank, and the equipment fuel necessary for Project construction.

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] 2021a). Southern California Edison (SCE) provides electrical services to the City of Artesia 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 operating power plants in the State by county. Los Angeles County contains 205 active power plants, of which 41 are natural gas-fired, 130 are solar-powered, 10 are biomass-powered, one is wind-powered, one is coal-fired, one is a battery energy storage plant, and 21 are hydro-powered (CEC 2021a).

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 Los Angeles County from 2016 to 2020. As indicated, the demand has decreased since 2016.

Table 4.6-1. Non-Residential Electricity Consumption in Los Angeles County 2016-2020				
Year	Non-Residential Electricity Consumption (Kilowatt hours)			
2020	42,736,774,915			
2019	46,105,550,849			
2018	47,361,083,621			
2017	47,960,383,020			
2016	49,095,003,320			

Source: CEC 2021c

Fuel Consumption

Fuel consumption during Project construction is analyzed in this analysis as the primary source of energy use that is relative to the Proposed Project. Table 4.6-2 shows automotive fuel consumption in Los Angeles County from 2016 to 2020. On-road fuel consumption decreased between 2016 and 2020 for the County, with a significant drop from 2017 to 2020. However, off-road fuel use, which includes construction fuel consumption has continued to rise.

Table 4.6-2. Automotive Fuel Consumption in Los Angeles County 2017-2021				
Neer	Total Fuel Consu	umption (gallons)		
Year	On-road Fuel	Off-road Fuel		
2021	3,960,517,147	38,868,134		
2020	4,420,147,319	38,103,387		
2019	4,489,481,091	37,302,908		
2018	4,542,919,008	36,474,733		
2017	4,545,567,013	35,603,935		

Source: CARB 2021

4.6.2 Energy (VI) Environmental Checklist and Discussion

Wou	ld 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); electricity needed to pump water into the water storage tank and conveyance system (operation); and diesel backup generator use (operation). 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 purpose of this analysis, the amount of electricity needed for water pumping and conveyance is quantified and compared to that consumed by all non-residential land uses in Los Angeles County. Similarly, the amount of fuel necessary for Project construction is calculated and compared to all fuel consumed in Los Angeles County. Additionally, the amount of fuel necessary to power the emergency generator for 200 hours annually, in the case of a power outage, is calculated and compared to all fuel consumed in Los Angeles County.

The analysis of electricity usage is based on the CEC Recommended Revised Estimates for Water Embedded Energy. Specifically, the outdoor water use for water supply and conveyance in Southern California is used (CEC 2007). 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 C). Energy consumption associated with the Proposed Project is summarized in Table 4.6-3.

Table 4.6-3. Proposed Project Fuel Consumption						
Energy Type	Annual Energy Consumption	Percentage Increase Countywide				
Project Construction						
Project Construction Year One Fuel Consumption (Combined Phases 1, 2, and 3)	40,591 gallons	0.104 percent				
F	Project Operations					
Water Conveyance Electricity Consumption	12,159 kilowatt-hours	0.000 percent				
Diesel Backup Generator	1,325 gallons	0.000 percent				

Source: Climate Registry 2016. See Appendix C.

Notes: The Project increases in automotive fuel consumption are compared with the countywide fuel consumption in 2020, the most recent full year of data. The Project's increase in electricity consumption is compared with all the non-residential uses in the Los Angeles County in 2020, the latest data available. Annual fuel usage for the backup generator was calculated for 200 hours annually.

4.6.2.1 Project Construction

The Project is expected to have a relatively short construction duration of approximately 460 calendar days. Project construction would require fuel consumption 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 infrastructure would be temporary, lasting only as long as the Project construction. The energy required to perform these construction tasks is typically provided by diesel power equipment. Although there would be an uptick in energy used during construction, the net energy reduction gained from the proposed changes and operations plan would more than offset the short-term increase in energy consumption due to construction. As shown in Table 4.6-3, the Project's fuel consumption during construction is estimated to be 40,591 gallons. This would increase the combined annual countywide fuel use by 0.104 percent for all construction activities conducted for the Project. 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. As with most infrastructure improvement projects, the new equipment used for conveying water to the localities in which it services would be more energy efficient because technological advancements have increased dramatically since the installation of existing infrastructure.

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.

4.6.2.2 Project Operation

As shown in Table 4.6-3, the increase in electricity usage from the Proposed Project operations would constitute a negligible increase of less than one ten-thousandth of a percent in the typical annual electricity consumption attributable to non-residential uses in Los Angeles County. The proposed water storage tank would provide an additional 0.75 MG of new water storage capacity at the site. As a result, based on CEC-recommended estimates of electricity use for water pumping, the Project would utilize an estimated 12,159 kilowatt-hours of electricity per year for water supply and conveyance, if the 0.75 MG storage tank is filled once per year using the proposed booster station (CEC 2007). This would increase countywide energy consumption by less than one ten-thousandth of a percent. Due to the low increase in electricity consumption as a result of the Proposed Project and its objective to provide adequate clean water to the service area, the Proposed Project would not result in the inefficient, wasteful, or unnecessary consumption of energy. Additionally, in the event of a power outage, the backup diesel powered generator would consume approximately 1,325 gallons of fuel annually resulting in a negligible increase in the County's fuel consumption.

During operation, well pumps would lift water from aquifer and convey treated water into the welded storage tank. The well pumps would be scheduled to operate during periods of low energy demand to fill the tank (i.e. night time). The booster station pumps would draw water from the welded steel tank and booster water into the distribution system to meet system demands.

Under this proposed operations scenario, electric energy consumption would be reduced during peak electrical demand periods by eliminating or reducing energy required for lifting groundwater from the wells and conveying treated water into the welded steel tank. It should be noted that the diurnal curve for water demands closely matches the diurnal curve for electric power demands. This similarity means GSWC must produce water during periods of peak energy demand times. However, under the proposed operations scenario, only the booster station pumps would operate during periods of high energy consumption. This would result in a net reduction in energy used during peak electrical demand periods and would shift the time of use for producing groundwater to off-peak electric power demand periods.

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.

For these reasons, this impact would be less than significant.

Woι	ıld 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?			\boxtimes	

Less than Significant Impact.

The Project would comply with relevant energy conservation policies included in the City of Artesia General Plan Land Use Element (City of Artesia 2010a). A major overarching goal of this element is to ensure that development in the City aligns with the City's resource conservation goals. The most relevant policy is Policy Action CFI 1.1.3, which focuses on assessing the City's public utilities systems' ability to serve current and future residents, recommend improvements, and identify funding mechanisms and partners for implementation.

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

A site-specific geotechnical investigation was conducted for the Project by Leighton Consulting, Inc. in May 2022 (Leighton Consulting, Inc. 2022; Appendix D). The purpose of the geotechnical exploration was to evaluate subsurface conditions at the site and provide geotechnical recommendations to aid in design and construction of the Proposed Project.

4.7.1 Environmental Setting

The Project Site is located in the Peninsular Range Geomorphic Province of California. The Project lies on the Santa Ana Block (the westernmost of the three constituent blocks), which is separated from the Perris Block by the Chino Fault and the Elsinore Trough.

The site is in a generally flat and highly urbanized area surrounded by residential homes and commercial properties. The elevation of the site is slightly over 60 feet above mean sea level. The parcel slopes gently to the southeast. No significant geological or topographical features are in the area.

4.7.1.1 Regional Seismicity and Fault Zones

An *active fault*, according to the 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*.

As indicated in Exhibit 5.7-1 of the City General Plan, there are no mapped surface or subsurface faults that traverse the City, and the City is not listed within a state-designated Alquist-Priolo Earthquake Fault zone. Therefore, surface fault rupture is unlikely to occur in the City (City of Artesia 2010a).

4.7.1.2 Soils

The entire Project Site is underlain by soils designated as Urban land-Hueneme, drained-San Emigdio complex, 0 to 2 percent slopes (Natural Resources Conservation Service [NRCS] 2022).

4.7.1.3 Paleontological Resources

A paleontological assessment was prepared by Joe Stewart, Ph.D. (Appendix E) for the Proposed Project to determine if paleontological resources were present in or adjacent to the Project Area and assess the sensitivity of the Project Area for undiscovered paleontological resources. The evaluation included a paleontological records search through the Natural History Museum of Los Angeles County's (NHMLAC) Vertebrate Paleontology Section, a literature search, a review of geological maps, a review of the City of Artesia General Plan (2010a), and impact analyses. A pedestrian survey for paleontological resources was conducted on January 25, 2022.

Woι	Would the Project:		Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a)	a) Directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving:				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
	ii) Strong seismic ground shaking?				
	iii) Seismic-related ground failure, including liquefaction?		\square		
	iv) Landslides?				

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

No Impact.

 Although the Project proposes to construct a water storage tank and booster station building, these structures are not habitable and would not pose a substantial risk to people or other structures because the site is not within an Alquist-Priolo Earthquake Fault Zone and no known earthquake faults traverse the Project Site (City of Artesia 2010a). No impact would occur.

Less than Significant with Mitigation Incorporated.

ii) In general, Southern California is a seismically active region that contains many earthquake faults. Surface rupture from earthquakes is unlikely to occur in Artesia as no faults have been identified within the City boundaries. The nearest fault, the Norwalk fault, is located approximately two miles north of the City. Other faults within the area include the Newport-Inglewood, Whittier-Elsinore and Raymond faults (City of Artesia 2010a).

Moderate to strong ground shaking due to seismic activity is expected at the site during the life span of the project. The potentially liquefiable layer is 10 feet thick or less based on the current groundwater level of 26 to 29 feet deep. As such, Site Class D is being used for seismic design (Appendix D). The geotechnical report recommends the use of a thickened concrete mat foundation for the pump station and reservoir in order to minimize any potential impacts due to a seismic event. Special detailing or other design techniques would be required for structural connections to ensure the water storage tank and other structures can sufficiently withstand the estimated level of distortion without structural failure. Additionally, compliance with the structural standards contained in the California Building Code would minimize risks to the public from strong seismic ground shaking. Impacts would be less than significant with incorporation of mitigation measure GEO-1.

Less than Significant with Mitigation Incorporated.

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 Seismic Hazard Evaluations of the Los Alamitos 7.5-minute Quadrangle (March 1999) prepared by the California Department of Conservation, Division of Mines and Geology, the City of Artesia is in a liquefaction hazard zone (City of Artesia 2010a).

Based on the analysis presented in the geotechnical report, soil layers between 10 to 40 feet may be susceptible to liquefaction during a strong local earthquake. Liquefaction-induced settlement was estimated to be in the range of 3 to 5 inches based on the current groundwater level and 6 to 8 inches if the groundwater rises to its historically high level of 10 feet deep. The seismic differential settlement was estimated to be on the order of two inches over 30 feet. The potential for surface manifestation of liquefaction, such as sand boils and ground fissures, may exist at the site if the historically high groundwater level is considered, due to the relatively shallow and relatively thick layers of the liquefiable soils (Appendix D).

The geotechnical report recommends the foundation for the proposed structures should be underlain by compacted fill reinforced with geogrid to provide a uniform support and reduce potential for differential settlement and potential adverse impact from liquefaction. Additionally, the City 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. Impacts would be less than significant with incorporation of mitigation measure GEO-1.

No Impact.

iv) Artesia is located on relatively flat topography and is not located adjacent to steep slopes or areas that would otherwise be subject to mass movements, such as landslides, debris flow, or rockfall. Therefore, damage from landslides and other mass movements is not anticipated within the City. Moreover, the City of Artesia is not located within a mapped Earthquake-Induced Landslides Zone, according to the Seismic Hazard Zones Map Los Alamitos and Whittier Quadrangles (City of Artesia 2010a). 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.

Wou	ıld 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?			\boxtimes	

Less than Significant Impact.

Construction of the Proposed Project would require ground disturbing activities, such as grading, that have the potential to result in soil erosion or the loss of topsoil. Grading is anticipated to be minimal for the construction of the water storage tank, booster station, and appurtenant structures.

The Project would have a total disturbance area of approximately 0.6 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 roadside gutters along Roseton Avenue. Surfaces would be restored to existing conditions 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.

Wou	Id 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.

Due to the City's flat topography and lack of significant slopes, the City is not subject to lateral spreading conditions (City of Artesia 2010b). Furthermore, the potential for a landslide, lateral spreading, or collapse at the Project Site is very low. As discussed above, the City has implemented the California Building Code seismic safety standards for structural construction. The City 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.

Woι	ıld 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.

The Project Site is not located on expansive soil as defined in Table 18-1-B of the Uniform Building Code. According to the U.S. Department of Agriculture NRCS Web Soil Survey, soils at the sites consist of sandy loams and are not reported to be significantly expansive. Furthermore, the Proposed Project does not propose to build habitable structures. Therefore, no impacts are anticipated, and no mitigation is required.

Woι	uld 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. The Project Site is located in an urbanized area within the City of Artesia, which is served by an existing wastewater collection, conveyance, and treatment system operated by the City. 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? 		\boxtimes		

Less than Significant with Mitigation Incorporated.

The record search results from the NHMLAC stated that the museum does not have any localities within one mile of the Proposed Project Area. NHMLAC has records of a mammoth fossil in Lakewood (approximately six miles west of the Project), marine invertebrate fossils at Signal Hill (approximately 6.5 miles southeast of the Project), and camel fossils in Long Beach (approximately eight miles southeast of the Project) (Appendix E). The records search lists a locality in Artesia (NHMLAC 1285) where a horse fossil was found, described as, "locality at Manville St. and P.C. railroad crossing at a depth of about 10 ft." Manville Street, however, is in the City of Compton on the west side of the Los Angeles River; therefore, this is not an unequivocal record. The University of California Museum of Paleontology has a record of a horse at Signal Hill, approximately six miles southeast of the Project (Appendix E). As a result of the site visit, no indications of the subsurface geology or paleontological resources were observed.

According to Project plans, the ground disturbance would not exceed three to four feet in depth. Nevertheless, any substantial excavations during the construction of the Proposed Project may encounter unknown paleontological resources. If paleontological resources are encountered and destroyed, then a significant impact may occur. With the implementation of Mitigation Measure GEO-2, impacts would be less than significant.

4.7.3 Mitigation Measures

- **GEO-1:** The Project Applicant shall implement the Conclusions and Recommendations as listed in the final site-specific geotechnical report (Geotechnical Exploration Report: Roseton Plant Reservoir and Booster Station, 17456 South Roseton Avenue Artesia, California, Leighton Consulting 2022) or most recent site-specific geotechnical evaluation.
- **GEO-2: 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 (CO₂), methane (CH₄), nitrous oxide (N₂O), and chlorofluorocarbons (CFCs), 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 SCAQMD is the local air quality agency regulating the Los Angeles County portion of the SoCAB. To provide guidance to local lead agencies on determining the significance of GHG emissions in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold Working Group (The Working Group). The Working Group was formed to assist the SCAQMD's efforts to develop a GHG significance threshold and is composed of a wide variety of stakeholders, including the State Office of Planning and Research, CARB, the Attorney General's Office, a variety of city and county planning departments in the Basin, various utilities (e.g., sanitation and power companies throughout the Basin), industry groups, and environmental and professional organizations. The Working Group recommended the options of a numeric *bright-line* threshold of 3,000 metric tons of CO₂e (MTCO₂e) annually and an efficiency-based threshold of 3.0 MTCO₂e per service population (i.e., the people that congregate on the Project Site) per year in 2035. The numeric bright-line and efficiency-based thresholds were 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 with regard to determining whether GHG emissions from a Proposed Project are significant.

In *Center for Biological Diversity v. Department of Fish and Wildlife* (2015) 62 Cal. 4th 2014, 213, 221, 227, following its review of various potential GHG thresholds proposed in an academic study [Crockett, *Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World* (July 2011), 4 Golden Gate U. Envtl. L. J. 203], the California Supreme Court identified the use of numeric bright-line thresholds as a potential pathway for compliance with CEQA GHG requirements. The study found numeric bright-line thresholds designed to determine when small projects were so small as to not cause a cumulatively considerable impact on global climate change were consistent with CEQA. Specifically, Public Resources Code section 21003(f) provides it is a policy of the State that "[a]ll persons and public agencies involved in the environmental review process be responsible

for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." The Supreme Court-reviewed study noted, "[s]ubjecting the smallest projects to the full panoply of CEQA requirements, even though the public benefit would be minimal, would not be consistent with implementing the statute in the most efficient, expeditious manner. Nor would it be consistent with applying lead agencies' scarce resources toward mitigating actual significant climate change impacts." (Crockett, *Addressing the Significance of Greenhouse Gas Emissions: California's Search for Regulatory Certainty in an Uncertain World* July 2011, 4 Golden Gate U. Envtl. L. J. 203, 221, 227.)

The significance of the Project's GHG emissions is evaluated, consistent with CEQA Guidelines Section 15064.4(b)(2), by considering whether the Project complies with applicable plans, policies, regulations, and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The City may set a project-specific threshold based on the context of each particular project, including using The Working Group's expert recommendations. This standard is appropriate for this Project because it is in the same air quality basin that the experts analyzed. For the Proposed Project, the SCAQMD's 3,000 MTCO₂e per year threshold is used as the significance threshold, in addition to the gualitative thresholds of significance set forth below from Section VII of CEQA Guidelines Appendix G. The 3,000 MTCO₂e per year threshold represents a 90 percent capture rate (i.e., this threshold captures projects that represent approximately 90 percent of GHG emissions from new sources). The 3,000 MTCO₂e per year value is typically used in defining small projects within this air basin that are considered less than significant because it represents less than one percent of the future 2050 statewide GHG emissions target and the lead agency can provide a more efficient implementation of CEQA by focusing its scarce resources on the top 90 percent. This threshold is correlated to the 90 percent capture rate for industrial projects within the air basin. Land use projects above the 3,000 MTCO₂e per year level would fall within the percentage of largest projects that are worth mitigating without wasting scarce financial, governmental, physical, and social resources. (Crockett 2011). As noted in the academic study, the fact that small projects below a numeric bright-line threshold are not subject to CEQA-based mitigation does not mean those small projects do not help the State achieve its climate change goals because even small projects participate in or comply with non-CEQA-based GHG reduction programs, such as constructing development in accordance with statewide GHG-reducing energy efficiency building standards, called Cal Green or Title 24 energy-efficiency building standards (Crockett 2011).

4.8.2	Greenhouse Gas	Emissions (VIII)	Environmental	Checklist and	Discussion
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Wou	ld 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.

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, 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 MTCO ₂ e per Year				
Construction Year One Project Total	412			
Significance Threshold	3,000			
Exceed Significance Threshold?	Νο			

Source: CalEEMod version 2020.4.0. Refer to Appendix F for Model Data Outputs. (CAPCOA 2020)

As shown in Table 4.8-1, Project construction would result in the generation of approximately 412 MTCO₂e during year one. This is less than the 3,000 MTCO₂e per year significance threshold. Once construction is complete, the generation of these GHG emissions would cease.

Operational GHG Emissions

The GSWC is proposing the installation of a new water storage tank and booster pump station. The Project would result in an increase in water pumping above baseline levels; however, this increase would result in negligible GHG emissions. Additionally, Project operations accounts for a conservative estimate of one vehicle trip per day. The Project includes an emergency backup, diesel-powered generator. This generator would not be operational except during a power outage at the Roseton Plant site. Assuming a year of several extended power outages in which a proposed 60-horsepower emergency backup diesel-powered generator was to be used for up to 200 hours, 13 metric tons of CO₂e would be emitted

annually, which is below the SCAQMD significance threshold of 3,000 metric tons of CO₂e annually. Therefore, a less than significant impact would occur. No mitigation is required.

Wou	ıld 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 City of Artesia has not adopted a Climate Action Plan at the time of this analysis. However, California promulgates several mandates and goals to reduce statewide GHG emissions, including the goal to reduce statewide GHG emissions to 40 percent below 1990 levels by the year 2030 (California Senate Bill [SB] 32) and 80 percent below 1990 levels by the year 2050 (Executive Order S-3-05). The Proposed Project is subject to compliance with SB 32. As discussed previously, the GHG emissions generated by the Proposed Project would not surpass GHG significance thresholds, which were prepared with the purpose of complying with these requirements.

Additionally, Project-generated GHG emissions would not surpass the significance threshold of 3,000 MTCO₂e established by the SCAQMD. The 3,000 MTCO₂e threshold was prepared with the purpose of complying with statewide GHG-reduction efforts. Additionally, once the implementation of the Project is complete, it would not be a source of operational GHG emissions. 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, us or disposal of hazardous materials?	se,		\boxtimes	

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. 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. Additionally, the implementation of BMPs stipulating proper storage of hazardous materials would be implemented during construction. Construction impacts would be less than significant.

During operation, the Proposed Project may require small quantities of hazardous materials, such as lubricants and paint, for maintenance of the booster station and tank. Construction contractors would be required to 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 USEPA, DTSC, and RWQCB. 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.

Wou	ıld 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. 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 off-site and straw wattles and silt filter bags to prevent offsite runoff onto public roadways or drainage outlets. The transport, use, and storage of these products would comply with all federal, state, and local laws regulating the management and use of hazardous materials. Impacts would be less than significant.

Wou	Id 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?				

Less than Significant Impact.

The Project Site is located within 0.25-miles of Luther Burbank Elementary School; however, 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. Impacts would be less than significant.

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

CalEPA's Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated on the Project Site or the adjacent properties and businesses (CalEPA 2020). 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 2022).

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 (SWRCB 2022).

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.

Woι	ıld 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.

The City of Artesia is not located within a land use plan area or within two miles of a public airport or public use airport. The nearest airports are Fullerton Municipal Airport (approximately six miles east of the Project Site), and Long Beach Airport (approximately five miles southwest 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?			\boxtimes	

Less than Significant Impact.

The City of Artesia prepared the Artesia Emergency Operations Plan, which outlines emergency response actions in the event of a large-scale disaster. The General Plan Community Safety Sub-Element is intended to reduce the potential risk of death, injuries, property damage, and the economic and social dislocation resulting from hazards, such as fires, floods, earthquakes, landslides, and other hazards. It serves as a guide for the City and the general public in understanding the hazards facing the City and how to reduce the impacts of those hazards.

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 via two driveways located on Roseton Avenue that currently serve as access to the existing site. During the course of the City'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 impair the implementation of or physically interfere with an adopted emergency response or evacuation plan is less than significant.

Woι	ıld 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 City of Artesia is fully urbanized, with no natural open space or fire-prone vegetation. The surrounding cities of Cerritos and Norwalk are also entirely urbanized; therefore, wildland fire hazards within the Project Area are minimal. No direct impacts from wildland fire are anticipated.

4.9.2 Mitigation Measures

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

4.10 Hydrology and Water Quality

4.10.1.1 Regional Hydrology

The City of Artesia contains no natural, permanent water features. The City is not in a flood zone, according to the Federal Emergency Management Agency (FEMA) (City of Artesia 2010a). However, Artesia is located within the dam inundation areas of the Whittier Narrows Dam. The Whittier Narrows Dam is located in Los Angeles County on the San Gabriel and Rio Hondo Rivers in the City of Pico Rivera, approximately 10 miles north of the City. The dam is owned by the Los Angeles District of the U.S. Army Corps of Engineers and is normally empty, except during or immediately after periods of significant runoff (City of Artesia 2010a). The City is under the jurisdiction of the Los Angeles Regional Water Quality Control Board (LARWQCB).

4.10.1.2 Site Hydrology and On-Site Drainage

The site is vacant and relatively flat, with elevations ranging from approximately 17 to 19 feet above mean sea level. Stormwater runoff from the Project Site flows to existing stormwater conveyance systems in Roseton Avenue.

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

Wou	Id 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 LARWQCB, 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 LARWQCB are documented in the Los Angeles Regional Water Quality Control Basin Plan (Basin Plan). Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory program of the LARWQCB 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, 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 water storage tank, booster station, and appurtenant structures.

The Project would have a total disturbance area of approximately 0.6 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 roadside gutters along Roseton Avenue. Surfaces would be restored to existing conditions 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.

Woι	ıld 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.

Beginning in the 1940s, the San Gabriel Valley experienced rapid urbanization and increased water demand. The rapid urbanization coupled with some extended droughts caused the Basin to become overdrafted and the entities that relied upon the Basin for their water supplies initiated litigation to resolve the overdraft condition. The San Gabriel Valley Groundwater Basin was adjudicated in January 1973 pursuant to the case Upper San Gabriel Valley Municipal Water District vs. City of Alhambra, et al (Superior Court, County of Los Angeles, Case No. 924128). The Judgment defined the water rights of 190 original parties to the legal action, created a new governing body – the Main San Gabriel Basin Watermaster, and described a program for management of the water in the Basin. There have been numerous amendments to the original Judgment with the latest Amendment issued on June 21, 2012 (GSWC 2021).

The adjudication does not cover the entire San Gabriel Valley Groundwater Basin area as it excludes a small portion of the Basin commonly referred to as "the Narrows." Moreover, the adjudication includes broader areas beyond the defined groundwater basin that impact the natural and artificial recharge of the groundwater basin. Importantly, although portions of the Basin lie outside the Adjudication boundary, the Sustainable Groundwater Management Act (SGMA) allows adjudicated areas to continue with existing management practices. As such, the GSWC South San Gabriel service area has no further management actions associated with SGMA for the Basin (GSWC 2021).

The Proposed Project consists of a new water storage tank, booster station, and appurtenant structures. The Proposed Project would address the existing storage deficiency, add redundancy to the existing system, and maintain a reliable supply of water for the GSWC Artesia System. The overall capacity required by the Artesia System would be the same as existing conditions and the Proposed Project would be located in a fully developed urban area with a stable customer base; therefore, there will be no capacity increase. The inclusion of the storage tank is to increase storage within the water system 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.

Wοι	ld the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c)	Substantially alter of the site or area alteration of the through the addi manner that wou	r the existing drainage pattern a, including through the course of a stream or river or tion of impervious surfaces, in a ld:				
	i) result in subs off-site;	tantial erosion or siltation on- or			\square	
	ii) substantially surface runof result in flood	increase the rate or amount of f in a manner which would ding on- or offsite;				
	iii) create or con would exceed planned storn provide subs polluted rund	tribute runoff water which I the capacity of existing or mwater drainage systems or tantial additional sources of off; or				
	iv) impede or re	direct flood flows?				\square

Less than Significant Impact or No Impact.

i-iv) The site is relatively flat with elevations ranging from approximately 17 to 18 feet above mean sea level. Drainage from the Project Site flows to existing stormwater conveyance systems in Roseton Avenue. No jurisdictional features, hydric soils, or wetlands are located on the Project site. Furthermore, the site is not located in a flood hazard zone (FEMA 2022). 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 of the site for installation of the storage tank, booster station, 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 0.6 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 roadside gutters along Roseton Avenue. Surfaces would be restored to existing conditions 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?				\square

No 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 City of Artesia is not subject to seiche because no significant water bodies exist within the city limits (City of Artesia 2010a).

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 approximately nine miles inland from the Pacific Ocean coastline and is therefore not subject to a tsunami.

Furthermore, the site is located in Zone X, outside of the 100- or 500-year floodplain (FEMA 2022). No impact would occur.

Would the Project:		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			\boxtimes	

Less than Significant Impact.

The Proposed Project consists of a water storage tank, booster station, and auxiliary structure construction and operation. The Proposed Project would address the existing storage deficiency, add redundancy to the existing system, and maintain an uninterrupted supply of water for the GSWC Artesia System. The Proposed Project would not require any additional water facilities beyond those proposed. The overall capacity required by the Artesia System would be the same as existing conditions and the Proposed Project would be located in a fully developed urban area with a stable customer base; therefore, there will be no capacity increase. The inclusion of the storage tank is to increase storage within the water system and not to increase overall capacity or to meet an increase in demand. Water quality standards for all ground and surface waters overseen by the LARWQCB 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 LARWQCB 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 restored to existing conditions 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. As such, the Proposed Project would not obstruct the implementation of a water quality control plan or groundwater management plan. Impacts would be less than significant.

4.10.3 Mitigation Measures

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

4.11 Land Use and Planning

4.11.1 Environmental Setting

The Proposed Project is located within the existing GSWC Roseton Plant site at 17456 Roseton Avenue in the City of Artesia. The land use of the site will not change. It will still be used as a water utility. The 0.6-acre Project Area is located on a previously graded, flat parcel with two modern wells, a backwash tank, a disinfection building, a motor control center, and associated structures. The site also contains five (5) ornamental trees. Residential development surrounds the Project Area to the north, east, and south, and Roseton Avenue and an elementary school bound the Project Area to the west. The existing Project Site is bordered by a concrete block wall, with three trees located at the site frontage along Roseton Avenue.

The site's land use designation is Low-Density Residential, and zoning is Single Family Residential. The site is bordered by Roseton Avenue to the east and single-family homes to the north, east, and west. Beyond that, land uses surrounding the site include low-density residential, institutional (Luther Burbank Elementary School), and general commercial land uses (City of Artesia 2010a).

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

		Potentially	Less than Significant with	Less than	
Would the Project:		Significant	Mitigation	Significant	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 booster station and water storage tank on an existing GSWC well site. Implementation of the Proposed Project would address the existing storage deficiency, add redundancy to the existing system, and maintain a reliable supply of water. 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 City of Artesia General Plan Land Use Map, the Project Site is currently zoned as Single Family Residential (City of Artesia 2010a). The Project proposes to construct a water storage tank and booster station on an existing, developed well site. 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 Mineral Resources (XII) Environmental Checklist and Discussion

Woι	uld 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 City of Artesia General Plan, no known mineral resources are located within the City (City of Artesia 2010a). Therefore, implementation of the Proposed Project would not result in the loss of any known mineral resources. No impact would occur.

Wou	ıld 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 City of Artesia General Plan, no locally important mineral resource recovery sites are located within the City (City of Artesia 2010a). Therefore, implementation of the Proposed Project would not result in the loss of any such resources or resource recovery sites. No impact would occur.

4.12.2 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 levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- Equivalent Noise Level (Leq) is the average acoustic energy content of noise for a stated period of time. Thus, the Leq 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 thenight.
- Day-Night Average (Ldn) is a 24-hour average Leq with 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 nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour Leq would result in a measurement of 66.4 dBA Ldn.
- Community Noise Equivalent Level (CNEL) is a 24-hour average Leq 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 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-tointerior 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 (HMMH 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 semicommercial 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 eastern and southern Project Site boundaries.

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 City is impacted by various noise sources and is subject to typical urban noise, such as noise generated by traffic, heavy machinery, and day-to-day outdoor activities, as well as noise generated from the various land uses (e.g., residential, commercial, institutional, and recreational) throughout the City that generates stationary source noise. Mobile sources of noise, especially cars and trucks, are the most common and continuous source of noise in the City. The major noise source in the vicinity of the Project Site is roadway noise traffic from Artesia Boulevard, located approximately 200 feet from the northern Project Site boundary. According to the City's General Plan Environmental Impact Report Traffic and Circulation Element, Artesia Boulevard is classified as a Primary Highway (Major). A Primary Highway serves as the highest type of facility carrying local traffic within communities with an emphasis on through-traffic carrying capability that serves as principal access routes to shopping areas, places of employment, community centers, recreational areas, and other places of assembly.

Per the City's General Plan Environmental Impact Report Traffic and Circulation Element, Primary Highway roadway capacity is projected at 30,000 average daily trips. According to the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108), which calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions, the Project Site, as a result of roadway traffic on Artesia Boulevard, has an ambient noise level of 64.2 dBA CNEL at 240 feet from the centerline. Vehicular noise varies with the amount, speed, and type of traffic. Slower traffic produces less noise than fast-moving traffic. Trucks typically generate more noise than cars. Infrequent or intermittent noise also is associated with vehicles and includes sirens, vehicle alarms, slamming of doors, garbage, and construction vehicle activity, and honking of horns. These noises add to urban noise and are regulated by a variety of agencies.

4.13.2 Methods of Analysis

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, predicted noise levels were calculated utilizing the FHWA's Roadway Construction Model (2006) and construction information provided by the Project applicant, such as the specific type of construction equipment and the duration of specific construction activities.

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 the Caltrans guidelines set forth above. Potential ground-borne vibration impacts related to structural damage and human annoyance were evaluated, considering the distance from earthwork activities to nearby land uses.

Wo	uld 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?				

4.13.3 Noise (XIII) Environmental Checklist and Discussion

Less than Significant Impact.

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 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, excavating, paving). Noise generated by construction equipment, including excavators, material handlers, and portable generators, 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 directly adjacent to the eastern and southern Project Site boundaries. The City's noise regulations are included in Title 5, Chapter 2, of the City Municipal Code. Specifically, Section 5-2.06, *Prohibited Noises—Specific Violations*, prohibits construction between the hours of 7:00 p.m. and 7:00 a.m. on weekdays and Saturdays or at any time on Sundays or federal holidays. The City does not promulgate a numeric threshold pertaining to the noise associated with construction. This is because construction noise is temporary, short-term, intermittent in nature, and would cease on completion of the Project. Additionally, construction would occur at multiple locations throughout the Project Site and would not be concentrated at any one point. Therefore, noise generated during construction activities, if conducted within the permitted hours, would not violate City noise standards.

Construction equipment noise levels were calculated using the Roadway Noise Construction Model for the construction process and compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by 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. 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.

The anticipated short-term construction noise levels generated for Project construction equipment were calculated using the Roadway Noise Construction Model for the demolition, site preparation, grading, building construction, and painting phases. Consistent with Federal Transit Administration (FTA) recommendations for calculating construction noise, the construction noise was measured from the center of the Project Site (FTA 2018), which is approximately 67 feet from the nearest residential receptor. Table 4.13-1 presents the anticipated short-term construction noise levels generated from Project construction equipment.

Table 4.13-1. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and Construction Equipment				
Equipment Type and No. of Units	Estimated Exterior Construction Noise Level at Noise Sensitive Receptors (dBA)	Construction Noise Standard (dBA L _{eq)}	Exceeds Standards?	
	Demolition			
Utility Flat Bed 1 Ton Truck (1)	67.7	85	No	
Skid Steer Loader (1)	72.6	85	No	
Tractor/Loader/Backhoe (1)	77.5	85	No	
Combined Demolition Equipment	79.0	85	No	
	Site Preparation	-		
Utility Flat Bed 1 Ton Truck (1)	67.7	85	No	
Skid Steer Loader (1)	72.6	85	No	
Tractor/Loader/Backhoe (1)	77.5	85	No	
Combined Site Preparation Equipment	79.0	85	No	
	Grading			
Utility Flat Bed 1 Ton Truck (1)	67.7	85	No	
Skid Steer Loader (1)	72.6	85	No	
Tractor/Loader/Backhoe (1)	77.5	85	No	
Combined Grading Equipment	79.0	85	No	
	Construction			
Concrete/Industrial Saws (1)	80.0	85	No	
Crane (1)	70.0	85	No	
Welding Utility 1 Ton Truck (2)	67.5 (each)	85	No	

Construction Equipment						
Equipment Type and No. of Units	Estimated Exterior Construction Noise Level at Noise Sensitive Receptors (dBA)	Construction Noise Standard (dBA L _{eq)}	Exceeds Standards?			
Rough Terrain Forklifts (1)	76.9	85	Νο			
Skid Steer Loaders (1)	72.6	85	No			
Tractors/Loaders/Backhoes (1)	77.5	85	No			
Combined Construction Equipment	83.9	85	No			
	Painting					
Concrete/Industrial Saws (1)	80.0	85	No			
Rough Terrain Forklifts (1)	76.9	85	No			
Skid Steer Loaders (1)	72.6	85	Νο			
Tractors/Loaders/Backhoes (1)	77.5	85	No			
Combined Painting Equipment	83.5	85	No			

 Table 4.13-1. Onsite Construction Average (dBA) Noise Levels by Receptor Distance and

 Construction Equipment

Source: Construction noise levels were calculated by ECORP Consulting, Inc. using the FHWA Roadway Noise Construction Model (FHWA 2008). Refer to Appendix G for Model Data Outputs.

Note: Construction equipment and quantity used during construction provided by the Project applicant.

As shown in Table 4.13-1, no individual or cumulative piece of construction equipment would exceed the NIOSH threshold of 85 dBA L_{eq} at the nearby sensitive receptors during construction activities; therefore, no health effects from construction noise would occur. Construction noise was modeled on a worst-case basis and it is very unlikely that all pieces of construction equipment would be operating at the same time or at the point closest to residences for the various phases of Project construction. A less than significant impact would occur as a result of construction noise on the Project Site.

Construction Traffic Noise Impacts

Project construction would result in additional traffic on adjacent roadways during the time period that construction occurs. According to the CalEEMod model, which is used to predict air pollutant emissions associated with Project construction and contains default usage parameters for typical construction projects, the maximum number of construction workers traveling to and from the Project Site on a single day would be 8 worker trips and 421 haul truck trips, for a total of 429 daily trips. The worker trips would largely occur within two distinct segments of the day, the morning and afternoon, whereas the haul trips would occur intermittently throughout the workday. According to the Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (Caltrans 2013), doubling of traffic on a roadway is required to result in an increase of 3 dB; outside of laboratory settings, a 3-dBA change is considered a *just-perceivable difference*. Access to the Project Site is expected to occur from Artesia Boulevard onto Roseton Avenue. According to the City's General Plan Environmental Impact Report Traffic and Circulation Element, Artesia Boulevard accommodates approximately 30,000 average daily trips. Therefore, Project vicinity roadways and, therefore, would not generate a perceptible noise level increase. A less than significant impact would occur as a result of construction traffic noise.

Operational Onsite Noise Impacts

The Project proposes to install a new 750,000-gallon above-ground potable water storage tank, booster pump station, and associated fencing, lighting, control panels, and appurtenances at the existing Roseton Well site. The main noise-producing piece of equipment associated with the Proposed Project would be the booster pump and emergency backup generator. The booster station would be enclosed in a building. The emergency backup generator is proposed to be equipped with a noise enclosure that fully wraps around the unit, as well as a noise suppressor on the exhaust. The generator would not be operational during the majority of days and would only operate during an emergency involving a power outage at the Roseton Plant site.

ECORP staff regularly conducts noise measurements within various land uses, at specific noise-generating events, and at individual pieces of noise-generating equipment in order to develop a wide sampling of potential noise levels. Previous noise measurements conducted by ECORP staff within five feet of an operating booster pump identified a sound power level of 52.8 dBA L_{eq}. The Project's proposed booster pump station would be positioned approximately 100 feet from the nearest residential receptor. Sound propagates uniformly outward in a spherical pattern, and the sound level attenuates at a rate of approximately 6 dBA for each doubling of distance from a stationary or point source. Therefore, accounting for this attenuation rate for each doubling of distance from the proposed booster pump to the nearest residential receptor, the proposed booster pump, when operating, would generate a noise level of 26.8 dBA at the nearest residential receptor. This falls below the daytime (7:00 a.m. to 10:00 p.m.) and nighttime (10:00 p.m. to 7:00 a.m.) interior and exterior City noise standards, as presented in Title 5, Chapter 2 of the City's Municipal Code.

The Project also proposes an emergency backup, diesel-powered generator. This generator would not be operational during the majority of days and would only operate during an emergency involving a power

outage at the Roseton Plant site. According to the FHWA's Roadway Construction Model (2006), dieselpowered generators such as the type proposed by the Project generate sound power as great at 72.8 dBA at the source, which can be expected to attenuate to 63.8 dBA at 100 feet distant, the distance to the nearest residential receptor. Section 5-2.03, Permissible Exterior Sound Limits or Levels, seeks to protect residential land uses from potential stationary sources of noise by limiting noise emitted from such sources to 55 dBA during the daytime hours (7:00 a.m. to 10:00 p.m.) and 50 dBA during the nighttime hours (10:00 p.m. – 7:00 a.m.), at all residential uses. However, the emergency backup generator would not be operational during the majority of days and is only intended to ensure continual, uninterrupted water supply during power outages and emergency situations. Additionally, the California Public Utilities Commission's (CPUC) Rules Governing Water Service, Including Minimum Standards for Operation, Maintenance, Design, and Construction (California State General Order 103-A) states that "Local agencies acting pursuant to local authority are preempted from regulating water production, storage, treatment, transmission, distribution, or other facilities (including the location of such facilities) constructed or installed by water or wastewater utilities subject to the Commission's jurisdiction." It is noted that the emergency backup generator is proposed to be equipped with a noise enclosure that fully wraps around the unit, as well as a noise suppressor on the exhaust. The noise enclosure fully wrapping around the generator will reduce the resultant noise level by 8 dBA (FTA 2006). Commercial-grade noise suppressors can be expected to reduce generator noise by another 14 to 20 dBA. Thus, generator noise as experienced at the nearest residence during power outages and emergency situations would be approximately 41.8 dBA with implementation of the noise enclosure and noise suppressor¹. This impact is less than significant, and no mitigation is required.

Operational Traffic Noise Impacts

Upon completion of the Proposed Project, additional traffic on area roadways resulting from Project operations would be minimal. The only visitors to the site would be one Water System Operator, who would visit the site daily, and staff conducting repair or maintenance work, which would occur infrequently. As previously stated, and according to the Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB; outside of laboratory settings, a 3-dBA change is considered a *just-perceivable difference*. The Proposed Project would not result in a doubling of traffic; therefore, its contribution to existing traffic noise would not be perceptible. Traffic noise impacts associated with Project operations would be less than significant.

¹ 63.8 dBA – 8 dBA – 14 dBA = 41.8 dBA

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?			\boxtimes	

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. 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 4.13-2 summarizes groundborne vibration levels associated with 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			

Table 4.13-2. Representative Vibration Source Levels for Construction Equipment

Source: Federal Transit Administration (FTA) 2018; Caltrans 2020

The City of Artesia does not regulate vibrations associated with construction; however, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans recommended standard of 0.2-inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold (Caltrans 2020), which 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, that could be affected by groundborne vibrations, is a residence located approximately 67 feet from the Project boundary.

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-2 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:

$$[PPVequip = PPVref x (25/D)^{1.5}]$$

Table 4.13-3. Construction Vibration Levels at 67 Feet **Receiver PPV Levels (in/sec)**¹ Large Bulldozer, Exceed Peak Threshold Caisson Loaded Small Vibratory Vibration Threshold Jackhammer Drilling, & Trucks Bulldozer Roller Hoe Ram 0.0202 0.0173 0.0079 0.0006 0.0478 0.0478 0.2 No

Table 4.13-3 presents the expected Project related vibration levels at a distance of 67 feet.

Notes: ¹Based on the Vibration Source Levels of Construction Equipment included on Table 4.13-2 (FTA 2018). Distance to the nearest structure is approximately 67 feet measured from the center of the Project Site.

As shown in Table 4.13-3, 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 5 miles west of the Fullerton Municipal Airport and northeast of the Long Beach Airport. According to Section 5.6, *Noise*, of the General Plan Environmental Impact Report (2010b), the City is not located within an airport land use plan; 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.

4.13.4 Mitigation Measures

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

4.14 Population and Housing

4.14.1 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through 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. Per the GSWC Master Plan, increased water storage is required to mitigate an existing storage deficiency in the pressure zone. The additional capacity provided by the storage tank is required to meet the current system's maximum day and fire flow demands. As a result, no impact would occur.

Wou	Id 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?				\boxtimes

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 Fire Services

Fire protection services in the City are provided by the Los Angeles County Fire Department (LACFD). The LACFD response time goal is four minutes; however, response time varies depending on the type of call. The community service representative acts as a liaison between the LACFD and the cities within the service area.

The fire stations closest to the Project Area are Fire Station #30 and Fire Station #35. Fire Station #30 is located at 19030 S. Pioneer Boulevard, approximately 1.3 miles driving distance south of the Project Site, and Fire Station #35 is located at 13717 E. Artesia Boulevard, approximately 3 miles driving distance east of the Project site. Staff at Station #30 are divided between three shifts, each consisting of nine fire fighters and one chief officer. Staff at Station #35 are divided between three shifts, each consisting of four fire fighters and one chief officer. The City has entered into an automatic response agreement with the Cities of Norwalk and Cerritos to provide dispatch regardless of the city boundaries. Additionally, Station #30 is part of a Mutual Aid Agreement with the County of Orange to provide overlapping coverage in the event of additional service needs (City of Artesia 2010b).

4.15.2 Police Services

Police protection services to the City of Artesia are provided under contract with the County of Los Angeles Sheriff's Department. The City is served by the Lakewood Sheriff's Station, located at 5130 Clark Avenue in the City of Lakewood. The Lakewood Station provides general and specialized communityoriented law enforcement services to over 270,000 residents in the contract cities of Artesia, Bellflower, Hawaiian Gardens, Lakewood, and Paramount.

4.15.3 Schools

The ABC Unified School District (ABCUSD) serves most of the City, including the Project area, and several other cities. Four school sites are within the City of Artesia: John H. Niemes Elementary, Luther Burbank

Elementary, William F. Elliott Elementary, and Faye Ross Junior High. The net open space provided by these schools totals 31.41 acres (City of Artesia 2010b). Luther Burbank Elementary School is located approximately 50 feet east of the Project Site, across Roseton Avenue.

4.15.4 Parks

The City's open space facilities include approximately 15 acres of parks and recreational trails. Regional recreation facilities provide supplemental recreational opportunities that may not be offered by the City due to its size and limited resources. Regional recreational facilities are located within a convenient traveling distance of the City. The City of Cerritos, in conjunction with the County of Los Angeles, maintains the 56-acre Cerritos Regional County Park, located less than 1 mile from Artesia's southern boundary. Ralph B. Clark Regional Park, a 105-acre County facility, is located in the City of Buena Park, approximately seven miles from Artesia's eastern boundary. These facilities provide additional amenities not offered in Artesia, such as hiking trails, fishing, and volleyball courts (City of Artesia 2010b).

Would	d 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?			\square	
	Police Protection?			\square	
	Schools?			\square	
	Parks?			\square	
	Other Public Facilities?			\square	

4.15.5 Public Services (XV) Environmental Checklist and Discussion

Less than Significant Impact.

The Proposed Project would construct a new water storage tank, a booster station, and other associated facilities. The Proposed Project would require no new staffing during operation. Based on the size and nature of the Proposed Project, it would not require the construction of a new or expanded police station, and impacts would be less than significant.

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. Therefore, the Proposed Project would not generate an increase in the student population within ABCUSD's service area that would necessitate the construction of a new or expanded school facility.

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 near their homes during non-work hours. A less than significant 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 Environmental Setting

The City's open space facilities include approximately 15 acres of parks and recreational trails. Regional recreation facilities provide supplemental recreational opportunities that may not be offered by the City due to its size and limited resources. Regional recreational facilities are located within a convenient traveling distance of the City. The City of Cerritos, in conjunction with the County of Los Angeles, maintains the 56-acre Cerritos Regional County Park, located less than 1 mile from Artesia's southern boundary. Ralph B. Clark Regional Park, a 105-acre County facility, is located in the City of Buena Park, approximately seven miles from Artesia's eastern boundary. These facilities provide additional amenities not offered in Artesia, such as hiking trails, fishing, and volleyball courts (City of Artesia 2010b).

4.16.2 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 a regional parks or other recreational facilities that substantial physical deterioration of the facility would occur or be accelerated? 	ind such			

No Impact.

As previously stated, the Proposed Project would construct a new water storage tank, a booster station, and other associated facilities. 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 recreatio construction or e facilities, which n effect on the env	nal facilities or require the xpansion of recreational night have an adverse physical ironment?				

No Impact.

The Proposed Project does not include the development of any parks or recreational facilities. Therefore, no impacts related to this issue would occur.

4.16.3 Mitigation Measures

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

4.17 Transportation

4.17.1 Environmental Setting

The City of Artesia shares borders with the cities of Norwalk and Bellflower on the north, the City of Lakewood on the west and south, and the City of Cerritos on the east and southeast. The City is well-served by area freeways. SR-91, also called the Artesia Freeway, provides east-west regional circulation through the north and central parts of the City. Freeway I-605, also called the San Gabriel River Freeway, provides for north-south regional travel on the west side of the City. Interstate 5 (I-5), also called the Santa Ana Freeway, provides for northwest-southeast travel, with an interchange just north of the City of Cerritos. Roseton Avenue, to the west, is designated a local street. Artesia Boulevard provides local access

to the Project site and is defined as a primary highway by the General Plan Circulation Element (City of Artesia 2010a).

4.17.2 Transportation (XVII) Environmental Checklist and Discussion

Wou	Id 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.

Truck Routes

The City has designated three roadways as *truck routes* to provide for the regulated movement of trucks through the City. The designation of these roadways (i.e., Artesia Boulevard, Pioneer Boulevard, and South Street) is intended to route truck traffic to those streets where they would cause the least amount of neighborhood intrusion and where noise and other impacts would not be considered nuisances. The designation of truck routes does not prevent trucks from using other roads or streets to load or unload when such deviations are reasonable and necessary (City of Artesia 2010a). Artesia Boulevard serves as a designated truck route and would be utilized by construction traffic during the Proposed Project's construction.

Transit Routes

Public bus service is provided to Artesia by the Metropolitan Transportation Authority, the Orange County Transportation Authority, the Long Beach Transit District, and the Norwalk Transit District. Expanded service and improved intercity routes make alternative transportation accessible and inexpensive. The City offers a free-of-charge transportation service called the *Artesia Express* to senior citizens 60 years of age or older and City residents with disabilities (City of Artesia 2010a).

Bicycle Facilities

Currently, there are no designated bikeways within the City. However, there are Class II bike lanes adjacent to the City in the following locations:

- Pioneer Boulevard, south of 195th Street
- 195th Street, east of Bloomfield
- South Street, east of Bloomfield

There are Class I bike paths to the west of the City along the San Gabriel River and to the east along Coyote Creek. The County Bicycle Transportation Strategic Plan identifies the opportunity to connect these bikeways through the creation of a new bikeway in Artesia (City of Artesia 2010a).

Pedestrian Facilities

The City provides sidewalks on all arterial roadways and on most residential streets. The City's circulation system has been designed to ensure that adequate facilities are provided for pedestrian circulation, especially in the vicinity of schools, parks, major retail facilities, and other locations with high levels of pedestrian activity. The City does not currently have a formal Pedestrian Master Plan.

Construction Impacts

Construction would generally be confined to the Project Site; however, short-term lane closure is anticipated within Roseton Avenue for connection to the distribution system. The Proposed Project's contractor shall prepare a site-specific Traffic Control Plan to be implemented during construction, which would be reviewed and approved by the City. Therefore, the construction of the Proposed Project would not conflict with the policies set forth in the Artesia General Plan Circulation Element. Impacts would be less than significant.

Operational Impacts

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

Wou	Id 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 highquality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the Project Area compared to existing conditions should be presumed to have a less than significant transportation impact."

The Guidelines also specify, "If existing models or methods are not available to estimate the vehicles miles traveled for the particular project being considered, a lead agency may analyze the project vehicle miles

traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate." No models or methods are available for use of this project. Instead, the Project is evaluated qualitatively.

The Proposed Project would construct a water storage tank and other associated facilities. Operation and maintenance of the Proposed Project would require one daily visit to the Project Site. The Proposed Project would generate short-term construction-related vehicle trips, which would utilize SR-91, I-605, and Artesia Boulevard (a designated truck route) 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. Lane closure within Roseton Avenue would be required for connection to the distribution system, however, 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.

Woι	ıld 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 would construct a water storage tank, booster station, and associated facilities. Access to the Project Site would be provided via driveways along Roseton Avenue, which is a local collector street with a designated speed limit of 25 miles per hour. 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 land designated as Utility and Flood Control and does not propose incompatible uses. Impacts would be less than significant.

Wou	Id the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d)	Result in inadequate emergency access?			\square	

Less than Significant Impact.

Complying with the Standardized Emergency Management System requirements of state law, the City of Artesia has prepared a Multi-Hazard Functional Plan for emergency response within the City. Critical areas

within the City are identified along with areas for meeting and staging, communication, and evacuation routes in the event of an emergency.

The City of Artesia has prepared the Artesia Emergency Operations Plan, which outlines emergency response actions in the event of a large-scale disaster. The General Plan Community Safety Sub-Element is intended to reduce the potential risk of death, injuries, property damage, and the economic and social dislocation resulting from hazards such as fires, floods, earthquakes, landslides, and other hazards. It serves as a guide for the City's government and the general public to understand the hazards facing the City of Artesia, and how to reduce the impacts of those hazards.

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.

Upon completion, vehicular access to the Project Site would be provided via two driveways located on Roseton Avenue, which now serve as access to the existing site. During the course of the City'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 September 8, 2022, Project notification letters with invitations to consult on the Project were sent by email with delivery confirmation to representatives of the three tribes on the State Water Board's Assembly Bill (AB) 52 list for the Proposed Project in Los Angeles County: Gabrieleno Band of Mission Indians – Kizh Nation, the Gabrieleno Tongva San Gabriel Band of Mission Indians, and the Quechan Tribe of the Fort Yuma Indian Reservation. In accordance with PRC Section 21080.3.1(b)(2), the tribes were afforded 30 days to request consultation. The response window closed on October 9, 2022.

The Quechan Tribe of the Fort Yuma reservation responded on September 8, 2022, and deferred consultation to the Gabrieleno tribes; no response was received from the Gabrieleno Tongva San Gabriel Band of Mission Indians. Therefore, no consultation under PRC Section 21080.3.1(e) was required.

The Gabrieleno Band of Mission Indians – Kizh Nation (Tribe) requested consultation in an email dated September 8, 2022. The State Water Board contacted the tribal office by email on September 9, 2022, and suggested several possible times to meet. A consultation meeting between the Kizh Nation and the State

Water Resources Control Board was held on January 18, 2023. The State Water Board sent the Tribe a copy of the cultural report prior to the meeting. The Tribe stated the positive Sacred Lands File Search received from the NAHC referred to a different site that was not located in the Project area, but that the Project site is within the Tribal Cultural Landscape of villages that were situated in the area and its natural abundance of water. Chairman Salas stated the Project Area was highly populated by indigenous Gabrielinos and that they settled in and utilized the vicinity of the Project Area due to its springs and natural resources. The Tribe stated that there was a potential to encounter tribal cultural resources (TCRs) such as artifacts during construction because of the Project's location in the Artesia TCR landscape. The mitigation measures included in this document were sent from the Tribe during AB 52 consultation for another Project in Los Angeles County, Saxon Reservoir and Replacement Well Project. With permission, those mitigation measures were adapted for this Project.

Wou a)	Id the Project: Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
	 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 				
	 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. 				

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Less than Significant with Mitigation Incorporated

A cultural resources inventory for the Proposed Project was completed and includes a records search of the CHRIS at the SCCIC and a Sacred Lands File (SLF) search from the NAHC. The NAHC indicated a Sacred Lands File Search was positive, meaning they had a record of a sacred site in the same Public Land Survey

section (one square-mile area) the Project area is in. The Gabrieleno Band of Mission Indians - Kizh Nation confirmed in a meeting on January 18, 2023, that the SLF search positive finding was not inside the Project area. While according to the records search, there are no known tribal cultural resources (TCR) 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), the Tribe stated that Artesia is within a known TCR landscape. If an archaeological resource of Native American origin and cultural significance is discovered during construction and determined to be a TCR, or human remains are discovered at the site, implementation of mitigation measures TCR-1, CUL-1, TCR-2, and TCR-3, as applicable, would reduce impacts to TCRs to a less than significant level.

4.18.3 Mitigation Measures

TCR-1: Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities

- The project applicant shall retain a Native American Monitor from or approved by the Gabrieleño Band of Mission Indians – Kizh Nation. The monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all the project locations site (i.e., both on-site and any off-site locations that are included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground-disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching.
- A copy of the executed monitoring agreement shall be submitted to the lead agency prior to the earlier of the commencement of any ground-disturbing activity.
- The monitor will complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribe. Monitor logs will identify and describe any newly discovered TCRs, including but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, tribal cultural resources, or "TCR"), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of monitor logs will be provided to the Lead Agency within 30 days of the completion of construction.
- On-site tribal monitoring shall conclude upon the latter of the following (1) written confirmation to the Kizh from a designated point of contact for the project applicant that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Kizh to the project applicant that no future, planned construction activity and/or development/construction phase at the project site possesses the potential to impact Kizh TCRs.

Upon discovery of any TCRs, all construction activities in the immediate vicinity of the discovery shall cease (i.e., not less than the surrounding 50 feet) and shall not resume until the discovered TCR has been fully assessed by the Kizh monitor and/or Kizh archaeologist. The Kizh will recover and retain all discovered TCRs in the form and/or manner the Tribe deems appropriate, in the Tribe's sole discretion, and for any purpose the Tribe deems appropriate, including for educational, cultural and/or historic purposes. Documentation of the discovery will be immediately reported to the Lead Agency and CUL-1 shall be implemented.

TCR-2: Unanticipated Discovery of Human Remains and Associated Funerary Objects

- If human remains are discovered during Project activities, the procedures specified in California Health and Safety Code section 7050.5 must be followed. Section 7050.5 of the Health and Safety Code requires that in the event of discovery or recognition of any human remains, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlie adjacent remains and the Los Angeles County Coroner (Coroner) shall be called immediately. For purposes of this project, the initial stop work zone will be 200 feet away from possible Native American human remains. The Coroner shall determine, within two working days of notification of the discovery if the remains are within their jurisdiction or if the human remains are those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC pursuant to Public Resources Code 5097.98. Whenever the NAHC receives notification of a discovery of Native American human remains from a county coroner pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, it shall immediately notify those persons it believes to be most likely descended (MLD) from the deceased Native American. The descendants may, with the permission of the owner of the land, or his or her authorized representative, inspect the site of the discovery of the Native American human remains and may recommend to the owner or the person responsible for the excavation work means for treatment or disposition, with appropriate dignity, of the human remains and any associated grave goods. The MLD shall complete their inspection and make recommendations or preferences for treatment 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.
- Native American human remains are defined in Public Resources 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
- Human remains and grave/burial goods shall be treated alike per California Public Resources Code section 5097.98(d)(1) and (2).
- Construction activities may resume in other parts of the project site at a minimum of 200 feet away from discovered human remains and/or burial goods while mitigation is taking place, if

the Kizh determines in its sole discretion that resuming construction activities at that distance is acceptable and provides the project manager express consent of that determination in writing.

TCR-3: Procedures for Burials and Funerary Remains

- If the Kizh Nation is determined to be the MLD by the NAHC, the Tribe will make every effort to recommend diverting the project and keeping the remains in situ and protected. If the project cannot be diverted, the burials may be removed and relocated.
- In the event preservation in place is not possible despite good faith efforts by the project applicant/developer and/or landowner, the landowner shall arrange a designated site location within the footprint of the project for the respectful reburial of the human remains and/or ceremonial objects.
- As the Most Likely Descendant ("MLD"), the Koo-nas-gna Burial Policy shall be implemented. To the Tribe, the term "human remains" encompasses more than human bones. In ancient as well as historic times, Tribal Traditions included, but were not limited to, the preparation of the soil for burial, the burial of funerary objects with the deceased, and the ceremonial burning of human remains.
- If the discovery of human remains includes four or more burials, the discovery location shall be treated as a cemetery and a separate treatment plan shall be created.
- The prepared soil and cremation soils are to be treated in the same manner as bone fragments that remain intact. Associated funerary objects are objects that, as part of the death rite or ceremony of a culture, are reasonably believed to have been placed with individual human remains either at the time of death or later; other items made exclusively for burial purposes or to contain human remains can also be considered as associated funerary objects. Cremations will either be removed in bulk or by means as necessary to ensure complete recovery of all sacred materials.
- In the case where discovered human remains cannot be fully documented and removed on the same day, the remains will be covered with muslin cloth and a steel plate that can be moved by heavy equipment placed over the excavation opening to protect the remains. If this type of steel plate is not available, a 24-hour guard should be posted outside of working hours.
- Each occurrence of human remains and associated funerary objects will be stored using opaque cloth bags, provided by the Tribe. All human remains, funerary objects, sacred objects and objects of cultural patrimony will be removed to a secure container on site if possible. These items should be retained and reburied within six months of recovery. The site of reburial/repatriation shall be on the project site but at a location agreed upon between the Tribe and the landowner at a site to be protected in perpetuity. There shall be no publicity regarding any cultural materials recovered.

The Tribe will work closely with the project's qualified archaeologist to ensure that the excavation is treated carefully, ethically, and respectfully. If data recovery of human remains is approved by the Tribe, documentation shall be prepared and shall include (at a minimum) detailed descriptive notes and sketches. All data recovery-related forms of documentation pertaining to human remains and associated grave goods shall be approved in advance by the Tribe. If any data recovery is performed on human remains, once complete, a final confidential report shall be submitted to the Tribe, the NAHC, the Lead Agency, and the landowner. The Tribe does NOT authorize any scientific study or the utilization of any invasive and/or destructive diagnostics on human remains.

4.19 Utilities and Service Systems

4.19.1 Water Service

The GSWC provides water to the City via the Artesia System North Side. GSWC currently obtains its water supply for the Artesia System from local groundwater, recycled water obtained through the Central Basin Municipal Water District (CBMWD), and imported water obtained from the CBMWD in conjunction with the City of Cerritos. CBMWD obtains its imported supply from the Metropolitan Water District of Southern California (MWD). Additionally, the Artesia System has a connection with GSWC's Orange County System, which also relies on both local groundwater and imported water obtained from MWD (City of Artesia 2010a).

4.19.2 Wastewater

The Sanitation Districts of Los Angeles County (Districts) treat wastewater from the City of Artesia. The City maintains local sewer lines and the Districts own, operate, and maintain the large trunk sewers of the regional wastewater conveyance system. Districts 2, 18, and 19 serve the City and their treatment plants treat wastewater flow originating from Artesia, with a remaining capacity of approximately 91.1 MG per day. The wastewater treatment plants that serve the City include:

- The Los Coyotes Water Reclamation Plant (WRP), located within the City, has a design capacity of 37.5 MG per day and currently processes an average flow of 21.7 mgd.
- The Joint Water Pollution Control Plant, located in the City of Carson, has a design capacity of 385 MG per day and currently processes an average flow of 326.1 MG per day.
- The Long Beach WRP has a design capacity of 25 MG per day and currently processes an average flow of 20.2 MG per day.

The District's treatment plants provide primary, secondary, and tertiary treatment processes to comply with the LARWQCB treatment requirements (City of Artesia 2010a).

4.19.3 Solid Waste

The City of Artesia currently maintains a franchise agreement with Consolidated Disposal Service for the collection and disposal of the City's solid waste. The franchise agreement also covers residential curbside recyclable and green waste collection and commercial onsite recyclable pickup.

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The Districts are a partnership of 23 independent special districts providing solid waste and wastewater management services for approximately 5.3 million people in Los Angeles County. The Districts operate the Puente Hills Materials Recovery Facility, located at 2808 Workman Mill Road in the City of Whittier. The facility is permitted to accept 4,400 tons per day, not to exceed 24,000 tons per week, of municipal solid waste (City of Artesia 2010a).

Woi	uld 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?				

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

Less than Significant Impact.

The Proposed Project consists of a water storage tank, booster pump station, and auxiliary structure construction. The Proposed Project would address the existing storage deficiency, add redundancy to the existing system, and maintain an uninterrupted supply of water for the GSWC Artesia System. The Proposed Project would not require any additional water facilities beyond those proposed. The overall capacity required by the Artesia System would be the same as existing conditions and the Proposed Project would be located in a fully developed urban area with a stable customer base; therefore, there would be no capacity increase. The inclusion of the storage tank is to increase storage within the water system and not to increase overall capacity or to meet an increase in demand.

Work at the site would be limited. 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 proposed water storage tank. Therefore, maintenance of the proposed water storage tank would not result in the need for new or expanded wastewater treatment facilities.

The site is relatively flat with elevations ranging from approximately 17 to 19 feet above mean sea level. Drainage from the Project Site flows to existing stormwater conveyance systems in Roseton Avenue. 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 City of Artesia 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 wa the project and re development duri dry years?	ter supplies available to serve asonably foreseeable future ng normal, dry, and multiple				

Less than Significant Impact.

As discussed previously, the San Gabriel Valley Groundwater Basin was adjudicated in January 1973. Although portions of the Basin lie outside the adjudication boundary, the SGMA allows adjudicated areas to continue with existing management practices. As such, the GSWC South San Gabriel service area has no further management actions associated with SGMA for the Basin (GSWC 2021).

The Proposed Project would construct a water storage tank and a booster station. Per the GSWC Master Plan, increased storage is required to address the existing storage deficiency, add redundancy to the existing system, and maintain an uninterrupted supply of water for the system. The overall capacity required by the Artesia System would be the same as existing conditions and the Proposed Project would be located in a fully developed urban area with a stable customer base; therefore, there will be no capacity increase. The inclusion of the storage tank is to increase storage within the water system and not to increase overall capacity or to meet an increase in demand. A less than significant impact would occur.

Woi	ıld 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.

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

Woι	uld 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 water storage tank, a booster pump station, and associated facilities. 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 likely be serviced by the Olinda Alpha Landfill, located at 1942 North Valencia Avenue in the City of Brea. The Olinda Alpha Landfill is a Class III site featuring 565 total acres, of which 453 acres are permitted for refuse disposal. The landfill has sufficient projected capacity to serve residents and businesses until 2030. The landfill's average disposal rate is approximately 7,000 tons per day (TPD), although it permitted up to 8,000 TPD (OC Waste and Recycling 2022). The minimal increase in waste associated with the Proposed Project would not be expected to affect the permitted capacity of this landfill. The Project Applicant would encourage contractors to recycle materials, when possible, in accordance with the Artesia recycling program and AB 939. 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 Project Applicant would encourage contractors to recycle materials, when possible, in accordance with the Artesia recycling program and AB 939. The Proposed Project would not generate solid waste during operation. No impact would occur.

4.19.5 Mitigation Measures

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

4.20 Wildfire

4.20.1 Environmental Setting

Government Code 51175-89 directs the California Department of Forestry and Fire Protection (CALFIRE) to identify areas of very high fire hazard severity within Local Responsibility Areas (LRA). Mapping of these areas, referred to as Very High Fire Hazard Severity Zones (VHFHSZ), is based on data and models of potential fuels over a 30- to 50-year time horizon and their associated expected fire behavior and expected burn probabilities to quantify the likelihood and nature of vegetation fire exposure to buildings. According to the State of California Fire Hazard Severity Zones map, the Project site is not located in a VHFHSZ (CALFIRE 2007).

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?				\boxtimes

No Impact.

The General Plan Safety Element is intended to reduce the potential risk of death, injuries, property damage, and the economic and social dislocation resulting from hazards such as fires, floods, earthquakes, landslides, and other hazards. It serves as a guide for the City government and the general public in understanding the hazards facing the City of Artesia and how to reduce the impacts of those hazards.

Upon completion, vehicular access to the Project Site will be provided via two full-access driveways located on Roseton Avenue that currently serve as access to the existing site. During the City'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. With adherence to City requirements for emergency vehicle access, impacts would be less than significant. Furthermore, the Proposed Project is not in or near a state responsibility area or VHFHSZ (CALFIRE 2007). Therefore, impacts to emergency response and evacuation plans would be less than significant.

If loc land zone	cated in or near state responsibility areas or s classified as very high fire hazard severity s, 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.

The Proposed Project would not substantially alter slope, wind patterns, or other factors that could exacerbate wildfire risks. The 0.6-acre Project Site is located in a generally flat and highly urbanized area bordered by Artesia Boulevard to the north, Roseton Avenue to the west, and single-family homes to the north, east, and west. According to the CALFIRE Fire Hazard Severity Zones map, the Project Site is not located in or near land classified as VHFHSZ; therefore, the Proposed Project is unlikely to expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact is anticipated.

If located in or near state responsibility areas lands classified as very high fire hazard sever zones, would the Project:	ity Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Require the installation or maintenance or associated infrastructure (such as roads, f breaks, emergency water sources, power other utilities) that may exacerbate fire rise that may result in temporary or ongoing to the environment?	f uel ines, or k or mpacts			

No Impact.

The Proposed Project would construct a water storage tank, a booster pump station, and associated structures on an existing GSWC well site. The Proposed Project is located within a developed area and is not located in or near land classified as VHFHSZ; therefore, the Proposed Project would not exacerbate fire risk resulting in temporary or ongoing impacts to the environment. No impact would occur.

If loo land zone	cated in or near state responsibility areas or s classified as very high fire hazard severity es, 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 not located in or near a VHFHSZ. The site is relatively flat with elevations ranging from approximately 17 to 19 feet above mean sea level. Construction of the Proposed Project would not require substantial grading or creation of slopes. Accordingly, the Proposed Project is not likely to expose people or structures to landslides or downstream flooding as a result of runoff, post-fire slope instability, or drainage changes. 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 Measure BIO-1 (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 Measures GEO-1, CUL-1, and CUL-2 the Proposed Project

would not eliminate important examples of the major periods of California's history or prehistory. Therefore, the Proposed Project would have a less than significant impact with mitigation incorporated.

Doe	s 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, any potentially significant impacts of the Proposed Project would be reduced to a less than significant level. Projects completed in the past have also implemented mitigation, as necessary. Accordingly, the Proposed Project would not otherwise combine with impacts of related development to 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	s 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, Tribal Cultural, Noise, Transportation, and Wildfire evaluate the Proposed Project's impacts that may have adverse effects on human beings, either directly or indirectly. All the Proposed Project's impacts on human beings, both direct and indirect, that are attributable to the Proposed Project were identified and mitigated. Therefore, the Proposed Project would not directly or indirectly cause substantial adverse effects on human beings because all potentially adverse direct and indirect impacts of the Proposed Project are identified as having no impact, less than significant impact, or less than significant impact with mitigation. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this IS/MND.

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6.0 **BIBLIOGRAPHY**

- California Air Pollution Control Officers Association (CAPCOA). 2020. California Emissions Estimator Model (CalEEMod), version 2020.4.0.
- California Air Resources Board (CARB). 2021. EMFAC2021 Web Database Emissions Inventory. https://arb.ca.gov/emfac/?utm_medium=email&utm_source=govdelivery.

_____. 2019. State and Federal Area Designation Maps. http://www.arb.ca.gov/desig/adm/adm.htm.

- California Department of Conservation (DOC). 2018. *Los Angeles County Important Farmland 2018 Sheet 2 of 2*. Available at <u>https://www.conservation.ca.gov/dlrp/fmmp/Pages/LosAngeles.aspx</u>. Accessed December 20, 2021.
- California Department of Forestry and Fire Protection (CALFIRE). 2007. State of California Fire Hazard Severity Zone in LRA. Available at <u>https://osfm.fire.ca.gov/media/6827/fhszl06_1_map.pdf</u>. Accessed September 2, 2020.
- California Department of Transportation (Caltrans). 2020. *Transportation and Construction-Induced Vibration Guidance Manual*.
- _____. 2019. California Scenic Highway Mapping System. Officially Designated Scenic Highway. Available at https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-livi-scenic-highways. Accessed January 4, 2022.
- _____. 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol.
- _____. 2002. California Airport Land Use Planning Handbook.
- California Environmental Protection Agency (CalEPA). 2020. Cortese List Data Resources. Available at <u>https://calepa.ca.gov/sitecleanup/corteselist/</u>. Accessed January 21, 2022.
- California Energy Commission (CEC). 2007. Water-Related Energy Use in California. CEC-999-2007-008. Available at: <u>http://sustainround.com/library/sites/default/files/Krebs_2007-02.pdf</u>.
 - ____.2021a. Energy Almanac. <u>https://www.energy.ca.gov/data-reports/energy-almanac</u>.
- _____. 2021b. California Electric Transmission Lines Interactive Map. <u>https://cecgis-</u> <u>caenergy.opendata.arcgis.com/datasets/260b4513acdb4a3a8e4d64e69fc84fee_0/explore?filters=e</u> <u>yJrVI9Tb3J0ljpbMjg4Ljc3LDUwMF19&location=34.576503%2C-118.367944%2C9.74</u>
- _____. 2021c. California Energy Consumption Database. http://www.ecdms.energy.ca.gov/Default.aspx.
- _____. 2007. Refining Estimates of Water Related Energy Use in California.
- City of Artesia. 2010a. *City of Artesia General Plan*. Published July 2010. Available at <u>http://www.cityofartesia.us/258/General-Plan-Update</u>.

- ____. 2010b. *Public Review Draft Program EIR Artesia General Plan Update*. Published July 2010. Available at <u>http://www.cityofartesia.us/258/General-Plan-Update</u>.
- _____. 2021. City of Artesia Municipal Code.
- Climate Registry. 2016. General Reporting Protocol for the Voluntary Reporting Program version 2.1. January 2016.
- Crockett, Alexander G. 2011. Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World.
- Department of Toxic Substances Control (DTSC). 2022. Department of Toxic Substances Control. EnviroStor Database. Available at: <u>https://www.envirostor.dtsc.ca.gov/public/</u>. Accessed on January 27, 2022.
- Department of Water Resources (DWR). 2019. Sustainable Groundwater Management Act 2019 Basin Prioritization. Available at <u>https://www.emwd.org/sites/default/files/file-</u> <u>attachments/sgma basin prioritization 2019 results.pdf?1559164669</u>. Accessed January 8, 2022.
- Federal Emergency Management Agency (FEMA). 2022. Flood Insurance Rate Map: Panel 1980 of 2350. Available at <u>https://msc.fema.gov/portal/search?AddressQuery=artesia#searchresultsanchor</u>. Accessed January 11, 2022.
- Federal Highway Administration (FHWA). 2011. Effective Noise Control During Nighttime Construction. Available online at: <u>http://ops.fhwa.dot.gov/wz/workshops/accessible/schexnayder_paper.htm</u>.

_____. 2006. Roadway Construction Noise Model.

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

- HMMH. 2006. Transit Noise and Vibration Impact Assessment, Final Report.
- Leighton Consulting, Inc. 2022. Geotechnical Exploration Report: Roseton Plant Reservoir and Booster Station, 17456 South Roseton Avenue Artesia, California. May 13, 2022.
- Natural Resources Conservation Service (NRCS). 2022. *Web Soil Survey*. Available at <u>https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>. Accessed January 5, 2022.
- OC Waste and Recycling. 2022. Olinda Alpha Landfill. <u>https://www.oclandfills.com/landfills/active-landfills/olinda-landfill</u>. Accessed January 23, 2020.
- South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]).
- _____. 2016, Final 2016 Air Quality Management Plan. Available at <u>https://www.aqmd.gov/home/air-</u> <u>quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp</u>.
- State Water Resources Control Board (SWRCB) 2022. *Geotracker Database*. Available at <u>https://geotracker.waterboards.ca.gov/</u>.
- U. S. Fish & Wildlife Service (USFWS). 2022. National Wetlands Inventory. Available at http://www.fws.gov/wetlands/Data/Mapper.html. Accessed January 4, 2022.

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- Appendix B Cultural Resources Assessment
- Appendix C Energy Assessment
- Appendix D Geotechnical Report
- Appendix E Paleontological Assessment
- Appendix F Greenhouse Gas Impact Assessment
- Appendix G Noise Impact Assessment