DRAFT

Initial Study and Mitigated Negative Declaration

North Bench Recycled Water System Project

Yucaipa, California

Lead Agency:

Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399

Prepared by:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

215 North Fifth Street
Redlands, California 92374

January 2023

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DRAFT MITIGATED NEGATIVE DECLARATION

Lead Agency: Yucaipa Valley Water District (YVWD)

Project Proponent: Yucaipa Valley Water District

Project Location: The Project is located primarily within the City of Yucaipa, with a small portion located within the Oak Glen community of unincorporated San Bernardino County. The Project extends from the Yucaipa Valley Regional Water Filtration Facility (YVRWFF) at 35477 Oak Glen Road, to an existing YVWD reservoir site approximately 3.1 miles to the east at 37761 Oak Glen Road.

Project Description: The Yucaipa Valley Water District proposes the expansion of the recycled water system in the North Bench area of the City of Yucaipa, San Bernardino County, California. The expansion includes the construction of four recycled water reservoirs, four booster stations, and approximately 3.4 miles of pipeline. The first (westernmost) booster station (B-14.1) would be located at the YVRWFF. The second booster station (B-16.2) and first reservoir (R-16.2) would be located north of Oak Glen Road approximately 1 mile east of the YVRWFF adjacent to an existing reservoir. The third booster station (B-17.2) and second reservoir (R-17.2) would be located at the eastern end of Lan Franc Road, south of Oak Glen Road. The fourth booster station (B-18.2) and third reservoir (R-18.2) would be located south of Oak Glen Road within undisturbed land. The fourth (easternmost) reservoir (R-20.1) would be constructed south of Oak Glen Road adjacent to an existing reservoir approximately 2 miles east of the first reservoir. A new 3.4-mile pipeline would be constructed in the existing roadway along Oak Glen Road with shorter segments located within the right-of-way (ROW) along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites. This Project will extend the system in the North Bench area of the City of Yucaipa and the unincorporated Oak Glen community to accommodate existing and planned development which will utilize recycled water on all landscaped areas. The Project would result in approximately 4.0 acres of disturbance (2.4 acres of pipeline and 1.6 acres of other facilities).

Public Review Period: January 8, 2023 to February 7, 2023

Mitigation Measures Incorporated into the Project to Avoid Significant Effects:

Biological Resources

BIO-1: **Special-Status Plant Survey.** A special-status plant survey shall be conducted within suitable habitat in the Project Area for species determined to have a potential to occur on the Project Area. The survey shall be conducted during the appropriate blooming period for chaparral sand-verbena, Nevin's barberry, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California satintail, salt spring checkerbloom, Jaeger's milk-vetch, mesa horkelia Sonoran maiden fern, and San Bernardino aster (approximately April to June). Multiple surveys may be necessary to accommodate the different blooming periods for the target species. The surveys shall be conducted by a botanist or qualified biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If any special-status species are observed during the surveys, the location of the individual plant or population will be recorded with a GPS device and impacts to individual plants or populations should be avoided. If Project-related impacts to special-status plants on the Project Area are unavoidable, consultation with CDFW and/or USFWS may be required to develop a mitigation plan or additional avoidance and minimization measures that could include seed collection, offsite mitigation, or transplantation.

BIO-2: **Preconstruction Nesting Bird Survey.** If construction or other Project activities are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project Area and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriate disturbance-limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance-limit buffer zones until the nest is deemed inactive by the qualified avian biologist through a minimum of weekly biological monitoring.

BIO-3: **Preconstruction Burrowing Owl Surveys.** Two preconstruction burrowing owl surveys shall be conducted prior to Project-related ground disturbance. The first survey shall be conducted between 30 to 14 days prior to initial ground disturbance (grading, grubbing, and construction) and the second survey should be conducted within 24 hours of initial ground disturbance. The surveys shall be conducted in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Typically, if burrowing owls or active burrowing owl burrows are identified in a Project Area during the survey, these features must be completely avoided during the owl breeding season (March 1 through August 31). If impacts to those

features are unavoidable, then the YVWD must also develop an owl mitigation plan in consultation with CDFW. Mitigation methods may include passive relocation (conducted between September 1 and February 28) outside of the owl breeding season. If an active burrowing owl burrow is identified, and construction is to proceed, then a qualified biologist (with two or more years of owl experience) shall establish an appropriate disturbance-limit buffer around the burrow using flagging or staking. The buffer limit size can be at the biologist's discretion based on topography of the site and other conditions. Construction activities shall not occur within any buffer zones until the burrow is deemed inactive by the qualified biologist through a minimum of weekly biological monitoring.

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

BIO-5: **Drainage Impact Avoidance.** Impacts to Oak Glen Creek shall be avoided either through Project design or construction methods. Should impacts to the drainage be necessary, a formal Aquatic Resources Delineation (ARD) shall be conducted to determine if it is subject to the jurisdiction of the CDFW or USACE. The ARD shall be conducted based on the guidelines presented in the USACE *1987 Wetlands Delineation Manual* as well as the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*, September 2008. The delineation shall also comply with the standards required by CDFW and the RWQCB.

If there are any planned Project-related impacts to jurisdictional streams, regulatory permitting will be required in advance for these impacts, including submittal and processing of a Pre-Construction Notification with the USACE, a Notification of Lake or Streambed Alteration with the CDFW, and a Section 401 Water Quality Certification with the RWQCB. The Project shall comply with the mitigation measures resulting from the ARD.

Cultural Resources

CUL-1: Historic-period resource NB-004 (masonry stone curbs and gutters) shall be avoided for all project associated construction activities for the entire duration of the Project. The following measures shall be implemented to ensure avoidance:

- Prior to the start of construction activities, temporary, high-visibility exclusionary fencing shall be installed around the resource, as shown in the confidential fencing plan on file with the Yucaipa Valley Water District.
- After the installation of the temporary exclusionary fencing and prior to the start of construction activities, a qualified cultural resource monitor shall assess the fences to confirm correct placement and compliance with the mitigation measure.
- The temporary exclusionary fencing shall remain in place for the duration of the Project construction. It shall be the responsibility of the Construction Manager or superintendent to ensure the temporary exclusionary fencing is maintained and any repairs to the fencing be completed within four hours of notification.
- The temporary exclusionary fencing shall be removed only when the Project is complete.

CUL-2: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 60-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. In addition, Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1)

is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) if the find is considered a significant cultural resource, as defined by CEQA, that the treatment measures, including but not limited to the development of a Monitoring and Treatment Plan, have been completed to their satisfaction. Drafts of the Monitoring and Treatment Plan shall be provided to YSMN for review and comment, as detailed within TCR-1.

- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.
- It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Publics Records Act. The coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

Geology and Soils

GEO-1: **Unanticipated Discovery – Paleontological Resource.** If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the YVWD and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the find. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the resource (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site outside of the 100-foot buffer while evaluation and treatment of the paleontological resource takes place.

Hazards and Hazardous Materials

HAZ-1: Prior to construction, the Yucaipa Valley Water District (or its contractor) shall prepare a Traffic Control Plan to ensure proper access to residences and businesses in the area by emergency vehicles during construction, to maintain traffic flow and to maintain access to evacuation routes.

Noise

NOI-1: The following measures shall be applied to the Project during pipeline installation activities and shall be monitored and enforced by YVWD:

- All construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
- All stationary construction equipment will be placed so that emitted noise is directed away from the noise sensitive receptors nearest the Project Area.
- As applicable, shut off all equipment when not in use.
- Equipment staging shall be located in areas that create the greatest distance between construction-related noise/vibration sources and sensitive receptors surrounding the Project Area.
- Jackhammers, pneumatic equipment, and all other portable stationary noise sources will be directed away from sensitive receptors to the extent possible. Either one-inch plywood or sound blankets can be utilized for this purpose. They shall reach up from the ground and block the line of sight between equipment and the nearest off-site residences. The shielding shall be without holes and cracks.
- No amplified music and/or voice will be allowed on the construction site.

Tribal Cultural Resources

TCR-1: The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CUL-2, of any pre-contact and/or post-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find so as to provide Tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by CEQA (as amended, 2015), a cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with SMBMI, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to represent SMBMI for the remainder of the Project, should SMBMI elect to place a monitor onsite.

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

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Definition
AB	Assembly Bill
AF	acre-feet
ANSI	American National Standards Institute
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
ARD	Aquatic Resources Delineation
BERD	Built Environment Resource Directory
BFE	Base Flood Elevation
BMPs	Best Management Practices
BTR	Biological Technical Report
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commissions
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNPSEI	California Native Plant Society Electronic Inventory
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CRHR	California Register of Historic Resources

Term	Definition
CSA	County Service Area
CUPA	Certified Unified Program Agency
dBA	A-weighted decibel
DHS	California Department of Health Services
DOC	California Department of Conservation
DOF	State Department of Finance
DPM	diesel particulate matter
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
ECORP	ECORP Consulting, Inc.
EIR	Environmental Impact Report
EOP	Emergency Operations Plan
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FMMP	Farmland Mapping and Monitoring Program
FRA	Federal Responsibility Areas
GHG	greenhouse gas
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HMMH	Harris Miller Miller & Hanson Inc.
I	Interstate
IRUWMP	Integrated Regional Urban Water Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
kWh	kilowatt-hours
L_{dn}	Day-Night Average Noise Level
L_{eq}	Equivalent Noise Level
LRA	Local Responsibility Area
LST	Localized Significance Threshold
MBTA	Migratory Bird Treaty Act
MLD	Most Likely Descendent
MND	Mitigated Negative Declaration
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
$MTCO_2e$	metric tons of carbon dioxide equivalent
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
ND	Negative Declaration
NEPA	National Environment Policy Act
NHD	National Hydrology Dataset

Term	Definition
NHPA	National Historic Preservation Act
NIOSH	National Institute for Occupational Safety and Health
N_2O	nitrous oxide
NO_x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
O_3	ozone
OHP	Office of Historic Preservation
OPR	California Office of Planning and Research
P-C	Production-Consumption
PM	particulate matter
$PM_{2.5}$	particulate matter with a diameter of 2.5 microns or less
PM_{10}	particulate matter with a diameter of 10 microns or less
ppm	parts per million
PPV	peak particle velocity
PRC	Public Resource Code
RCEM	Road Construction Emissions Model
RCPG	Regional Comprehensive Plan and Guide
ROG	reactive organic gases
ROW	right-of-way
RTP/SCS	Regional Transportation Plan/Sustainable Communities Strategy
RWQCB	Regional Water Quality Control Board
USACE	U.S. Army Corps of Engineers
USGS	U.S. Geological Survey
SBCoFD	San Bernardino County Fire Protection District
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCCIC	South Central Coastal Information Center
SCE	Southern California Edison
SGMA	Sustainable Groundwater Management Act
SIP	State Implementation Plan
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	sulfur dioxide
SoCAB	South Coast Air Basin
SoCal Gas	Southern California Gas Company
SOI	sphere of influence
SR	State Route
SRA	Sensitive Receptor Area

Term	Definition
SSC	California Species of Special Concern
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCRs	Tribal Cultural Resources
USC	U.S. Code
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
VHFHSZ	very high fire hazard severity zone
VMT	vehicle miles traveled
WIFIA	Water Infrastructure Finance and Innovation Act
WMP	waste management and diversion plan
WRWRF	Henry N. Wochholz Regional Water Recycling Facility
WSC	Western Science Center
YSMN	Yuhaaviatam of San Manuel Nation Cultural Resources Department
YVRWFF	Yucaipa Valley Regional Water Filtration Facility
YVWD	Yucaipa Valley Water District

1.0 BACKGROUND

1.1 Summary

Project Title:	North Bench Recycled Water System Project
Lead Agency Name and Address:	Yucaipa Valley Water District 12770 Second Street Yucaipa, California 92399
Contact Person and Phone Number:	Jennifer Ares Water Resource Manager Yucaipa Valley Water District (909) 797-5118 jares@yvwd.us
Project Location:	The Project would be located primarily in the City of Yucaipa, with a small portion located within the Oak Glen community of unincorporated San Bernardino County. The first (westernmost) booster station (B-14.1) would be located at the existing Yucaipa Valley Regional Water Filtration Facility (YVRWFF) at 35477 Oak Glen Road, Yucaipa, California 92399. The second booster station (B-16.2) and first reservoir (R-16.2) would be located north of Oak Glen Road approximately 1 mile east of the YVRWFF adjacent to an existing reservoir. The third booster station (B-17.2) and second reservoir (R-17.2) would be located at the eastern end of Lan Franc Road, south of Oak Glen Road. The fourth booster station (R-18.2) and third reservoir (R-18.2) would be located south of Oak Glen Road within undisturbed land. The fourth (easternmost) reservoir (R-20.1) would be constructed south of Oak Glen Road adjacent to an existing reservoir approximately 2 miles east of the first reservoir. A new 3.4-mile pipeline would be constructed in the existing roadway along Oak Glen Road with shorter segments located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites.

General Plan Designation:	City of Yucaipa: IN – Institutional, Right-of-Way, RL – Rural Residential Oak Glen community: RL – Rural Living (R-2.5), RL – Rural Living (RL-5), RL – Rural Living (RL-20), and Agriculture (AG)
Zoning:	City of Yucaipa: Rural Residential – RL-1, Institutional – IN, Right-of-Way Oak Glen community: Agriculture-Agriculture Preserve, Right-of-Way

1.2 Introduction

The Yucaipa Valley Water District (YVWD) is the Lead Agency for this California Environmental Quality Act (CEQA) Initial Study. This Initial Study has been prepared to identify and assess the anticipated environmental impacts of the North Bench Recycled Water System Project (Project) to satisfy CEQA (Public Resources Code [PRC], Section 21000 et seq.) and state CEQA Guidelines (Title 14, California Code of Regulations [CCR] 15000 et seq.). CEQA requires that all state and local government agencies consider the environmental consequences before approving those projects. Yucaipa Valley Water District will use this CEQA Initial Study to determine which CEQA document is appropriate for the Project: Negative Declaration (ND), Mitigated Negative Declaration (MND), or Environmental Impact Report (EIR).

In accordance with CEQA, this Initial Study/Mitigated Negative Declaration (IS/MND) will be circulated for a 30-day public review and comment period. Written comments on the Draft IS/MND should be submitted to:

Jennifer Ares, Water Resources Manager
Yucaipa Valley Water District
12770 Second Street
Yucaipa, California 92399
(909) 790-3301
jares@yvwd.us

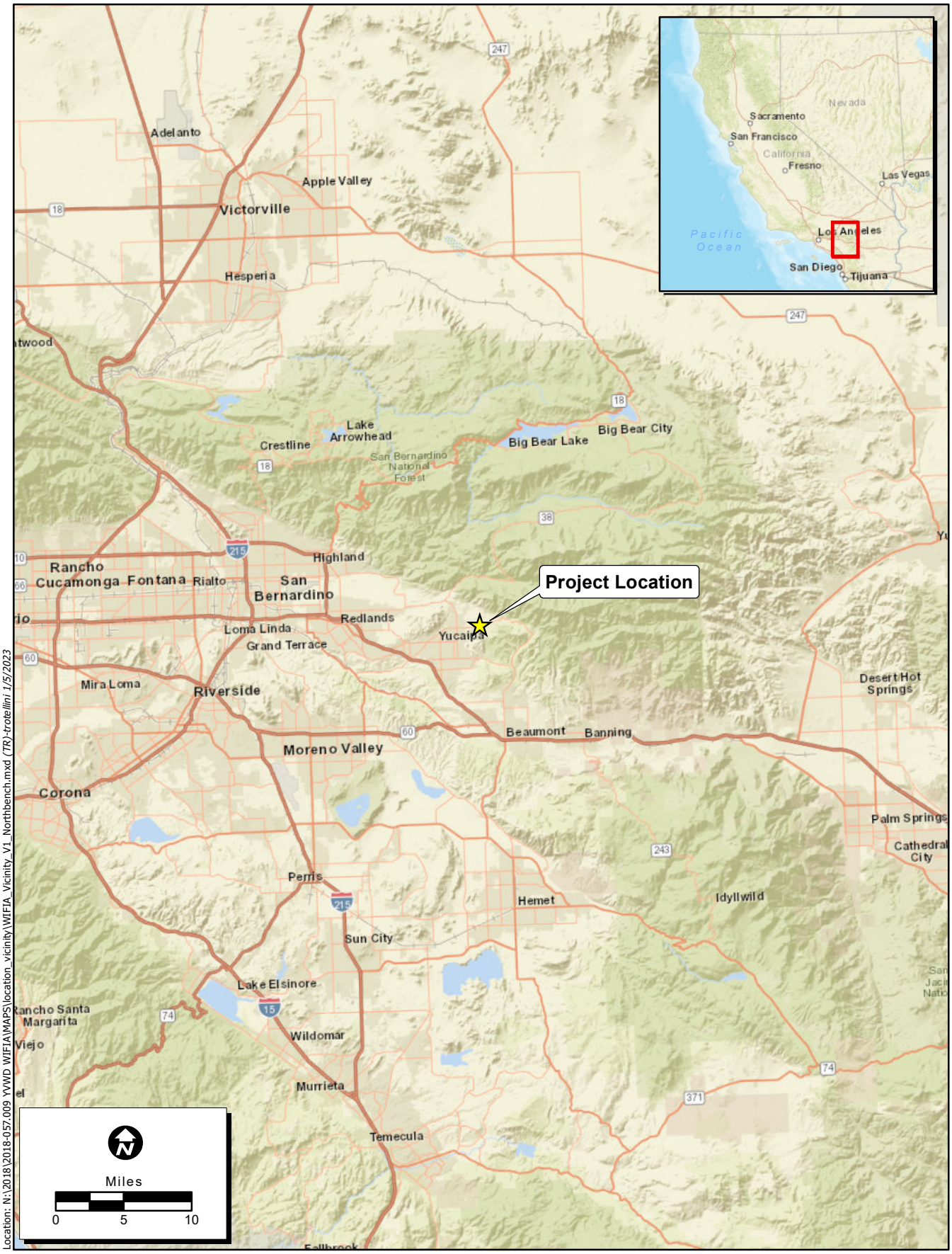
1.3 Surrounding Land Uses/Environmental Setting

The Project Area is primarily located in the City of Yucaipa (Figure 1). A small section of the eastern portion of the Project Area is located within the Oak Glen community of unincorporated San Bernardino County. The City of Yucaipa covers approximately 28 square miles within San Bernardino County, California. The City is bordered by the City of Calimesa to the south and the City of Crafton to the west. The Project would be located in Township 1 South, Range 1 West of the Yucaipa and Forest Falls, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle maps (Figures 1 and 2). Surrounding land uses are summarized in Table 1.3-1.

Table 1.3-1. Surrounding Land Uses

	Land Use Designation	Zoning Designation	Existing Land Use
Project Alignment	Yucaipa: IN – Institutional Right-of-Way RL – Rural Residential Oak Glen community: RL, Rural Living (RL-2.5) RL, Rural Living (RL-5) RL, Rural Living (RL-20) AG, Agriculture	Yucaipa: IN – Institutional Right-of-Way RL – Rural Residential Oak Glen community: AG-AP, Agriculture-Agriculture Preserve Right-of-Way Rural Living-5 Acre Minimum Rural Living-20 Acre Minimum	Water Treatment Facility Paved Road Single-Family Homes Undeveloped
North	Yucaipa: RS – Single Residential CN – Neighborhood Commercial RL – Rural Residential OS – Open Space P – Park Oak Glen community: AG, Agriculture RL, Rural Living (RL-5)	Yucaipa: RS – Single Residential CN – Neighborhood Commercial RL – Rural Residential OS – Open Space P – Park Oak Glen community: AG-AP, Agriculture-Agriculture Preserve Rural Living-5 Acre Minimum	Single-Family Homes Undeveloped Park
West	Yucaipa: CN – Neighborhood Commercial RL – Rural Residential	Yucaipa: CN – Neighborhood Commercial IN – Institutional RS – Single Residential	Grocery Store Single-Family Homes
South	Yucaipa: IN – Institutional RS – Single Residential RL – Rural Residential Oak Glen community: RL, Rural Living (RL-5) AG, Agriculture RL, Rural Living (RL-2.5)	Yucaipa: RS – Single Residential RL – Rural Residential Oak Glen community: AG-AP, Agriculture-Agriculture Preserve	Single-Family Homes Undeveloped
East	Oak Glen community: RL, Rural Living (RL-2.5)	Oak Glen community: AG-AP, Agriculture-Agriculture Preserve Rural Living-5 Acre Minimum Rural Living-20 Acre Minimum	Single-Family Homes Undeveloped

Source: City of Yucaipa 2016a; County of San Bernardino 2007; County of San Bernardino 2022a



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Map Date: 1/5/2023

Sources:

ECORP Consulting, Inc.
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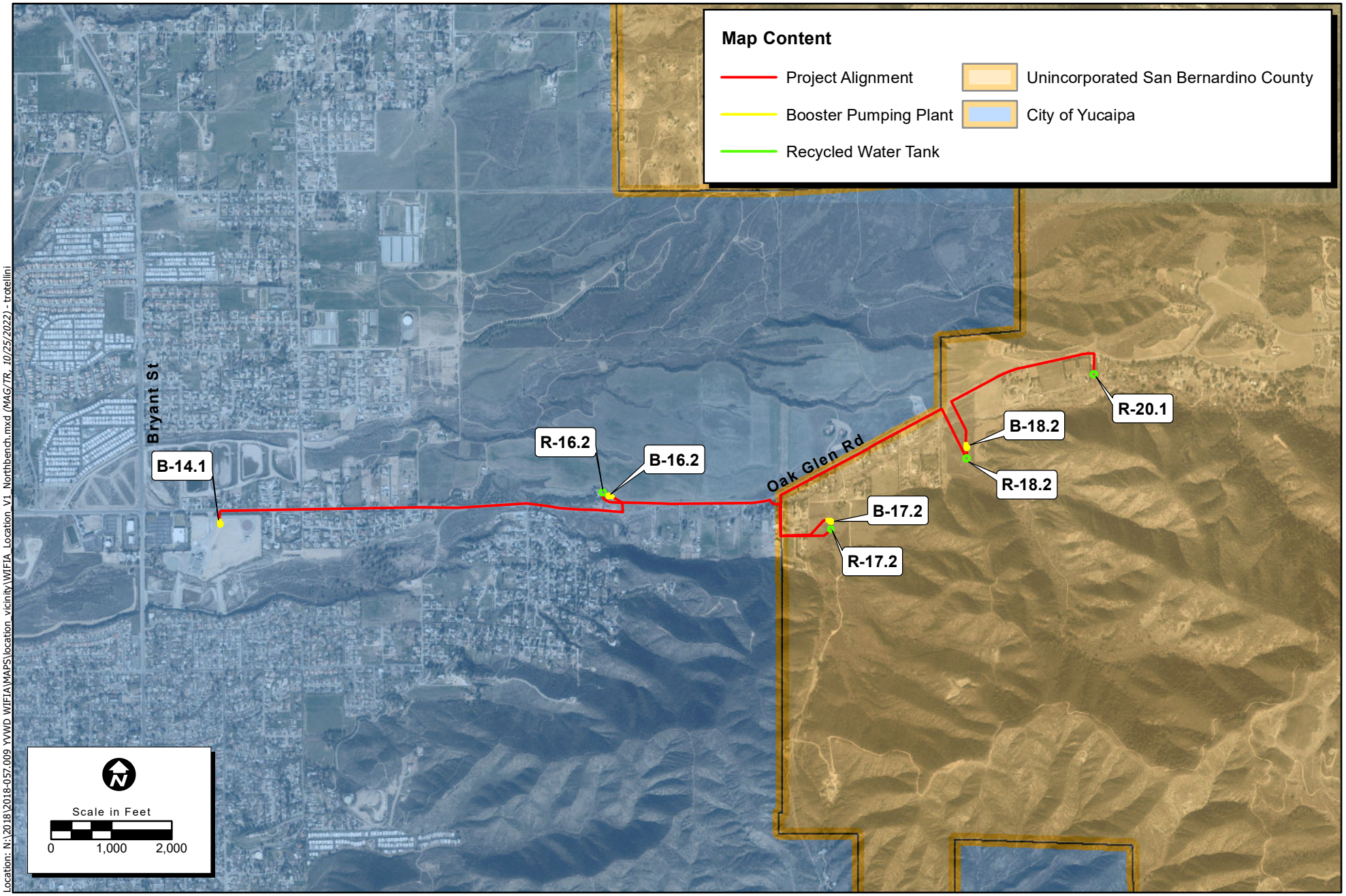
Figure 1. Project Vicinity

2018-057.009 YVWD WIFIA - North Bench RW System



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Map Date: 10/25/2022

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

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Figure 2. Project Location

2018-057.009 WIFIA Projects - North Bench RW System

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2.0 PROJECT DESCRIPTION

2.1 Project Objectives

The YVWD proposes the expansion of the recycled water system in the North Bench area (zones 14 through 20) of the City of Yucaipa and the unincorporated Oak Glen community, San Bernardino County, California. This Project would extend the system in the North Bench area of the City of Yucaipa and the unincorporated Oak Glen community to accommodate existing and planned development which will utilize recycled water for all landscape areas.

2.2 Project Characteristics

The first (westernmost) booster station (B-14.1) would be located at the YVRWFF at 35477 Oak Glen Road, Yucaipa, California within the existing footprint at the water plant (Figure 3). The second booster station (B-16.2) and first reservoir (R-16.2) would be located north of Oak Glen Road approximately 1 mile east of the YVRWFF adjacent to an existing reservoir. The third booster station (B-17.2) and second reservoir (R-17.2) would be located at the eastern end of Lan Franc Road, south of Oak Glen Road. The fourth booster station (B-18.2) and third reservoir (R-18.2) would be located south of Oak Glen Road within undisturbed land. The fourth (easternmost) reservoir (R-20.1) would be constructed south of Oak Glen Road adjacent to an existing reservoir approximately 2 miles east of the first reservoir. A new 3.4-mile pipeline would be constructed in the existing roadway along Oak Glen Road with shorter segments located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites. Diesel emergency backup generators will be included at each booster location. The Project would result in approximately 4.0 acres of disturbance (2.4 acres of pipeline and 1.6 acres of other facilities).

2.3 Project Timing

It is anticipated that construction would take 3 years and would begin in early 2024.

Map Features

- Project Alignment
- Booster Pumping Plant

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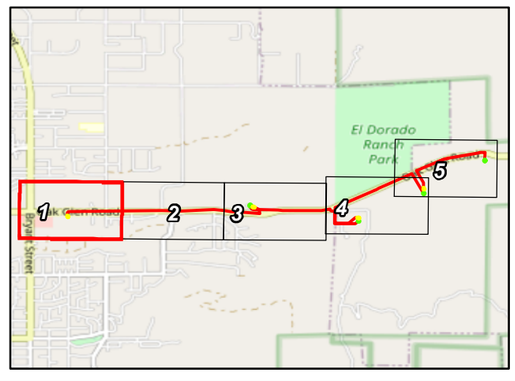

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Map Date: 10/17/2022

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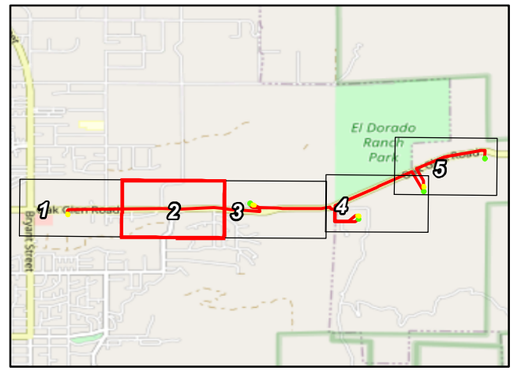
Scale in Feet
0 350

Figure 3. Project Alignment Detail
Sheet 1 of 5
2018-057.009 WIFIA Projects - North Bench RW System

Map Features

Project Alignment

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community (c) OpenStreetMap and contributors, Creative Commons-Share Alike License (CC-BY-SA)



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Map Date: 10/17/2022

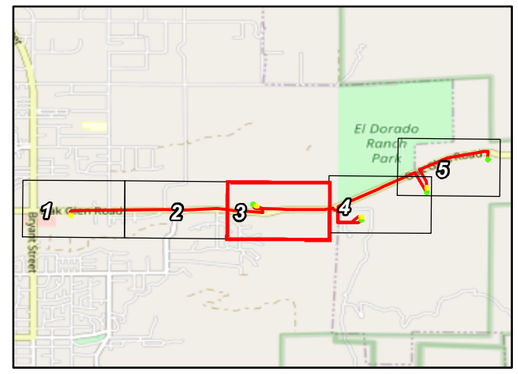
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 350

Figure 3. Project Alignment Detail
Sheet 2 of 5
2018-057.009 WIFIA Projects - North Bench RW System

Map Features

- Project Alignment
- Booster Pumping Plant
- Recycled Water Tank



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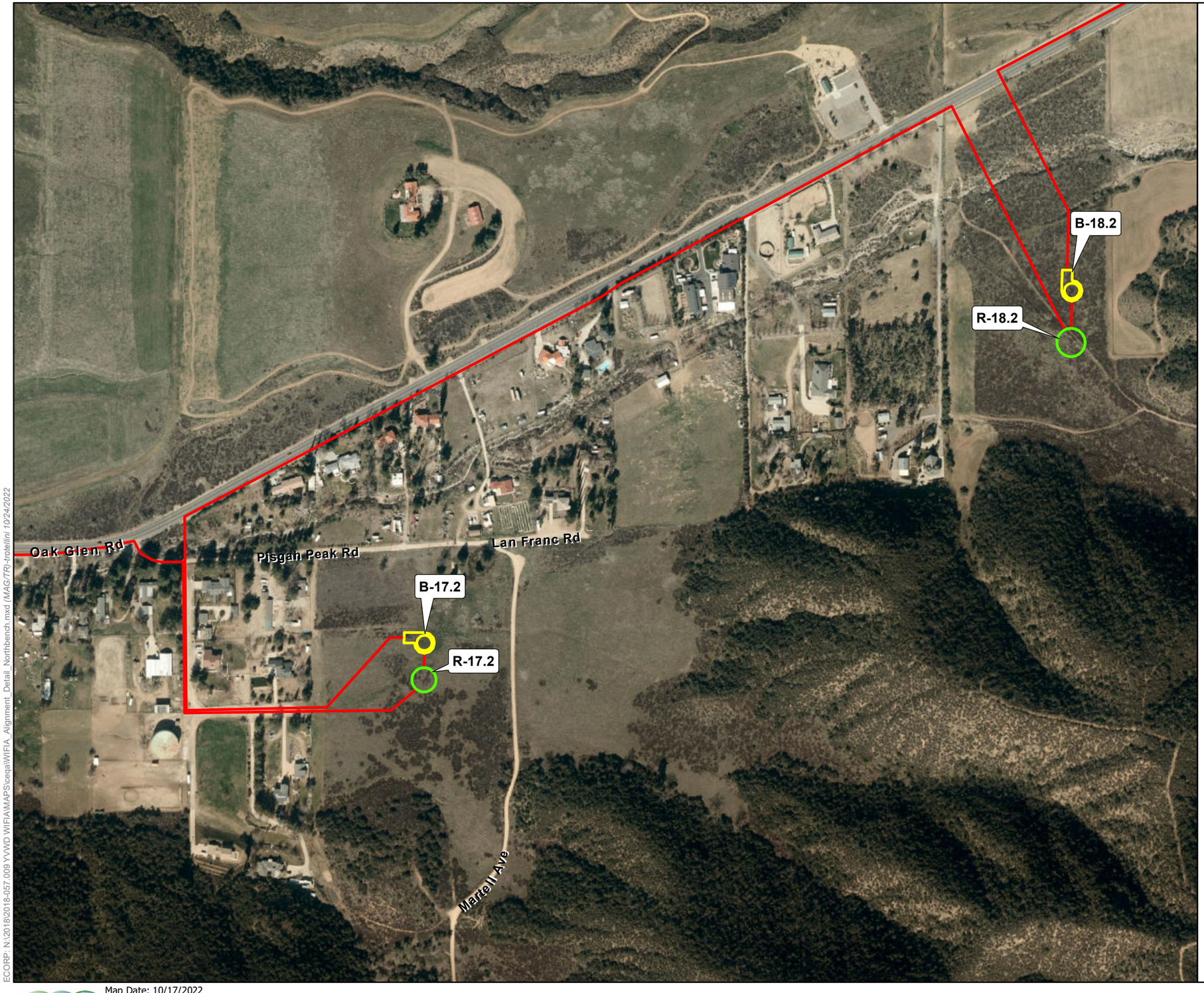
ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 350

Figure 3. Project Alignment Detail
Sheet 3 of 5
2018-057.009 WIFIA Projects - North Bench RW System



Map Features

- Project Alignment
- Booster Pumping Plant
- Recycled Water Tank

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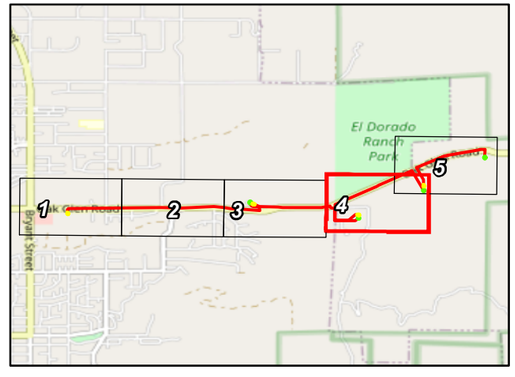

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Map Date: 10/17/2022

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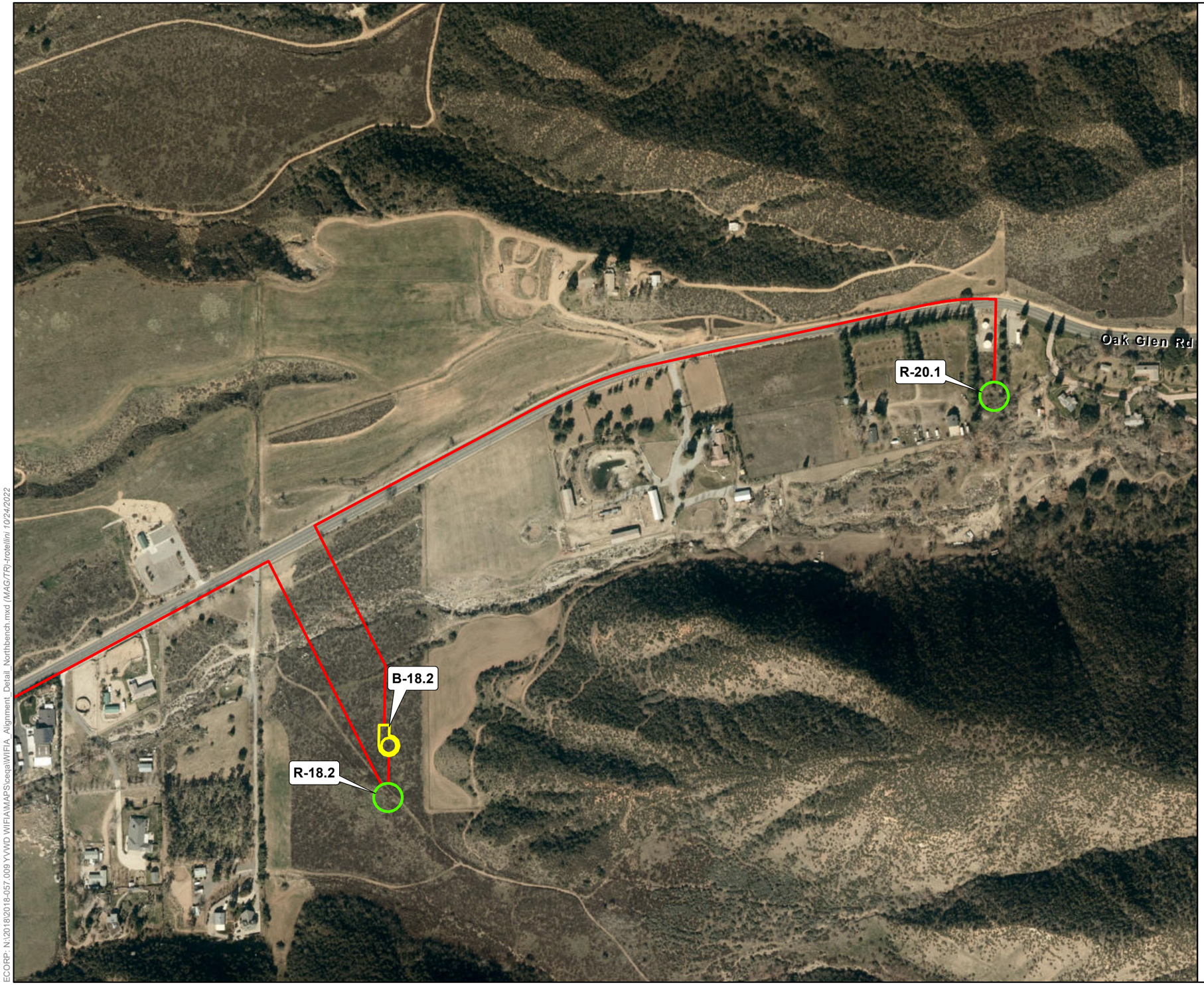
Scale in Feet
0 350

Figure 3. Project Alignment Detail
Sheet 4 of 5
2018-057.009 WIFIA Projects - North Bench RW System



Map Features

- Project Alignment
- Booster Pumping Plant
- Recycled Water Tank

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
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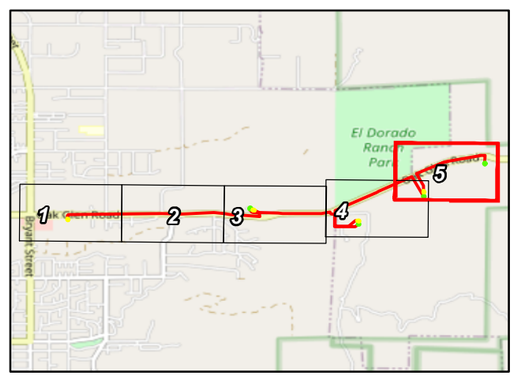

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Map Date: 10/17/2022

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Scale in Feet
0 350

Figure 3. Project Alignment Detail
Sheet 5 of 5
2018-057.009 WIFIA Projects - North Bench RW System

2.4 Regulatory Requirements, Permits, and Approvals

The Proposed Project would require the following approvals and regulatory permits:

- National Environment Policy Act (NEPA) Approval (U.S. Environmental Protection Agency [USEPA])
- Title 22 Permit Amendment (Santa Ana Regional Water Quality Control Board [RWQCB])
- Encroachment Permit for construction in roads (City of Yucaipa and San Bernardino County)

USEPA is identified because of its approval authority over YVWD's Water Infrastructure Finance and Innovation Act (WIFIA) funding application for the Project. The information in this IS/MND will assist with the NEPA determination.

2.5 Consultation With California Native American Tribe(s)

On October 3, 2022, YVWD notified the following California Native American tribes traditionally and culturally affiliated with the geographic area of the Proposed Project:

- Morongo Band of Mission Indians
- Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians)

The Yuhaaviatam of San Manuel Nation (formerly known as the San Manuel Band of Mission Indians) requested additional information regarding the Project on October 31, 2022. YVWD provided the additional information on November 14, 2022. On December 6, 2022, The Yuhaaviatam of San Manuel Nation has concurred with the results of the cultural resource inventory report and included mitigation measures to be implemented. These mitigation measures have been incorporated into this IS/MND. No response was received from the Morongo Band of Mission Indians during the 30-day response period. As of the publication of this Draft IS/MND, no tribes have requested consultation pursuant to PRC Section 21080.3.1. Section 4.18 of this IS/MND provides additional information regarding Tribal Cultural Resources (TCRs).

3.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED AND DETERMINATION

3.1 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the 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:

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

Jennifer Ares
Water Resource Manager

01-05-2023
Date

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4.0 ENVIRONMENTAL CHECKLIST AND DISCUSSION

4.1 Aesthetics

4.1.1 Environmental Setting

The City of Yucaipa is bounded by hills and natural open space, including Crafton Hills, Yucaipa Hills, and San Bernardino National Forest. The "flatlands" at the base of the hills provide locations for residential, commercial, industrial, institutional, and other uses. The City of Yucaipa's major landmarks include Yucaipa Hills, Crafton Hills, and Wildwood Canyon, which offer panoramic vistas. Zanja Peak and other peaks and ridgelines are natural landmarks that overlook the City.

Scenic/view corridors include the major transportation corridors in Yucaipa. Four major roadways, Bryant Street, Yucaipa Boulevard, Wildwood Canyon Road, and Oak Glen Road are designated scenic corridors. These corridors provide unimpeded views of the surrounding mountains, hillsides, prominent ridges, canyons, and valley floor.

Major tributaries converge at Live Oak Canyon, at the southwest portion of the City. Major creeks, including Wilson Creek and Wildwood Creek, drainage channels, and elevated benches are also defining features of the City.

Surrounded by undeveloped hills, Yucaipa is removed from more urbanized areas of the county and the associated glare of lights. The semirural environment and large open space areas contribute a very low level of background lighting (City of Yucaipa 2016a).

Scenic features in the Oak Glen community include the surrounding San Bernardino mountains, San Bernardino National Forest, agricultural orchards, and scenic routes (County of San Bernardino 2020a, County of San Bernardino 2020b).

4.1.1.1 Regional Setting

State and County Scenic Highways

The California Scenic Highway Program protects and enhances the scenic beauty of California's highways and adjacent corridors. The California Department of Transportation (Caltrans) can designate a highway 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.

A portion of Highway 38, which travels from Redlands through Yucaipa to the San Bernardino Mountains is an officially designated scenic highway by the County of San Bernardino and the State of California (Caltrans 2022). The officially designated portion of Highway 38 is located approximately 12 miles northeast of the Project alignment. Oak Glen Road, where it enters the unincorporated area of the County is a county scenic route (County of San Bernardino 2020c).

General Plan

The City of Yucaipa's General Plan establishes six scenic transportation corridors or highways, including Yucaipa Boulevard, Bryant Street, Oak Glen Road, Wildwood Canyon Road, Sand Canyon Road (Yucaipa Boulevard to City limits), Live Oak Canyon Road, and future spine roads in the Freeway Corridor Specific Plan. Each of these roadways offers views of the surrounding hills, mountains, and other natural features (City of Yucaipa 2016a).

To protect scenic resources along these corridors, a Scenic Resources Overlay District is applied to an area extending approximately 200 feet on both sides of the ultimate road right-of-way (ROW) of State, County and City-designated Scenic Highways. Within this area, development is subject to certain standards, including building and structure placement, utilities, access drives, landscaping, roads/walkways/parking, grading, and signage (City of Yucaipa 2016a).

The County of San Bernardino General Plan describes that the existing street system in the Oak Glen community is characterized by secondary highway and local roadways. Oak Glen Road is a secondary highway that is a two-lane road through the Oak Glen community. Oak Glen Road is designated as a scenic route (County of San Bernardino 2007).

4.1.1.2 Visual Character of the Project Area

The Project Area includes the developed YVRWFF, a water treatment facility, as well as a developed YVWD reservoir site, paved roadways, and undeveloped land. The Project Area is surrounded by a commercial business, single-family homes, a park, and undeveloped land.

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?	☐	☐	☒	☐

Less than Significant Impact.

The Project would install reservoirs and booster stations at locations fronting Oak Glen Road and install a 3.4-mile pipeline in the existing roadway along Oak Glen Road, a city and county-designated scenic roadway. Shorter pipeline segments would be located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites. Scenic views in the Project Area consist of views of Crafton Hills and Yucaipa Hills. These views and the visual character of the Project Area would be temporarily degraded by short-term construction activities because equipment, vehicles, building materials, and related activities would be visible during the construction phase of the Project. Additionally, the installation of the pipeline in Oak Glen Road would likely result in temporary road closures or detours. Construction-related activities would be short-term and temporary in nature. Once construction is complete, all construction-related aesthetic impacts would cease.

The B-14.1 booster station and the proposed pipeline from YVWRFF to the B-18.2/R-18.2 booster station/reservoir site lie within 200 feet of Oak Glen Road and therefore would be located within the City's Scenic Resources Overlay District. To be compliant with the intent of the overlay, design considerations can be incorporated to allow development to coexist and not substantially interfere with the preservation of unique natural resources, roadside view, and scenic corridors of such natural resources. According to the City's Municipal Code Section 85.030610 Development Standards, the building and structure placement should be compatible with and should not detract from the visual setting, nor should it obstruct significant views. Additionally, other applicable standards include minimizing ROW access drives, minimizing the removal of native vegetation, especially timber, constructing and routing utilities underground except in situations where natural features prevent the underground siting or where safety considerations necessitate above-ground construction and routing, and constructing above-ground utilities to minimize detrimental effects on the visual setting of the designated area.

The proposed B-14.1 booster station would be located on YVRWFF property near an existing reservoir and would not detract from the visual setting of the surrounding area or obstruct significant views as it would be compatible with existing uses.

The B-16.2/R-16.2 booster station/reservoir site would be located near an existing reservoir and would be partially obstructed by trees and an existing residence on Oak Glen Road. It would not detract from the visual character or views of the surrounding hills.

The B-17.2/R-17.2 and B-booster station/reservoir site would be constructed on undeveloped land with single-family homes to the north and west. The visual character of this undeveloped area would change; however, public views of the site from Oak Glen Road would be partially obstructed by existing residences.

The B-18.2/R-18.2 booster station/reservoir site would be constructed on undeveloped land with single-family homes to the west. The visual character of this undeveloped area would change and the proposed structures would likely be visible from Oak Glen Road.

The R-20.1 reservoir site would be constructed on YVWD land near existing reservoirs. The site is visible from Oak Glen Road; however, it is compatible with existing uses and would not further detract from the visual setting.

In compliance with the development standards set forth in the Scenic Resources Overlay District, the Project would minimize ROW access drives along Oak Glen Road, minimize the removal of native vegetation, and would route the proposed pipelines underground. Therefore, a less than significant impact would occur.

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

No Impact.

There are no officially designated state scenic highways in the vicinity of the Project Area (Caltrans 2022, City of Yucaipa 2016a). A portion of SR-38 is an Eligible State Scenic Highway; however, it is not officially designated. This portion is located approximately 2.25 miles north of the Project Area and the proposed Project improvements would not be visible from this highway. Therefore, no impact would occur.

Except as provided in Public Resources Code Section 21099, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the Project is in an urbanized area, would the Project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐

Less than Significant Impact.

The Project Area is surrounded by a commercial business, single-family homes, a park, and undeveloped land. The Project proposes four booster stations, four reservoirs, and a 3.4-mile pipeline in the existing roadway of Oak Glen Road with shorter segments located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites.

The B-14.1 booster station site, B-16.2/R-16.2 booster station/reservoir site, and the pipeline from YVWRFF to the City limit at Martell Avenue are within the City of Yucaipa and are zoned as IN – Institutional, RL – Rural Residential, and ROW (City of Yucaipa 2016a).

The B-17.2/R-17.2 and B-18.2/R-18.2 booster station/reservoir sites, R-20.1 reservoir site, and the pipeline from the City limit to the R-20.1 reservoir site are within unincorporated San Bernardino County and are zoned as AG-AP, Agriculture-Agriculture Preserve, Rural Living-5 Acre Minimum, Rural Living-20 Acre Minimum, and ROW (County of San Bernardino 2022a).

YVWD, as a special district, is not required to obtain City building and zoning permits as they have authority to self-regulate their own projects. Additionally, the proposed infrastructure is compatible with allowed uses in all zones. Impacts would be less than significant.

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 security lighting for the water storage reservoirs, booster stations, and appurtenant structures. The lighting would be directed downward and would avoid spillage onto adjacent properties. Additionally, the Proposed Project would limit reflective surface areas and the reflectivity of architectural materials used. The reservoir tanks 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 PRC 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 PRC Section 4526 means "…land, other than land owned by the federal government and land designated by the board as experimental forest land, which is available for, and capable of, growing a crop of trees of a commercial species used to produce lumber and other forest products, including Christmas trees. Commercial species shall be determined by the board on a district basis."

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

Agricultural operations in Yucaipa consist of two chicken ranches, a small Christmas tree farm, a seasonal pumpkin patch, and a small winery in the foothills. Grazing is permitted in the open space areas but the cattle are brought in from outside the City. Other than these nonconforming uses, the City no longer has agricultural land use districts that would permit active row crops, ranching, or farming. Limited agricultural uses may coexist or be permitted in areas designated as Rural Living (City of Yucaipa 2016a).

The agriculture land use districts in the Oak Glen community are located in the western portion of the community on both the north and south sides of Oak Glen road (County of San Bernardino 2007). Agriculture and natural resources account for 36 percent of the community's land uses (County of San Bernardino 2020b). Agricultural operations primarily consist of apple orchards, but include other agricultural products such as pumpkins, berries, corn, and Christmas trees. The area also includes ranching (County of San Bernardino 2007).

The California Department of Conservation's (DOC) Farmland Mapping and Monitoring Program (FMMP), compiles important farmland maps pursuant to the provisions of Section 65570 of the California Government Code. According to the FMMP, the Project Area is located on land designated as Grazing Land (land on which the existing vegetation is suited to the grazing of livestock) and Other Land (land not included in any other mapping category) (DOC 2022).

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

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

No Impact.

B-14.1 is located in the existing YVRWFF on land designated as Grazing Land. The B-16.2/R-16.2 booster station/reservoir site is located on land designated as Grazing Land, but it is currently developed as an existing YVWD reservoir site. The B-17.2/R-17.2 and B-18.2/R-18.2 booster station/reservoir sites and the R-20.1 reservoir site would be located within Other Land. The pipeline running along Oak Glen Road would be in the ROW however Oak Glen Road is bordered to the south by Urban and Built-Up Land, Grazing Land, and other Land and bordered to the south by Urban and Built-Up Land, Farmland of Local Importance, Prime Farmland, and Unique Farmland (DOC 2022). The Project Area is not currently used for agriculture and no Prime or Unique Farmlands or Farmland of Statewide Importance is located within the Project . Therefore, no conversion of such farmlands to non-agricultural use would occur. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

No Impact.

According to the California Important Farmland Finder, the Project Area is not mapped as an agricultural preserve subject to a Williamson Act contract (DOC 2022). The Proposed Project would not conflict with zoning for agricultural use or a Williamson Act contract. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒

No Impact.

The Project Area is not zoned for forest land, timberland, or timberland production (DOC 2022). No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact.

The Project Area is not zoned for forest land, timberland, or timberland production (DOC 2022). 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 and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

No Impact.

The Project Area is not currently used for agriculture. No Prime or Unique Farmlands or Farmland of Statewide Importance are located within the Project Area. Development of the Project 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 and no mitigation is required.

4.2.3 Mitigation Measures

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

4.3 Air Quality

This section is based in part on the results of the Air Quality and Greenhouse Gas Assessment performed by ECORP Consulting, Inc. (ECORP) in October 2022 (ECORP 2022a; Appendix A). This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the South Coast Air Quality Management District (SCAQMD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and greenhouse gas (GHG) emissions attributable to the Project and to determine the level of impact the Project would have on the environment.

4.3.1 Environmental Setting

The City of Yucaipa is located within San Bernardino County. The California Air Resource Board (CARB) has divided California into regional air basins according to topographic features. The City of Yucaipa portion of San Bernardino County is located in a region identified as the South Coast Air Basin (SoCAB). The SoCAB occupies the non-desert portions of Los Angeles, Riverside, and San Bernardino counties and all of Orange County. The air basin is on a coastal plain with connecting broad valleys and low hills and 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 USEPA and CARB have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants representing safe levels that avoid specific

adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The six criteria pollutants are ozone (O_3), carbon monoxide (CO), particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO_2), and lead. Areas that meet ambient air quality standards are classified as attainment areas, while areas that do not meet these standards are classified as nonattainment areas. The portion of San Bernardino County encompassing the City of Yucaipa and the Project Area is designated as a nonattainment area for the federal O_3 and particulate matter with a diameter of 2.5 microns or less ($PM_{2.5}$) standards and is also a nonattainment area for the state standards for O_3, $PM_{2.5}$ and particulate matter with a diameter of 10 microns or less (PM_{10}) (CARB 2019).

The local air quality regulating authority in San Bernardino County portion is the 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 Riverside County portion of the SoCAB. The SCAQMD is also responsible for 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, as well as many other activities. All projects are subject to SCAQMD rules and regulations in effect at the time of construction.

The following is a list of noteworthy SCAQMD rules that are required of construction activities associated with the Proposed Project:

Rule 201 & Rule 203 (Permit to Construct & Permit to Operate) – Rule 201 requires a "Permit to Construct" prior to the installation of any equipment "the use of which may cause the issuance of air contaminants . . ." and Regulation II provides the requirements for the application for a Permit to Construct. Rule 203 similarly requires a Permit to Operate.

Rule 212 (Standards for Approving Permits and Issuing Public Notice)- This rule requires the applicant to show that the equipment used of which may cause the issuance of air contaminants or the use of which may eliminate, reduce, or control the issuance of air contaminants, is so designed, controlled, or equipped with such air pollution control equipment that it may be expected to operate without emitting air contaminates in violation of Section 41700, 4170 or 44300 of the Health and Safety Code or of these rules.

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 all forms of visible PM are prohibited from crossing any

property line. This rule is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.

a) 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.

b) All onsite roads will be paved as soon as feasible or watered periodically or chemically stabilized.

c) All material transported offsite will be either sufficiently watered or securely covered to prevent excessive amounts of dust.

d) The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e) 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 1113 (Architectural Coatings) – This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce reactive organic gases (ROG) emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories.

Rule 1401 (New Source Review of Toxic Air Contaminants) – This rule requires new source review of any new, relocated, or modified permit units that emit toxic air contaminants (TACs). The rule establishes allowable risks for permit units requiring permits pursuant to Rules 201 and 203 discussed above.

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.

4.3.2 Air Quality (III) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒

No Impact.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance

standards and market-based programs. Similarly, under state law, the California Clean Air Act (CCAA) 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 Area is located within the SoCAB, which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the federal Clean Air Act (CAA), to reduce emissions of criteria pollutants for which the SoCAB is in nonattainment. In order to reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, CARB, Southern California Association of Governments (SCAG), and the USEPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including 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.) The Project is subject to the SCAQMD's AQMP.

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 for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of 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 Table 4.3-1, 4.3-2, 4.3-3, and 4.3-4, the Proposed Project would result in emissions that would be below the SCAQMD regional and localized thresholds during both construction and operation. Therefore, 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 timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?

As shown in Table 4.3-1 and 4.3-3, the Proposed Project would be below the SCAQMD regional thresholds for construction and operation. 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 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 or not the Proposed Project exceeds the assumptions utilized in preparing the forecasts presented its air quality planning documents. Determining whether or not 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 Yucaipa. Specifically, SCAG's Growth Management Chapter of the Regional Comprehensive Plan and Guide (RCPG) provides regional population forecasts for the region and SCAG's RTP/SCS provides socioeconomic forecast projections of regional population growth. The City of Yucaipa General Plan is referenced by SCAG in order to assist forecasting future growth in Yucaipa.

The Proposed Project Area has a General Plan land use designation of Institutional and Rural Residential. The intent of the Institutional designation is to provide for public and/or quasi-public uses and facilities and compatible uses; the rural residential designation is to provide areas for rural development where single family residential is the primary use, along with conservation of open space, watershed, and habitat areas. light industrial, research and development, support service uses and office-based firms seeking an attractive environment and a prestigious location (City of Yucaipa 2016a). The Project is not proposing to amend the City General Plan, is consistent with all land use designations applied to the Project Area and would not increase the number of people residing or working in the area beyond that anticipated by the General Plan.

The Project is consistent with the City of Yucaipa General Plan and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the RTP/SCS and RCPG. As a result, 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. The City's population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; and these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into their air quality planning efforts, it can be concluded that the Proposed Project would be consistent with the projections. (SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans.) Therefore, the Proposed Project would be considered consistent with the population, housing, and employment growth projections utilized in the preparation of SCAQMD's air quality plans.

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 201, 402, 403, and 1113. SCAQMD Rule 402 prohibits the discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. SCAQMD Rule 403 requires fugitive dust sources to implement Best Available Control Measures for all sources, and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. SCAQMD 1113 requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG emissions from the use of these coatings, primarily by placing limits on the ROG content of various coating categories. 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 AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The Proposed Project is consistent with the land use designation and development density presented in the City's General Plan and therefore, would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP.

In conclusion, the determination of AQMP consistency is primarily concerned with the long-term influence of a project on air quality. The Proposed Project would not result in a long-term impact on the region's ability to meet state and federal air quality standards. The Proposed Project's long-term influence would also be consistent with the goals and policies of the SCAQMD's 2016 AQMP.

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

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐

Less than Significant Impact.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions

contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed significance thresholds would not be considered cumulative considerable.

Air quality impacts were assessed in accordance with methodologies recommended by the SCAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the Road Construction Emissions Model (RCEM), version 9.0.0 as well as the California Emissions Estimator Model (CalEEMod), version 2020.4.0. The RCEM is a spreadsheet-based model that is able to estimate exhaust emissions from heavy-duty construction equipment, haul trucks, and worker commute trips as well as fugitive dust from the construction of a new roadway, road widening, roadway overpass, levee or pipeline projects. The emissions from the pipeline installation component of the Project were calculated with the RCEM. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. The construction-generated air pollutant emissions associated with the construction of the four recycled water reservoirs and booster pumps were calculated using CalEEMod model defaults for San Bernardino County. Operational air pollutant emissions were based on defaults for San Bernardino County provided by CalEEMod.

Regional Construction Significance Analysis

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 construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation. 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 the Proposed Project were calculated using the CARB-approved CalEEMod computer program as well as the RCEM, based on typical construction requirements. See Appendix A for more information regarding the construction assumptions, including construction equipment and duration, 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.

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

Construction Year	Pollutant (pounds per day)					
	ROG	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Pipeline Construction[1]	4.60	40.06	45.07	0.12	6.75	2.78
Reservoirs and Pump Stations Construction[2]	1.65	16.29	14.54	0.04	3.44	1.91
Total Combined	**6.25**	**56.35**	**59.61**	**0.16**	**10.19**	**4.69**
SCAQMD Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1]Source: RCEM version 9.0.0. Refer to Appendix A for Model Data Outputs.
[2]Source: CalEEMod version 2020.4.0. Refer to Appendix A for Model Data Outputs.
Notes: Emissions taken from the season (summer or winter) with the highest output. 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; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. Emission calculations account for the export of 200 cubic yards of soil and 200 cubic yards of demolished asphalt daily from pipeline installation for a total of 105,600 cubic yards of material over the course of construction. Emission calculations also account for the export of 3,565.5 tons of demolished asphalt material from reservoir and pump station construction.

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.

Localized Construction Significance Analysis

The nearest sensitive receptors to the Project Area are residences located approximately 86 feet (26 meters) to the north. Localized Significance Thresholds (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 sensitive receptor area (SRA) for the localized significance thresholds is East San Bernardino Valley, SRA 35. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$.The SCAQMD has produced lookup tables for projects that disturb one, two and five acres. The construction of the four recycled water reservoirs and booster pumps would disturb approximately 1.6 acres of land. The 3.4-mile pipeline installation would disturb a total of approximately 4.0 acres of land. Therefore, the whole of the Project would disturb approximately 5.6 acres of land. Thus, the LST threshold value for a five-acre site was employed from the LST lookup tables. This is conservative since the analysis will only account for the

dispersion of air pollutants over five acres before reaching sensitive receptors, as opposed to accounting for the dispersion of air pollutants over a greater 5.6-acre area. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. As previously stated, the nearest sensitive receptor to the Project Area are residences located approximately 86 feet (approximately 26 meters) north of the Project Area. Therefore, LSTs for receptors located at 25 meters were utilized in this analysis. 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 site.

Table 4.3-2. Construction-Related Emissions (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Pipeline, Reservoir, and Pump Station Construction	53.87	56.12	9.22	4.43
SCAQMD Localized Significance Threshold (5.0 acre of disturbance)	270	2,075	14	9
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

Source: CalEEMod version 2020.4.0. Refer to Appendix A for Model Data Outputs.
Notes: Emissions taken from the season (summer or winter) with the highest output. 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; water exposed surfaces three times daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied.

Table 4.3-2 shows that the emissions of these pollutants on the peak day 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, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would not adversely impact the neighboring receptors in the vicinity of the Project.

Regional Operational Significance Analysis

Once construction is complete, no regular additional daily vehicle trips or personnel would be added to operate or maintain the new facilities. Thus, the Proposed Project would not include the provision of new permanent stationary or mobile sources of criteria air pollutant emissions, and therefore, would generate negligible amounts of criteria emissions from Project operations. The predominate source of operational emissions associated with the Project would be the permit testing of back-up diesel generators. Long-term operational emissions attributable this source of emissions are identified in Table 4.3-3 and are compared to the operational significance thresholds promulgated by the SCAQMD.

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

Emission Source	Pollutant (pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Area	0.03	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Stationary	1.31	3.67	4.76	0.01	0.19	0.19
Total	**1.34**	**3.67**	**4.76**	**0.01**	**0.19**	**0.19**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	0.03	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00
Stationary	1.31	3.67	4.76	0.01	0.19	0.19
Total	**1.34**	**3.67**	**4.76**	**0.01**	**0.19**	**0.19**
SCAQMD Regional Significance Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Exceed SCAQMD Regional Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

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

As shown in Table 4.3-3, the Project's emissions would not exceed any SCAQMD thresholds for any criteria air pollutants during operation.

The San Bernardino County portion of the SoCAB is listed as a nonattainment area for federal O_3 and PM_{10} standards and is also a nonattainment area for the state standards for O_3 and PM_{10} (CARB 2019). O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely affect the human respiratory system. As shown in Table 4.3-3, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NO_x, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SCAQMD is contained in the SCAQMD 2016 AQMP. The AQMP provides control measures that reduce emissions to attain federal ambient air quality standards by their applicable deadlines such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SCAQMD are designed to meet the objectives of the AQMP and in doing so achieve attainment status with state and federal standards. As noted above, the Project would increase the emission of these pollutants, but would not exceed the thresholds of significance established by the SCAQMD for purposes of reducing air pollution and its deleterious health effects.

Localized Operational Significance Analysis

According to the SCAQMD localized significance threshold methodology, LSTs would apply to the operational phase of a project only if the project includes stationary sources or attracts mobile sources that may spend long periods queuing and idling at the site (e.g., warehouse or transfer facilities). The Project would include four back-up diesel generators; therefore, in the case of the Proposed Project, the operational phase LST protocol is applied. Operational LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$.

The nearest sensitive receptors to the Project Area are residences located approximately 86 feet (26 meters) to the north. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, LSTs for receptors located at 25 meters were utilized in this analysis.

For this Project, the appropriate SRA for the localized significance thresholds is East San Bernardino Valley, SRA 35. As described, the SCAQMD has produced lookup tables for projects under five acres. The LST threshold value for a five-acre site was employed from the LST lookup tables. For a worst-case scenario assessment, the emissions shown in Table 4.3-4 include all "onsite" project-related stationary (area and offroad) sources.

Table 4.3-4. Operational-Related Emissions Attributable to Project Buildout (Localized Significance Analysis)

Activity	Pollutant (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Onsite Emissions (Summer)	3.67	4.76	0.19	0.19
Onsite Emissions (Winter)	3.67	4.76	0.19	0.19
SCAQMD Localized Significance Threshold	270	2,075	*4*	*3*

Table 4.3-4. Operational-Related Emissions Attributable to Project Buildout (Localized Significance Analysis)				
Activity	**Pollutant (pounds per day)**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
(5.0 acre of disturbance)				
Exceed SCAQMD Localized Threshold?	**No**	**No**	**No**	**No**

As shown in Table 4.3-4, the emissions of these pollutants on the peak day of operations would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, significant impacts would not occur concerning LSTs during operational activities. This impact is less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐

Less than Significant Impact.

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors 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 age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptor to the Project Area is a residence located approximately 86 feet to the north.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Project-generated emissions of diesel particulate matter (DPM), ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The portion of the SoCAB which encompasses the Project Area is designated as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3 and PM_{10} standards (CARB 2019). Thus, existing O_3, PM_{10}, and $PM_{2.5}$ levels in the SoCAB are at unhealthy levels during certain periods. However, as shown in Table 4.3-1 and Table 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 (ROG or NOx)

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 (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM_{10} exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM. As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SCAQMD's thresholds. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants. Furthermore, the Project has been evaluated against the SCAQMD's LSTs for construction. As previously stated, LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative and can be used to assist lead agencies in analyzing localized impacts associated with Project-specific level of proposed projects. 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*. As shown in Table 4.3-2, the emissions of pollutants on the peak day of construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Thus, the fact that onsite Project construction emissions would be generated at rates below the LSTs for NO_x, CO, PM_{10}, and $PM_{2.5}$ demonstrates that the Project would not adversely impact vicinity sensitive receptors.

Operational Air Contaminants

In 2005, CARB issued a guidance document on air quality and the location of sensitive land uses in proximity to sources of air toxins. The main health concern related to air quality is the increased exposure of nearby sensitive receptors to DPM. DPM is also the primary TAC of concern for construction activity. As previously described, the Project Area is approximately 86 feet from the nearest sensitive receptor. However, the Project is not anticipated to generate any truck trips and would not be a substantial source of DPM. As such, the Project would not contribute to adverse health impacts associated with operational generated air contaminants.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams per mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SoCAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in SCAQMD's *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of southern California. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District, the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000

vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

Once constructed, the proposed facilities would instigate regular daily traffic trips. Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values.

This impact is less than significant, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Less than Significant Impact.

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

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite 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; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. 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.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources.

Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

According to the SCAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include agriculture (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.

This impact is less than significant, and no mitigation is required.

4.3.3 Mitigation Measures

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

4.4 Biological Resources

This section is based on the analysis and recommendations presented in the Biological Technical Report (BTR) prepared for the Proposed Project (ECORP 2022b, Appendix B). ECORP prepared the BTR to identify potential biological resource constraints and ensure compliance with state and federal regulations regarding listed, protected, and sensitive species.

ECORP biologists performed a literature review using the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2022a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2022) to determine the special-status plant and wildlife species that have been documented near the Project Area. ECORP searched CNDDB and CNPSEI records within the Project Area boundaries as depicted on USGS 7.5-minute Yucaipa and Forest Falls topographic quadrangles, plus the surrounding ten topographic quadrangles including Harrison Mountain, Keller Peak, Big Bear Lake, Moonridge, San Gorgonio Mountain, Cabazon, Beaumont, El Casco, Sunnymead, and Redlands. The CNDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2022b);
- Special Animals List (CDFW 2022c);
- The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012);
- The Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009); and
- various online websites (e.g., Calflora 2022; USFWS 2022b).

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

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, or are protected under either the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA);
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project Area based on the following guidelines:

- **Present:** The species was observed in the Project Area during a site visit or focused survey.
- **High:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.
- **Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occur in the Project Area.
- **Low:** Limited or marginal habitat for the species occur within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.
- **Presumed Absent:** Species was not observed during a site visit (if it was a species expected to be observed) or during focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project Area.

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

A review of the Natural Resources Conservation Service (NRCS 2022), National Wetlands Inventory (NWI; (USFWS 2022a), National Hydrology Dataset (NHD; USGS 2022), and the corresponding USGS topographic

maps was also conducted to determine if there were any blue line streams or drainages present on the Project Area that potentially fall under the jurisdiction of either federal or state agencies.

ECORP conducted the biological reconnaissance survey on September 13, 2022, and summarized the results of the survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors) in the BRT (ECORP 2022b).

4.4.1 Environmental Setting

The City of Yucaipa lies in a transition zone between the valley floor and slopes of the San Bernardino National Forest. Significant natural open space areas lie to the west (Crafton Hills), east (Wildwood Canyon State Park), and south (San Timoteo Canyon natural areas in Calimesa and Redlands). These areas are also linked to the San Gorgonio Wilderness to the east (City of Yucaipa 2016a).

4.4.1.1 Vegetation Communities

The City of Yucaipa's location in a transition zone supports diverse land cover. While most of the interior of the community is urbanized, the surrounding areas are relatively undisturbed. Several scrub communities are found in Crafton Hills, Live Oak Canyon, North Bench, and Wildwood Canyon. Three chaparral communities cover Crafton Hills and Yucaipa Hills. Forest covers parts of Wildwood Canyon and valley grasslands populate hillsides. Sensitive vegetation communities identified in Yucaipa include Riversidian alluvial fan sage scrub, southern sycamore alder riparian woodland, southern cottonwood riparian woodland, southern coast live oak riparian forest, southern riparian scrub and southern riparian forest, southern willow scrub, and canyon live oak ravine forest (City of Yucaipa 2016a).

The Oak Glen community is within the County's Mountain and Valley Regions; however, the Project Area lies within the eastern boundary of the Valley Region. Several vegetation community and land cover types are found in the Valley Region including agriculture, coastal scrub, developed and disturbed areas, native grassland, nonnative grassland, riparian forest and woodland, riparian scrub, Riversidian alluvial fan sage scrub, undifferentiated chapparal scrub, and upland walnut woodlands and forests (Dudek 2019).

Vegetation communities present in the Project Area include California buckwheat scrub and nonnative grassland. Additionally, two land cover types, disturbed and developed, were present within the Project alignment (ECORP 2022b).

California Buckwheat Scrub

California buckwheat scrub habitat is present at the B-17.2/R-17.2 and B-18.2/R-18.2 booster station/reservoir sites, located within undeveloped land south of Oak Glen Road. The B-17.2/R-17.2 booster station/reservoir site is located south of Chagall Road and east of Lan Franc Road toward the center of the Project alignment. The second location with B-18.2 and R-18.2 occurs in the eastern portion of the Project alignment where the alignment changes from a northwest to a southeast direction. This community is typically dominated or co-dominated by California buckwheat (*Eriogonum fasciculatum*). Vegetation at the time of survey ranged from an intermittent to continuous canopy with shrubs less than 4 feet tall. Plant species within this community that were present in the Project Area include Menzies'

fiddleneck (*Amsinckia menziesii*), bromegrass (*Bromus diandrus*), cheatgrass (*Bromus tectorum*), California buckwheat, and slender buckwheat (*Eriogonum gracile*) (ECORP 2022b).

Nonnative Grassland

Nonnative grassland was present adjacent to the disturbed land cover and occurs north of Oak Glen Road at the B-16.2/R-16.2 booster station/reservoir site, in an area adjacent to an existing YVWD water facility's access road. Nonnative grassland communities are largely devoid of native vegetation due to human disturbance and are dominated by open areas of nonnative grasses including nonnative weedy and ruderal vegetation. Vegetation height at the time of the survey ranged from approximately 1 foot to 3.5 feet. Plants present in this community onsite included primarily nonnative grass species such as wild oat (*Avena fatua)*, bromegrass, and cheatgrass. Soils within this community appeared mechanically disturbed (e.g., disced) and were loose and friable at the time of the survey (ECORP 2022b).

Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. The disturbed designation indicates a location that has experienced disturbances, typically associated with human activities. Disturbed areas may be actively maintained to be free of vegetation or have been compacted or disked to such a degree that native vegetation is very sparse. Disturbed habitat was identified north and south of Oak Glen Road in two areas adjacent to an existing YVWD water facility (B-16.2/R-16.2 booster station/reservoir and R-20.1 reservoir sites). This land cover is present on an isolated slope adjacent to an existing water tank. This patch was surrounded by nonnative grassland to the east. It is likely that this disturbed area had been cleared and graded in the past. The disturbed habitat was largely devoid of native vegetation was dominated by non-native weedy and ruderal vegetation. Plants present in this land cover type within the Project Area included non-native weedy species such as black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), short-podded mustard (*Hirschfeldia incana*), and Russian thistle (*Salsola tragus*) but also included a few native species including ragweed (*Ambrosia* sp.), California buckwheat, and phacelia (*Phacelia* sp.). One nonnative sapling, tree tobacco (*Nicotiana glauca*), was present within in this land cover type and was approximately 10 feet tall at the time of the survey (ECORP 2022b).

Developed

The majority of the Project Area occurs within the existing paved road ROW and consists of developed land cover. Developed is not a vegetation classification, but rather a land cover type. Areas identified as developed have been constructed upon or otherwise physically altered to an extent that natural vegetation communities are no longer supported. Areas classified as developed were heavily disturbed due to paved roads and low to medium-density residential development with some commercial development. Portions of the developed areas in the Project Area contained small strips of ornamental and landscaped vegetation. The B-14.1/R-14.1 booster station/reservoir and R-20.1 reservoir sites, as well as the existing public ROW, contained developed land cover (ECORP 2022b).

4.4.1.2 Wildlife

The City of Yucaipa provides habitat for common and special-status species of invertebrates, amphibians, reptiles, birds, and mammals. Common bird species in the area include California towhee (*Melozone crissalis)*, spotted towhee *(Pipilo maculatus)*, western meadowlark *(Sturnella neglecta)*, California quail *(Callipepla californica)*, Bewick's wren *(Thryomanes bewickii),* Bullock's oriole *(Icterus bullockii)*, and rufous-crowned sparrow *(Aimophila ruficeps)*. The City also supports a variety of raptor species, including numerous species of hawks (City of Yucaipa 2016a).

The County's Valley Region, which includes the Project alignment in the City and in the Oak Glen community, provides habitat for common and special status species such as cactus wren (*Campylorhynchus brunneicapillus)*, California gnatcatcher *(Polioptila californica)*, coyote (*Canis latrans*), American badger *(Taxidea taxus),* and mule deer (*Odocoileus hemionus*) (Dudek 2019).

Wildlife species observed and detected in the Project Area, or adjacent, were characteristic of California buckwheat scrub, nonnative grassland, and disturbed habitat as well as developed areas. Four mammal species were detected on and in the vicinity of the Project Area: coyote, Botta's pocket gopher (*Thomomys bottae*), mule deer, and California ground squirrel (*Otospermophilus beecheyi*). Eight bird species were also detected on and in the vicinity of the Project Area, including red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), acorn woodpecker (*Melanerpes formicivorus*), California towhee, and European starling (*Sturnus vulgaris*). Due to the level of human activity and majority of the Project alignment occurring within developed areas, the property represents relatively low-quality habitat for most wildlife species (ECORP 2022b).

4.4.1.3 Critical Habitat

The Project Area is not located within any USFWS-designated critical habitat. Southwestern willow flycatcher designated critical habitat is present approximately 0.02 mile south of the Project Area on the east end of the alignment. Impacts are not expected to the critical habitat because the critical habitat is not in the immediate vicinity of the Project Area (ECORP 2022b).

4.4.1.4 Soils

According to the U.S. Department of Agriculture (USDA)'s Natural Resources Conservation Science (NRCS) Web Soil Survey, six soil types are located within the Project Area and on land adjacent to the ROW. These soil types are Soboba gravelly loamy sand (SoC), 0 to 9 percent slopes; Oak glen gravelly sandy loam (OgD), 9 to 15 percent slopes; Saugus sandy loam (ShF), 30 to 50 percent slopes; Greenfield sandy loam (GtC), 2 to 9 percent slopes; Hanford coarse sandy loam (HaC), 2 to 9 percent slopes; and Tujunga loamy sand (TuB), 0 to 5 percent slopes (NRCS 2022).

4.4.1.5 State or Federally Protected Wetlands and Waters of the U.S.

A review of the NWI showed one mapped aquatic feature (Oak Glen Creek) within the Project Area. The Project pipeline connecting Reservoirs R-17.2 and R-18.2 and Boosters B-17.2 and B-18.2 cross this aquatic feature in four location sites. The NWI mapping designation (R4SBC) indicated Riverine, Intermittent Streambed that is Seasonally Flooded. The USGS topographic map shows a mapped blue-line stream in the same location as the aquatic drainage feature mapped within the NWI (ECORP 2022b).

4.4.1.6 Special-Status Plants

In the broader region that includes the City of Yucaipa, 106 special-status plant species are known to occur, but only 44 species occur at the City's elevation range and only 5 have been identified in the City. These species include Yucaipa onion (*Allium marvinii*), Plummer's mariposa lily (*Calochortus pummerae*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), slender-horned spineflower (*Dodecahema leptoceras*), and Parish's checkerbloom (*Sidalcea hickmanii* ssp. *parishii*). No critical habitats for these or other special-status plant species have been designated in the City of Yucaipa (City of Yucaipa 2016a).

The County's Valley Region, which includes the Project alignment in the City and the Oak Glen community, has 31 documented special-status plant species, including 3 federally and state listed species. These species include Nevin's barberry (*Berberis nevinii*), Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*), and slender-horned spineflower (Dudek 2019).

The literature review and database searches identified 85 special-status plant species that could occur near the Project Area. The Project Area was evaluated for suitable habitat that could support any of the special-status plant species. Because the majority of the alignment is located within paved roadways, the discussion of the potential for special-status plant species to occur applies only to the four areas of the alignment that are located in undeveloped or partially developed areas north and south of Oak Glen Road. Of the 85 special-status plants identified in the literature review, eight species were determined to have a high potential, two species have a moderate potential, and one species has a low potential to occur in the Project Area. The remaining species identified in the literature review are presumed absent from the Project Area. No special-status plant species were observed during the biological survey (ECORP 2022b).

Plant Species with a High Potential to Occur

Chaparral Sand-Verbena (Abronia villosa var. *Aurita)*

Chaparral sand-verbena is not a federally or state-listed species. The plant species is an annual herb and is typically found in chaparral, coastal scrub, and desert dune habitats. The species is often found in sandy soils. Suitable coastal scrub habitat is present in the Project Area at the proposed locations of the 17.2 and 18.2 booster/reservoir sites in the California buckwheat scrub community. One recent record (Occurrence # 69) from 2009 occurs approximately 3 miles away (CDFW 2022a). Due to the suitable coastal scrub habitat present in the Project Area in two locations and the recent record within 5 miles, this species has a high potential to occur in the Project Area.

Nevin's Barberry (Berberis nevinii)

Nevin's barberry is a federally (endangered) and state-listed (endangered) species. The plant species is an annual herb that is endemic to California. The species is typically found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitat and is often in sandy or gravelly soils. Suitable coastal scrub habitat is present in the Project Area at the 17.2 and 18.2 booster/reservoir sites, where California buckwheat scrub is present. One recent record (Occurrence # 4) from 2009 occurs approximately 3 miles away from the Project Area (CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project Area, this species has been determined to have a high potential to occur in the Project Area.

Parry's Spineflower (Chorizanthe parryi var. *parryi)*

Parry's spineflower is not a federally or state-listed species. The plant species is an annual herb that is endemic to California. This species is typically found in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland habitat. The species is generally associated with larger alluvial plains and is often found in sandy or rocky openings. Suitable coastal scrub habitat occurs in the Project Area in the two areas with California buckwheat scrub (17.2 and 18.2 booster/reservoir sites). Twenty-two recent records have been recorded within 5 miles of the Project Area with the most recent ones (Occurrence # 5, 138, and 151) being from 2018, located approximately 4 miles away (Occurrence # 5 and 138) and 2 miles away (Occurrence # 151; CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project Area, this species has been determined to have a high potential to occur in the Project Area.

White-Bracted Spineflower (Chorizanthe xanti var. *leucotheca)*

White-bracted sunflower is not a federally or state-listed species. It is an annual herb that is endemic to the Coachella Valley. This species is typically found in coastal scrub (alluvial fans), Mojavean desert scrub, and pinyon and juniper woodland with sandy or gravelly soils. The Project Area contains suitable coastal scrub habitat in the areas containing California buckwheat scrub (17.2 and 18.2 booster/reservoir sites). This species has been documented near the Project Area 12 times within the past 20 years with the closest record occurring less than 1 mile from the Project Area (Occurrence # 34) in 2011 (CDFW 2022a). Due to the suitable coastal scrub habitat present in the Project Area in two locations and the recent records documented within 5 miles, this species has a high potential to occur in the Project Area.

Mojave Tarplant (Deinandra mohavensis)

Mojave tarplant is a state-listed (endangered) species. The plant species is an annual herb that is endemic to California. This species is typically found in chaparral, coastal scrub, and riparian scrub habitats and is often found in mesic soils. Suitable coastal scrub habitat occurs in the Project Area in the two areas with California buckwheat scrub (17.2 and 18.2 booster/reservoir sites). There are two recent records (Occurrences # 8 and 78) located approximately 4.5 and 4 miles away respectively from 2003 and 2012 (CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the recent documented records of the species within 5 miles of the Project Area, this species has been determined to have a high potential to occur in the Project Area.

California Satintail (Imperata brevifolia)

California satintail is not a federally or state-listed species. The plant species is a perennial rhizomatous herb and is typically found in chaparral, coastal scrub, Mojavean desert scrub, alkaline meadows and seeps, and riparian scrub habitats. This herb species is often found in mesic soils. The Project Area contains suitable coastal scrub habitat in the areas containing California buckwheat scrub (17.2 and 18.2 booster/reservoir sites). One recent record (Occurrence # 1040) from 2010 occurs approximately 3 miles southeast of the Project Area (CDFW 2022a). Due to the suitable coastal scrub habitat present in the Project Area in two locations and the recent record documented within 5 miles, this species has a high potential to occur in the Project Area.

Salt Spring Checkerbloom (Sidalcea neomexicana)

Salt spring checkerbloom is not a federally or state-listed species. It is a perennial herb and is typically found chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas in mesic, alkaline soils. The Project Area contains suitable coast scrub habitat within the California buckwheat scrub vegetation community. The 17.2 and 18.2 booster/reservoir sites are the two areas within the Project Area that contain this suitable habitat. One recent record occurs within 5 miles with the record occurring less than 1 mile southeast of the Project Area in 2011 (Occurrence # 23; CDFW 2022a). Due to the suitable coastal scrub habitat present in the Project Area and the recent record within 5 miles, this species has a high potential to occur in the Project Area.

San Bernardo Aster (Symphyotrichum defoliatum)

San Bernardino aster is not a federally or state-listed species. It is a perennial rhizomatous herb that is endemic to California. This species is typically found in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and valley and foothill grassland (vernally mesic) habitat. The species is often found in disturbed areas and near ditches, streams, or springs. Suitable coastal scrub habitat occurs in the Project Area in the two areas with California buckwheat scrub (17.2 and 18.2 booster/reservoir sites). The 18.2 booster/reservoir site also has a small stream, Oak Glen Creek, running through it that could offer marginally suitable habitat. This species was documented approximately 2 miles away in 2010 (Occurrence # 105; CDFW 2022a). Based on the presence of suitable coastal scrub habitat and the documented record of the species within 5 miles of the Project Area, this species has a high potential to occur in the Project Area.

Plant Species with a Moderate Potential to Occur

The Project Area provides marginal or limited amounts of habitat (including soils and elevation factors) in the disturbed nonnative grassland community and recently documented observations occur within 5 miles of the Project Area; or a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area. Two plant species, Jaeger's milk-vetch (*Astragalus pachypus* var. *jaegeri*) and Mesa horkelia (*Horkelia cuneata* var. *puberula*) were found to have a moderate potential to occur:

Plant Species with a Low Potential to Occur

Sonoran maiden fern (*Thelypteris puberula* var. *sonorenis*) has a low potential to occur in the Project Area because limited or marginal habitat for these species occurs on site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

4.4.1.7 Special-Status Wildlife

Forty-six special-status wildlife species are known to occur within the region, however only 7 have occurred in the City, including orange-throated whiptail (*Aspidoscelis hyperythrus*), Swainson's hawk (*Buteo swainsoni*), white-tailed kite (*Elanus leucurus*), bald eagle (*Haliaeetus leucocephalus*), lesser long-nosed bat (*Leptonycteris yerbabuenae*), western yellow bat (*Lasiurus xanthinus*), and northwestern San Diego pocket mouse (*Chaetodipus fallax*) (City of Yucaipa 2016a).

Special-status wildlife species known to occur in the Valley Region include coastal California gnatcatcher (*Polioptila californica californica*), least Bell's vireo (*Vireo bellii pusillus*), white-tailed kite, golden eagle (*Aquila chrysaetos*), Santa Ana sucker (*Catostomus santaanae*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Stephens' kangaroo rat (*Dipodomys stephensi*), and Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*) (Dudek 2019).

The literature review and database searches identified 49 special-status wildlife species that could occur near the Project Area. The Project Area was evaluated for suitable habitat that could support any of the special-status wildlife species. One wildlife species was found to have a high potential to occur, 8 have a moderate potential to occur, and 10 have a low potential to occur in the Project Area. The remaining species are presumed absent from the Project Area. No special-status wildlife species were observed during the biological survey (ECORP 2022b).

Wildlife Species with a High Potential to Occur

Northwestern San Diego Pocket Mouse (Chaetodipus fallax fallax)

Northwestern San Diego pocket mouse is a CDFW SSC that is typically found in sandy desert fans and shrub communities such as coastal sage scrub, chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland habitats. Suitable habitat for this species is present in the California buckwheat scrub and nonnative grassland habitats in the Project Area. Nine records of this species are documented within 5 miles of the Project Area with the closest record being 2 miles away in 2016 (CDFW 2022a). Due to the presence of suitable habitat for this species and the recent documented records near the Project Area, this species has been determined to have a high potential to occur within the California buckwheat scrub and nonnative grassland habitats in the Project Area.

Wildlife Species with a Moderate Potential to Occur

The Project Area provides marginal or limited amounts of habitat (including soils and elevation factors) onsite in the California buckwheat scrub and nonnative grassland communities and recently documented observations occur within 5 miles of the Project Area; or a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area. Eight special-status wildlife species were found to have a moderate potential to occur in the Project Area, including California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), loggerhead shrike (*Lanius ludovicianus*), purple martin (*Progne subis*), western yellow bat (*Lasiurus xanthinus*), San Diego desert woodrat (*Neotoma lepida intermedia*), and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*).

Wildlife Species with a Low Potential to Occur

Ten species have a low potential to occur in the Project Area because limited or marginal habitat for these species occurs onsite and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search. These species include western spadefoot (*Spea hammondii*), red-diamond rattlesnake (*Crotalus ruber*), burrowing owl (*Athene cunicularia*), golden eagle, Swainson's hawk (*Buteo swainsoni*), white-tailed kite, coastal California gnatcatcher, yellow warbler (*Setophaga petechia*), pallid bat (*Antrozous pallidus*), and American badger.

4.4.1.8 Wildlife Movement Corridors

Wildlife corridors allow wildlife to move between open space areas. The City of Yucaipa is surrounded on three sides by regional wildlife corridors. Several potential wildlife corridors may exist in the City. Crafton Hills and Wildwood Canyon connect the San Bernardino National Forest and San Gorgonio Wilderness. Ridgelines, canyons, and creek beds could also be used as local travel routes for wildlife to resources in a smaller, more defined area. Oak Glen Creek, which intersects the Project Area at Oak Glen Road is considered a potential local wildlife linkage (City of Yucaipa 2016a).

The Project Area was assessed for its ability to function as a wildlife corridor. Most of the Project Area is located within the existing paved public ROW of Oak Glen Road. The existing ROW portion of the Project Area as well as the proposed locations of 14.1 booster/reservoir site and the 20.1 reservoir site are bordered by residential and commercial development which greatly reduces the areas' value as a wildlife movement corridor. The proposed locations of the 17.2 and 18.2 booster/reservoir sites likely provide wildlife movement opportunities because they consist of open and unimpeded land. In addition, the shrubs in these areas could provide some cover for larger animals. Although most of the Project is within the existing paved road ROW, the surrounding area north of much of Oak Glen Road is open and unimpeded land. Wildlife could cross the Project Area on the paved road in this area. Although the Project is situated along Oak Glen Creek, this drainage would not provide movement corridors for wildlife. Additionally, the disturbances from vehicles on the paved road ROW (Oak Glen Road) would likely deter wildlife from moving through the area at this location. Although, portions of the Project Area likely

provide wildlife movement opportunities because they consist of open and unimpeded land, the Project Area's value as a corridor is lessened by the fact that it borders residential developments and is moderately disturbed due to anthropogenic factors. Additionally, the disturbances from vehicles on the paved road ROW and adjacent residential and commercial developments would likely deter wildlife from moving through the area. Therefore, the Project Area would not be considered a wildlife corridor. Therefore, the Project Area is not considered a linkage or corridor between natural habitat areas.

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.

Based on the presence of suitable habitat and documented records of the species within 5 miles of the Project Area, eight special-status plant species identified in the literature review and database searches have a high potential to occur in the Project Area. Additionally, two special-status plant species (Jaeger's milk-vetch and mesa horkelia) have a moderate potential to occur, and one plant species (Sonoran maiden fern) has a low potential to occur. Special-status plant species potential was limited to the four areas of the alignment that occur in undeveloped or partially developed areas north and south of Oak Glen Road. If present, direct impacts to one or all these species could occur in the form of direct take (mortality) during grading or construction when the Project is constructed. However, these species are of relative low levels of sensitivity and the Project Area is not expected to support large numbers of either species. Impacts to special-status plant species could be considered significant under CEQA; however, implementation of Mitigation Measure BIO-1 would reduce impacts to a level that is less than significant.

The literature review and database searches identified 49 special-status wildlife species that occur in the vicinity of the Project Area. Of those 49 species, one species, northwestern San Diego pocket mouse, was determined to have a high potential to occur within the California buckwheat scrub and nonnative grassland habitats in the Project Area. If present, this CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project. However, due to the lack of high-quality habitat within the impact area, the Project Area's long history of anthropogenic disturbances, and the presence of urban development adjacent to the Project Area, this species is only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to northwestern San Diego pocket mouse are not considered significant and additional surveys and mitigation are not necessary.

A total of eight species were determined to have moderate potential to occur in the Project Area. Six of the species (California glossy snake, coast horned lizard, coast patch-nosed snake, western yellow bat, San Diego desert woodrat, and Los Angeles pocket mouse) are CDFW SSC species that could occur in the Project Area. If present, these CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Area. However, due to the lack of high-quality habitat within the impact area, the Project Area's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Area, these species are only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to coast horned lizard, coast patch-nosed snake, western yellow bat, San Diego desert woodrat and Los Angeles pocket mouse are not considered significant and additional surveys and mitigation are not necessary.

The remaining two species with moderate potential to occur include two CDFW SSC bird species (loggerhead shrike and purple martin). Marginally suitable nesting and foraging habitat for these species is present within and adjacent to the Project Area. If present, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Area. Impacts to loggerhead shrike and purple martin could be considered significant under CEQA; however, implementation of Mitigation Measure BIO-2 would reduce impacts to a level that is less than significant.

A total of 10 species were determined to have low potential to occur on the Project Area. Four of the species (western spadefoot, red-diamond rattlesnake, pallid bat, and American badger) are CDFW SSC species that could, but are unlikely to occur, in the Project Area. If present, these CDFW SSC species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Area. However, due to the lack of high-quality habitat within the impact area, the Project Area's long history of anthropogenic disturbances, and the presence of urban development immediately adjacent to the Project Area, these species are only expected to occur in very low density, if present, and Project-related impacts would not be expected to contribute to the overall decline of populations for these species. Therefore, impacts to western spadefoot, red-diamond rattlesnake, pallid bat, and American badger are not considered significant and additional surveys and mitigation are not necessary.

The remaining six species with low potential to occur include two CDFW SSC bird species (burrowing owl and yellow warbler), two CDFW fully protected species (golden eagle and white-tailed kite), and two state-listed (threatened) species (Swainson's hawk and coastal California gnatcatcher). Marginally suitable low-quality nesting and foraging habitat for these special-status bird species is present within and adjacent to the Project Area. However, due to the lack of high-quality habitat within the impact area, the Project Area's long history of anthropogenic disturbances, and the presence of urban development adjacent to the Project Area, these species are not likely to occur. If present, these species could be subject to direct impacts through ground disturbance and indirect impacts from construction noise, vibrations, and increased human activity related to the development of the Project Area. Impacts to these species could

be considered significant under CEQA; however, implementation of Mitigation Measures BIO-2, BIO-3, and BIO-4 would reduce impacts to a level that is less than significant.

Large shrubs and trees and some of the grassland habitat in the Project Area could provide nesting habitat for nesting birds and raptors protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. If construction of the Proposed Project occurs during the bird breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect nesting birds and other birds protected by the MBTA and their nests through the removal of habitat on the Project Area, and indirectly through increased noise, vibrations, and increased human activity. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measures BIO-3 and BIO-4.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

No Impact.

The vegetation communities and land cover types in the Project Area include nonnative grassland, California buckwheat scrub, and disturbed/developed areas. None of these vegetation communities or land cover types are considered sensitive natural communities. No riparian habitat was found in the Project Area. Therefore, no impacts to riparian habitat or sensitive natural communities are anticipated to result from the development of this Project.

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?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

Oak Glen Creek is located within and adjacent to the Project alignment and could be considered an aquatic resource jurisdictional to the U.S. Army Corps of Engineers (USACE), CDFW and RWQCB. The proposed Project pipeline alignment crosses Oak Glen Creek near the B-17.2/R-17.2 and B-18.2/R-18.2 booster station/reservoir sites. Impacts to drainages would be less than significant with implementation of Mitigation Measure BIO-5, which involves drainage impact avoidance.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐

Less than Significant Impact.

Most of the Project Area is located within a paved road ROW of Oak Glen Road and previously disturbed or developed areas. Although, portions of the Project Area likely provide wildlife movement opportunities because they consist of open and unimpeded land, the Project Area's value as a corridor is lessened by the fact that it borders residential developments and is moderately disturbed due to anthropogenic factors. Additionally, the disturbances from vehicles on the paved road ROW and adjacent residential and commercial developments would likely deter wildlife from moving through the area. Therefore, the Project Area would not be considered a wildlife corridor. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project Area. No impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project Area, and due to the overall small footprint of the booster and reservoir sites and the fact that they are unmanned and not lit with night lighting, the Project itself will is not likely to affect wildlife movement in the area. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒

No Impact.

The City of Yucaipa's Municipal Code Chapter 5 *Oak Tree Conservation* sets policy to require the conservation of all healthy oak trees unless reasonable and conforming use of the property justifies the removal, cutting, pruning and/or encroachment into the protected zone of an oak tree with a valid oak tree permit. San Bernardino County's Development Code Chapter 88.01 *Plant Protection and Management* regulates the management of specified desert native plants, native trees, palm trees, and riparian habitats.

One nonnative sapling, tree tobacco, was present within the disturbed land cover type adjacent to an existing YVWD water reservoir (B-16.2/R-16.2 booster station/reservoir site). Additionally, there are ornamental trees along the developed portion of the Project. These nonnative and ornamental trees are not considered sensitive natural communities and are not listed under the City of Yucaipa's Municipal Code or San Bernardino County's Development Code. The Project would not conflict with any local policies or ordinances protecting biological resources; therefore, no impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

No Impact.

The Project Area is not located within a Habitat Conservation Plan; Natural Community Conservation Plan; or local, regional, or state habitat conservation plan area. Therefore, no impact would occur and no mitigation is required.

4.4.3 Mitigation Measures

BIO-1: **Special-Status Plant Survey.** A special-status plant survey shall be conducted within suitable habitat in the Project Area for species determined to have a potential to occur on the Project Area. The survey shall be conducted during the appropriate blooming period for chaparral sand-verbena, Nevin's barberry, Parry's spineflower, white-bracted spineflower, Mojave tarplant, California satintail, salt spring checkerbloom, Jaeger's milk-vetch, mesa horkelia Sonoran maiden fern, and San Bernardino aster (approximately April to June). Multiple surveys may be necessary to accommodate the different blooming periods for the target species. The surveys shall be conducted by a botanist or qualified biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1996); the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018); and the CNPS Botanical Survey Guidelines (CNPS 2001). If any special-status species are observed during the surveys, the location of the individual plant or population will be recorded with a GPS device and impacts to individual plants or populations should be avoided. If Project-related impacts to special-status plants on the Project Area are unavoidable, consultation with CDFW and/or USFWS may be required to develop a mitigation plan or additional avoidance and minimization measures that could include seed collection, offsite mitigation, or transplantation.

BIO-2: **Preconstruction Nesting Bird Survey.** If construction or other Project activities are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project Area and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriate disturbance-limit buffer around the nest using flagging or staking. Construction

activities shall not occur within any disturbance-limit buffer zones until the nest is deemed inactive by the qualified avian biologist through a minimum of weekly biological monitoring.

BIO-3: **Preconstruction Burrowing Owl Surveys.** Two preconstruction burrowing owl surveys shall be conducted prior to Project-related ground disturbance. The first survey shall be conducted between 30 to 14 days prior to initial ground disturbance (grading, grubbing, and construction) and the second survey should be conducted within 24 hours of initial ground disturbance. The surveys shall be conducted in accordance with the CDFW *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Typically, if burrowing owls or active burrowing owl burrows are identified in a Project Area during the survey, these features must be completely avoided during the owl breeding season (March 1 through August 31). If impacts to those features are unavoidable, then the YVWD must also develop an owl mitigation plan in consultation with CDFW. Mitigation methods may include passive relocation (conducted between September 1 and February 28) outside of the owl breeding season. If an active burrowing owl burrow is identified, and construction is to proceed, then a qualified biologist (with two or more years of owl experience) shall establish an appropriate disturbance-limit buffer around the burrow using flagging or staking. The buffer limit size can be at the biologist's discretion based on topography of the site and other conditions. Construction activities shall not occur within any buffer zones until the burrow is deemed inactive by the qualified biologist through a minimum of weekly biological monitoring.

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

BIO-5: **Drainage Impact Avoidance.** Impacts to Oak Glen Creek shall be avoided either through Project design or construction methods. Should impacts to the drainage be necessary, a formal Aquatic Resources Delineation (ARD) shall be conducted to determine if it is subject to the jurisdiction of the CDFW or USACE. The ARD shall be conducted based on the guidelines presented in the USACE *1987 Wetlands Delineation Manual* as well as the

Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region, September 2008. The delineation shall also comply with the standards required by CDFW and the RWQCB.

If there are any planned Project-related impacts to jurisdictional streams, regulatory permitting will be required in advance for these impacts, including submittal and processing of a Pre-Construction Notification with the USACE, a Notification of Lake or Streambed Alteration with the CDFW, and a Section 401 Water Quality Certification with the RWQCB. The Project shall comply with the mitigation measures resulting from the ARD.

4.5 Cultural Resources

ECORP Consulting, Inc. (ECORP) prepared a Cultural Resources Inventory and Evaluation Report (ECORP 2022c; Appendix C) 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 cultural resources. The inventory included a records search, literature review, and field survey. Cultural resources include prehistoric archaeological sites, historic archaeological sites, and historic structures, and generally consist of artifacts, food waste, structures, and facilities made by people in the past. Prehistoric archaeological sites are places that contain the material remains of activities carried out by the native population of the area (i.e., Native Americans) prior to the arrival of Europeans in Southern California. Places that contain the material remains of activities carried out by people during the period when written records were produced after the arrival of Europeans are considered historic archaeological sites. Historic structures include houses, garages, barns, commercial structures, industrial facilities, community buildings, and other structures and facilities that are more than 50 years old. Historic structures may also have associated archaeological deposits, such as abandoned wells, cellars, privies, refuse deposits, and foundations of former outbuildings (ECORP 2022c).

The information provided below is an abridged version of the Cultural Resources Inventory and Evaluation Report and is included here to provide a brief context of the potential cultural resources in the Project Area. Due to the sensitive nature of cultural resources and their records and documentation, which are restricted from public distribution by state and federal law, the IS/MND appendices do not include the cultural resources report; however, all pertinent information necessary for impact determinations is included in this section. A redacted version of the cultural resources report that does not include confidential site records or locations is included in Appendix C.

4.5.1 Environmental Setting

The Project Area encompasses parts of the foothills north of Pisgah Peak and in an area near drainages near the foothills of the San Bernardino Mountains. The area encompasses sparsely developed suburban homes and commercial tracts. Elevations range from 2,875 to 3,190 feet above mean sea level. Two intermittent drainages of Oak Glen Creek and Wilson Creek are within the Project Area.

4.5.2 Regulatory Setting

The cultural resources investigation conducted pursuant to the provisions for the treatment of cultural resources contained within Section 106 of the National Historic Preservation Act (NHPA) and in CEQA (PRC § 21000 et seq.) in order to meet the regulatory requirements of this Project. The goal of NHPA and CEQA is to develop and maintain a high-quality environment that serves to identify the significant environmental effects of the actions of a proposed project and to either avoid or mitigate those significant effects where feasible.

The NHPA and CEQA (Title 54 U.S. Code [USC] Section 100101 et seq and Title 14, CCR Article 5, § 15064.5) apply to cultural resources of the historical and pre-contact periods. Any project with an effect that may cause a substantial adverse change in the significance of a cultural resource, either directly or indirectly, is a project that may have a significant effect on the environment. As a result, such a project would require avoidance or mitigation of impacts to those affected resources. Significant cultural resources must meet at least one of four criteria that define eligibility for listing on either the California Register of Historical Resources (CRHR; PRC § 5024.1, Title 14 CCR, § 4852) or the National Register of Historic Places (NRHP; 36 Code of Federal Regulations [CFR] 60.4). Cultural resources eligible for listing on the NRHP are considered Historic Properties under 36 CFR Part 800 and are automatically eligible for the CRHR. Resources listed on or eligible for inclusion in the CRHR are considered Historical Resources under CEQA.

4.5.3 Methods

4.5.3.1 Records Search

The analysis of cultural resources was based on a records and literature search conducted at the South Central Coastal Information Center (SCCIC) of the California Historical Resources Information System (CHRIS) at California State University – Fullerton on April 19, 2022, a literature review, and a field survey. The purpose of the records search was to determine the extent of previous surveys within a 1-mile (1,600-meter) radius of the Proposed Project location, and whether previously documented pre-contact or historic-period archaeological sites, architectural resources, or traditional cultural properties exist within the Project Area. SSCIC staff completed and returned the records search to ECORP on June 9, 2022.

Record search results found that nine previous cultural resources studies were conducted in or within 1 mile of the Project Area. All nine studies intersect the Project Area and revealed the presence of pre-contact sites, including lithic scatters and habitation sites, and historical sites, including wells and sites associated with historic agriculture (ECORP 2022c).

The records search determined that 16 previously recorded pre-contact and historic-era cultural resources are located within 1 mile of the Project Area. Of these, 4 are believed to be associated with Native American occupation of the vicinity, and 12 are historic-era sites, associated with early European-American ranching and agricultural activities. There are two previously recorded cultural resources adjacent to the Project Area. No cultural resources are located within the Project Area (ECORP 2022c).

4.5.3.2 Sacred Lands File

In addition to the record search, ECORP contacted the Native American Heritage Commission (NAHC) on April 19, 2022, to request a search of the Sacred Lands File (SLF) for the Area of Potential Effects (APE). The APE consists of the horizontal and vertical limits of a project and includes the area within which significant impacts or adverse effects to Historical Resources or Historic Properties could occur as a result of the Project. For projects subject to the CEQA, the term Project Area is used rather than APE. The terms Project Area and APE are interchangeable in terms of Cultural Resources for the purpose of this document. The SLF search determines whether Sacred Lands have been recorded by California Native American tribes within the APE, because the SLF is populated by members of the Native American community with knowledge about the locations of tribal resources. A search of the SLF by the NAHC was received on May 20, 2022. The SLF results were negative and failed to indicate the presence of Native American Sacred Lands in or in the vicinity of the Project Area (ECORP 2022c).

4.5.3.3 Field Survey

On August 18, 2022, ECORP conducted an intensive pedestrian survey of the APE. At that time, the ground surface was examined for indications of surface or subsurface cultural resources. The general morphological characteristics of the ground surface were inspected for indications of subsurface deposits that may be manifested on the surface, such as circular depressions or ditches. Whenever possible, the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances were examined for artifacts or for indications of buried deposits. No subsurface investigations or artifact collections were undertaken during the pedestrian survey (ECORP 2022c).

As a result of the field survey, seven new cultural resources were identified within the Project Area, including a historic distribution line consisting of 19 historic-period wooden utility poles (NB-001), a historic-period box culvert (NB-002), an irrigation site with two historic-period concrete vaults and a spigot (NB-003), a historic-period stone and concrete curb and gutter (NB-004), and three historic-period roads (NB-005,-006, and -007) (ECORP 2022c).

The significance of the historic-period resources (NB-001 through NB-007) located within the Project Area were evaluated relative to eligibility criteria set forth in the NRHP and CRHR. Only one resource, NB-004, was evaluated as eligible under the NRHP/CRHR under criteria A/1 and C/3, and therefore should be considered a Historical Resource under CEQA and Historic Property under Section 106 NHPA (ECORP 2022c).

4.5.4 Cultural Resources (V) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated.

The Office of Historic Preservation's (OHP) Built Environment Resource Directory (BERD) for San Bernardino County did not include any resources within 1 mile of the Project Area (OHP 2022a). The closest property is the Oak Glen School located 1.9 miles to the east. The National Register Information System failed to reveal any eligible or listed properties within the Project Area (National Park Service 2022). ECORP reviewed resources listed as California Historical Landmarks by the OHP and the nearest listed landmark is #528: the Yucaipa adobe (located approximately 4 miles to the west of the Project Area) (OHP 1996, 2022b). The Caltrans Bridge Local and State Inventories did not list any historic bridges in or within 1 mile of the Project Area (Caltrans 2019, 2020a).

The records search determined that 16 previously recorded pre-contact and historic-era cultural resources are located within 1 mile of the Project Area. Of these, 4 are believed to be associated with Native American occupation of the vicinity, and 12 are historic-era sites, associated with early European-American ranching and agricultural activities. There are two previously recorded cultural resources adjacent to the Project Area. No cultural resources are located within the Project Area (ECORP 2022c).

As a result of the field survey, seven historic-period resources were identified within the Project Area, including a historic distribution line consisting of 19 historic-period wooden utility poles (NB-001), a historic-period box culvert (NB-002), an irrigation site with two historic-period concrete vaults and a spigot (NB-003), a historic-period stone and concrete curb and gutter (NB-004), and three historic-period roads (NB-005,-006, and -007). All seven resources have been evaluated for listing in the NRHP and CRHR.

Only one resource, NB-004, was evaluated as eligible under the NRHP/CRHR under criteria A/1 and C/3, and therefore should be considered a Historical Resource under CEQA and Historic Property under Section 106 NHPA. Because removal or damage of the stone curb and gutter would affect the aspects of integrity that currently convey the significance of NB-004, Mitigation Measure CUL-1 has been provided to avoid impacts to this resource. Impacts would be less than significant with implementation of Mitigation Measure CUL-1.

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

Less than Significant with Mitigation Incorporated.

The records search determined that 16 previously recorded pre-contact and historic-era cultural resources are located within 1 mile of the Project Area. Of these, 4 are believed to be associated with Native American occupation of the vicinity, and 12 are historic-era sites, associated with early European-American ranching and agricultural activities. There are two previously recorded cultural resources adjacent to the Project Area. No cultural resources are located within the Project Area (ECORP 2022c).

Due to the presence of alluvium along Oak Glen Creek, and given the likelihood of pre-contact archaeological sites located along perennial waterways, the potential exists for buried pre-contact archaeological sites in the Project Area. Considering the amount of prior development in the Project Area and vicinity, this potential is considered low. There always remains the potential for ground-disturbing activities to expose previously unrecorded cultural resources. Both CEQA and Section 106 of the NHPA require the lead agency to address any unanticipated cultural resource discoveries during Project construction (ECORP 2022c). Therefore, impacts would be less than significant with incorporation of Mitigation Measure CUL-2.

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 formal cemeteries are located in or near the Project Area. Most Native American human remains are found in prehistoric archaeological sites. No impacts to human remains are anticipated; however, if any are encountered during ground disturbing construction activities, existing regulations (§7050.5 of the California Health and Safety Code, §5097.98 of the California Public Resources Code, and Assembly Bill [AB] 2641) are in place which detail the actions that must be taken if such discoveries are made. Implementation of Mitigation Measure CUL-2 would reduce impacts to a less than significant level.

4.5.5 Mitigation Measures

CUL-1: Historic-period resource NB-004 (masonry stone curbs and gutters) shall be avoided for all project associated construction activities for the entire duration of the Project. The following measures shall be implemented to ensure avoidance:

- Prior to the start of construction activities, temporary, high-visibility exclusionary fencing shall be installed around the resource, as shown in the confidential fencing plan on file with the Yucaipa Valley Water District.
- After the installation of the temporary exclusionary fencing and prior to the start of construction activities, a qualified cultural resource monitor shall assess the fences to confirm correct placement and compliance with the mitigation measure.
- The temporary exclusionary fencing shall remain in place for the duration of the Project construction. It shall be the responsibility of the Construction Manager or superintendent to ensure the temporary exclusionary fencing is maintained and any repairs to the fencing be completed within four hours of notification.
- The temporary exclusionary fencing shall be removed only when the Project is complete.

CUL-2: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 60-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, the archaeologist shall immediately notify the lead agencies. The agencies shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines or a historic property under Section 106 NHPA, if applicable. In addition, Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed within TCR-1, regarding any pre-contact and/or post-contact finds and be provided information after the archaeologist makes their initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment. Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the site either: 1) is not a Historical Resource under CEQA or a Historic Property under Section 106; or 2) if the find is considered a significant cultural resource, as defined by CEQA, that the treatment measures, including but not limited to the development of a Monitoring and Treatment Plan, have been completed to their satisfaction. Drafts of the

Monitoring and Treatment Plan shall be provided to YSMN for review and comment, as detailed within TCR-1.

- If the find includes human remains, or remains that are potentially human, they shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Bernardino County Coroner (per § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. If the coroner determines the remains are Native American and not the result of a crime scene, the coroner will notify the NAHC, which then will designate a Native American Most Likely Descendant (MLD) for the Project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.
- It is understood by all Parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Publics Records Act. The coroner, parties, and Lead Agencies, will be asked to withhold public disclosure information related to such reburial, pursuant to the specific exemption set forth in California Government Code § 6254 (r).

4.6 Energy

Energy relates directly to environmental quality. Energy use can adversely affect air quality and other natural resources. The vast majority of California's air pollution is caused by burning fossil fuels. Consumption of fossil fuels is linked to changes in global climate and depletion of stratospheric ozone. Transportation energy use is related to the fuel efficiency of cars, trucks, and public transportation; choice of different travel modes (auto, carpool, and public transit); vehicle speeds; and miles traveled by these modes. Construction and routine operation and maintenance of transportation infrastructure also consume energy. In addition, residential, commercial, and industrial land uses consume energy, typically through the usage of natural gas and electricity. This analysis focuses on the one source of energy that is relevant to the Proposed Project: the equipment fuel necessary for Project construction.

4.6.1 Environmental Setting

4.6.1.1 Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. Natural gas provides California with a majority of its electricity, closely followed by renewables, large hydroelectric and nuclear (California Energy Commissions [CEC] 2021a). Southern California Edison (SCE) provides electrical services to Yucaipa 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 Southern California Gas Company (SoCal Gas) provides natural gas services to the Project Area. SoCal Gas services approximately 21.6 million customers, spanning roughly 20,000 square miles of California.

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 data base that describes all of the operating power plants in the state by county.

4.6.1.2 Energy Consumption

Electricity use is measured in kilowatt-hours (kWh), and natural gas use is measured in therms. Vehicle fuel use is typically measured in gallons (e.g., of gasoline or diesel fuel), although energy use for electric vehicles is measured in kWh. The electricity consumption associated with all nonresidential uses in San Bernardino County from 2016 to 2020 is shown in Table 4.6-1. As indicated, the demand has decreased since 2016.

Table 4.6-1. Nonresidential Electricity Consumption in San Bernardino County 2016-2020

Year	Electricity Consumption (kWh)
2020	9,865,589,938
2019	9,989,834,942
2018	10,214,939,044
2017	10,119,402,373
2016	9,985,382,081

Source: CEC 2021b

The natural gas consumption associated with all nonresidential uses in San Bernardino County from 2016 to 2020 is shown in Table 4.6-2. As indicated, the demand has increased since 2016.

Table 4.6-2. Nonresidential Natural Gas Consumption in San Bernardino County 2016-2020	
Year	**Natural Gas Consumption (therms)**
2020	259,873,628
2019	272,237,239
2018	268,588,772
2017	257,919,617
2016	259,825,086

Source: CEC 2021b

Automotive fuel consumption in San Bernardino County from 2016 to 2021 is shown in Table 4.6-3. Fuel consumption demand has decreased since 2016.

Table 4.6-3. Automotive Fuel Consumption in San Bernardino County 2016-2020	
Year	**Total Fuel Consumption**
2020	1,134,211,219
2019	1,266,660,003
2018	1,262,750,340
2017	1,266,415,496
2016	1,242,666,294

Source: CARB 2021

4.6.2 Energy (VI) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during Project construction or operation?	☐	☐	☒	☐

Less than Significant Impact.

Operation of the Proposed Project would not result in the consumption of natural gas beyond existing conditions and thus, would not quantifiably contribute to the County wide demand for electricity or natural gas. The sources of energy associated with operation of the Proposed Project is the fuel (gasoline) necessary for Project construction and the electricity associated with pumping water. Addressing energy impacts requires an agency to make a determination as to what constitutes a significant impact. There are no established thresholds of significance, statewide or locally, for what constitutes a wasteful, inefficient, and unnecessary consumption of energy for a proposed land use. For the purpose of this analysis, Project increases in fuel consumption during the construction phase are compared with the countywide fuel consumption in 2020 as shown in Table 4.6-3. The amount of total Project construction-related fuel used

was estimated using ratios provided in the Climate Registry's General Reporting Protocol for the Voluntary Reporting Program, Version 2.1. Similarly, Project increases in electricity consumption is quantified and compared to that consumed by nonresidential all land uses in San Bernardino County as identified in Table 4.6-1.

Table 4.6-4. Proposed Project Energy and Fuel Consumption

Energy Type	Annual Energy Consumed	Percentage Increase Countywide
Operation Electricity Consumption		
Electricity Consumption	473,040 kWh	0.005%
Construction Vehicular/Equipment Fuel Consumption		
Gasoline	26,700 gallons	0.002%

Source: Climate Registry 2016; Appendix D.

Notes: The Project increase construction-related fuel consumption is compared with the countywide construction-related fuel consumption in 2021, the most recent full year of data.

As shown in Table 4.6-4, the Project's gasoline fuel consumption during the construction period is estimated to be 26,700 gallons of fuel, which would increase the annual construction-related gasoline fuel use in the county by 0.002 percent during Project construction. Additionally, no natural gas is assumed to be used during construction. As such, Project construction would have a nominal effect on local and regional energy supplies, especially over the long-term. Additionally, construction equipment fleet turnover and increasingly stringent state and federal regulations on engine efficiency combined with state regulations limiting engine idling times and require 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 Project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

Energy use for the operational component of the Project would come from the operation of the four booster pump stations, permit testing of generators, and for repair or maintenance on the booster pump station. Based on a maximum ampere input of 37.5 and three-phase booster motor output, each proposed booster pump would consume approximately 13.5 kilowatts per hour or 118,260 kilowatts annually. All four booster pumps collectively would consume approximately 473,040 kilowatts annually. As shown in Table 4.6-4, this would result in a 0.005 percent increase in nonresidential electricity use in the County. Additionally, visits to the Project Area for maintenance would be required infrequently and inconsistently. When these visits do occur, the equipment necessary will be substantially less than that used during construction. As shown in Table 4.6-4, gasoline consumption during construction grew countywide energy consumption use by very little; operations would result in even less consumption than what occurs during construction. As such, fuel consumption associated with vehicle trips generated by the Project during operation would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region. For these reasons, this impact would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project includes the construction and operation of four recycled water reservoirs, four booster stations, and approximately 3.4 miles of pipeline. The Proposed Project would not conflict with or obstruct a plan for renewable energy or energy efficiency. Therefore, the project would have a less than significant impact in this regard and no mitigation is required.

4.6.3 Mitigation Measures

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

4.7 Geology and Soils

4.7.1 Environmental Setting

4.7.1.1 Geomorphic Setting

The City of Yucaipa's location in the Yucaipa Plain, and the Crafton and Yucaipa Hills, coupled with the streams flowing through the City contribute to its naturally undulating terrain. The City rests primarily on alluvium deposited by the Yucaipa Creek and its tributaries. Older deposits consisting of alluvial fan conglomerate and other decomposed, clay-rich alluvia cover central Yucaipa and Dunlap Acres. Younger alluvial deposits cover the river wash areas and Dunlap Acres west of Oak Glen Road. Parts of west Yucaipa are on Reservoir Canyon Hill, which is composed of crystalline rocks and older alluvium (City of Yucaipa 2016a).

4.7.1.2 Regional Seismicity and Fault Zones

The California Department of Conservation, Division of Mines and Geology, defines an *active fault* as one that has been subjected to surface displacement within the last 11,000 years. A fault is considered *inactive* if it has not shown geologic evidence of surface displacement in the last 11,000 years.

Yucaipa is in a seismically active region. The San Andreas Fault and San Jacinto Fault Zone accommodate up to 80 percent of the slip rate between the North American and Pacific plates. The San Bernardino segment of the San Andreas Fault transects the northern portion of the City along the base of Yucaipa Ridge. Yucaipa has surface traces of active faults capable of producing damaging earthquakes. The Chicken Hill Fault runs through west Yucaipa and parallels Oak Glen Road south of Yucaipa Boulevard. The Crafton Hills Fault runs along the southeast front of the Crafton Hills of Yucaipa. Northern Yucaipa is also transected by a series of fault lines, designated Alquist-Priolo Zones (City of Yucaipa 2016a).

4.7.1.3 Soils

According to the USDA's NRCS Web Soil Survey website, six soil types are located within the Project Area. These soil types are Soboba gravelly loamy sand (SoC), 0 to 9 percent slopes; Oak glen gravelly sandy loam (OgD), 9 to 15 percent slopes; Saugus sandy loam (ShF), 30 to 50 percent slopes; Greenfield sandy loam (GtC), 2 to 9 percent slopes; Hanford coarse sandy loam (HaC), 2 to 9 percent slopes; and Tujunga loamy sand (TuB), 0 to 5 percent slopes (NRCS 2022).

Yucaipa's clay soils and young, relatively low-compacted soils can shrink or swell depending on moisture content. This occurs mostly during flood or earthquake events. Unstable soils are primarily adjacent to the drainage courses (City of Yucaipa 2016a).

4.7.1.4 Paleontological Resources

ECORP requested a paleontological database search of the paleontology locality and specimen collection records for the Project Area and surrounding area (one-mile radius) from the Western Science Center (WSC) in April 2022. The WSC database results, summary, and recommendations can be found in Appendix E.

4.7.2 Geology and Soils (VII) Environmental Checklist and Discussion

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

No Impact.

i) The San Bernardino segment of the San Andreas Fault transects the northern portion of the City along the base of Yucaipa Ridge. Yucaipa has surface traces of active faults capable of producing damaging earthquakes. The Chicken Hill Fault runs through west Yucaipa and

parallels Oak Glen Road south of Yucaipa Boulevard. The Crafton Hills Fault runs along the southeast front of the Crafton Hills of Yucaipa. Northern Yucaipa is also transected by a series of fault lines, designated Alquist-Priolo Zones (City of Yucaipa 2016a). No known active faults are within the Project Area (City of Yucaipa 2022). Due to the absence of any onsite active faults, no impact related to fault-rupture would occur in the Project Area and no mitigation is required.

Less than Significant Impact.

ii) Just like most of southern California, in the event of an earthquake strong ground shaking is expected to occur at the Project Area. The City is subject to ground shaking due to fault ruptures along many of its active faults. The most intense shaking that could damage structures would be from the San Andreas Fault, which passes along northern Yucaipa. The Proposed Project does not include the construction of habitable structures and therefore would not expose people to strong seismic ground shaking greater than what currently exists. Water pipeline and reservoir design and construction would comply with current applicable codes and standards which would reduce the risk of loss, injury, or death resulting from strong ground-shaking. Impacts would be less than significant, and no mitigation is required.

No Impact.

iii) Liquefaction is a phenomenon where water-saturated granular soil loses shear strength during strong ground shaking produced by earthquakes. The loss of soil strength occurs when cyclic pore water pressure increases below the groundwater surface. Potential hazards due to liquefaction include the loss of bearing strength beneath structures, possibly causing foundation failure and/or significant settlements.

The City is generally susceptible to liquefaction, but the only area at high risk of liquefaction is near Mill Creek Canyon, where groundwater levels are within 50 feet of the surface. The Project Area is not located within an area that is known for being particularly susceptible to liquefaction (City of Yucaipa 2022). Therefore, no impact would occur and no mitigation is required.

Less than Significant Impact.

iv) According to the City's General Plan, Yucaipa has a low to moderate potential for landslides. However, landslides have occurred in Crafton Hills and in northern Yucaipa, where the Project is located. These areas are also subject to a higher risk of mud/debris flow due to the topography (City of Yucaipa 2016a).

Landslide prone areas include the northeastern portion of Oak Glen Road, which is within an area designated as generally susceptible to landslides (City of Yucaipa 2022). This portion of the Project Area includes the recycled water pipeline. 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 landslides. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Less than Significant Impact. Construction of the Proposed Project would require ground disturbing activities, such as grading, which have the potential to result in soil erosion or the loss of topsoil. Best Management Practices (BMPs) would be implemented to manage erosion and the loss of topsoil during construction-related activities. 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 into drainage outlets. In addition, any drinking water-related discharges during construction would be covered under the Statewide General National Pollutant Discharge Elimination System (NPDES) Permit for Drinking Water System Discharges. The Statewide permit also requires that similar BMPs be implemented to prevent erosion or offsite runoff onto public roadways or into drainage outlets. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in onsite or offsite landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐

Less than Significant Impact.

According to the City's General Plan, Yucaipa has a low to moderate potential for landslide although landslides have occurred in Crafton Hills and in northern Yucaipa. These areas are also subject to a higher risk of mud/debris flow due to the topography. The northeastern portion of the Project Area is located within an area generally susceptible to landslides (City of Yucaipa 2022). Refer to Threshold iv) above for an analysis of landslides.

Ground subsidence involves the settling of ground surface due to extraction of oil, gas, or groundwater. Although Yucaipa does not have extraction fields, the Yucaipa Basin is in overdraft and thus has a low to moderate potential for ground subsidence throughout the community, with isolated cases of subsidence occurring in the past (City of Yucaipa 2016a). The Project Area is not located within an area that is known for being particularly susceptible to liquefaction (City of Yucaipa 2022).

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 onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse. Impacts would be less than significant.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒

No Impact.

The USDA's NRCS Web Soil Survey website lists six soil types within the Project Area. These soil types are Soboba gravelly loamy sand (SoC), 0 to 9 percent slopes; Oak Glen gravelly sandy loam (OgD), 9 to 15 percent slopes; Saugus sandy loam (ShF), 30 to 50 percent slopes; Greenfield sandy loam (GtC), 2 to 9 percent slopes; Hanford coarse sandy loam (HaC), 2 to 9 percent slopes; and Tujunga loamy sand (TuB), 0 to 5 percent slopes (NRCS 2022).

Yucaipa's clay soils and young, relatively low-compacted soils can shrink or swell depending on moisture content. This occurs mostly during flood or earthquake events. Unstable soils are primarily adjacent to the drainage courses. The near-surface sediments in the City are composed primarily of clay, silt, and sand. Silts and sands are usually non-expansive or have very low expansion potential, while clays are recognized as expansive soils (City of Yucaipa 2016a). As the Project is located entirely on sandy loams, the Project is not expected to be negatively impacted by expansive soils. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒

No Impact.

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

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

According to the paleontological records search results from WSC, the Project Area is underlain by mixed Holocene and Pleistocene alluvial and sedimentary deposits, with some portions of Precambrian gneiss. Holocene alluvial units are considered to be of high preservation value, but material found is unlikely to be fossil material due to the relatively modern associated dates of the deposits. However, Pleistocene alluvial units are considered highly paleontologically sensitive; Precambrian gneiss units are not. There are no records of fossil resources within the Project Area or within a one-mile radius (WSC 2022).

Due to the presence of Pleistocene aged deposits in part of the Project Area, any fossil specimens recovered would be scientifically significant. Excavation activity associated with the construction of the Project could impact the paleontologically sensitive Pleistocene units. Impacts would be less than significant with the implementation of mitigation measure GEO-1.

4.7.3 Mitigation Measures

GEO-1: **Unanticipated Discovery – Paleontological Resource.** If paleontological resources (i.e., fossil remains) are discovered during excavation activities, the contractor will notify the YVWD and cease excavation within 100 feet of the find until a qualified paleontological professional can provide an evaluation of the find. The qualified paleontological professional will evaluate the significance of the find and recommend appropriate measures for the disposition of the resource (e.g., fossil recovery, curation, data recovery, and/or monitoring). Construction activities may continue on other parts of the construction site outside of the 100-foot buffer while evaluation and treatment of the paleontological resource takes place.

4.8 Greenhouse Gas Emissions

This section is based in part on the results of the Air Quality and Greenhouse Gas Assessment conducted for the Project (ECORP 2021a; Appendix A). GHG emissions-related impacts were assessed in accordance with methodologies recommended by the SCAQMD. Where GHG emission quantification was required, emissions were modeled using CalEEMod, version 2020.4.0. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated using CalEEMod model defaults for San Bernardino County coupled with details associated with construction timing, equipment, and duration provided by the Project Applicant. Operational air pollutant emissions were based on the Project traffic trip generation rates from CalEEMod and RCEM.

4.8.1 Environmental Setting

GHG emissions are released as byproducts of fossil fuel combustion, waste disposal, energy use, land use changes, and other human activities. This release of gases, such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and chlorofluorocarbons, creates a blanket around the earth that allows light to pass through but traps heat at the surface, preventing its escape into space. While this is a naturally occurring process known as the greenhouse effect, human activities have accelerated the generation of GHGs beyond natural levels. The overabundance of GHGs in the atmosphere has led to an unexpected warming of the earth and has the potential to severely impact the earth's climate system.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps more than 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2. Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e). Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

The local air quality agency regulating the SoCAB is the SCAQMD, the regional air pollution control officer for the basin. As previously stated, to provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SCAQMD staff convened a GHG CEQA Significance Threshold 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 (OPR), CARB, the Attorney General's Office, a variety of city and county planning departments in the Basin, various utilities such as sanitation and power companies throughout the Basin, industry groups, and environmental and professional organizations. The numeric bright line and efficiency-based thresholds described above 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 was 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 of Yucaipa may set a project-specific threshold based on the context of each particular project, including using the SCAQMD Working Group expert recommendation. 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 metric tons of CO_2e ($MTCO_2e$) per year threshold is used as the significance threshold in addition to the qualitative thresholds of significance set forth below from Section VII of CEQA Guidelines Appendix G. The 3,000 $MTCO_2e$ 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 $MTCO_2e$ 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 future 2050 statewide GHG emissions target and the lead agency can provide 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 $MTCO_2e$ 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 such 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).

Additionally, the Project is assessed for consistency with the City of Yucaipa Climate Action Plan (CAP), a long-range plan to reduce communitywide greenhouse gas emissions from activities within the City limits. The CAP is a strategy for the City to continue to grow in a sustainable way that meets GHG reduction targets while continuing to allow for public and private development and redevelopment that will uphold the City as a vibrant and livable community.

4.8.2 Greenhouse Gas Emissions (VIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐

Less than Significant Impact.

Construction

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

Table 4.8-1. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/Year)
Pipeline Construction[1]	1,354
Reservoirs and Pump Stations Construction[2]	271
Total Construction Emissions	**1,625**
SCAQMD and Yucaipa CAP Significance Threshold	*3,000*
Exceed SCAQMD or Yucaipa CAP Threshold?	**No**

[1]Source: RCEM version 9.0.0. Refer to Appendix A for Model Data Outputs.
[2]Source: CalEEMod version 2020.4.0. Refer to Appendix A for Model Data Outputs.
Notes: Emission calculations account for the export of 200 cubic yards of soil and 200 cubic yards of demolished asphalt daily from pipeline installation for a total of 105,600 cubic yards of material over the course of construction. Emission calculations also account for the export of 3,565.5 tons of demolished asphalt material from reservoir and pump station construction.

As shown in Table 4.8-1, Project construction would result in the generation of approximately 1,625 $MTCO_2e$ over the course of construction. Once construction is complete, the generation of these GHG emissions would cease. Construction emissions would not exceed the numeric bright-line threshold of 3,000 $MTCO_2e$ annually.

Operational Significance Analysis

Operation of the Project would result in an increase in GHG emissions, primarily associated with the stationary source of generators. Long-term operational GHG emissions attributed to the Project are identified in Table 4.8-2.

Table 4.8-2. Operational-Related Greenhouse Gas Emissions	
Emission Source	**CO_2e (Metric Tons/ Year)**
Area Source	0.0
Energy	0.0
Mobile	0.0
Stationary	1.5
Waste	0.0
Water	0.0
Total	**1.5**
SCAQMD and Yucaipa CAP Significance Threshold	*3,000*
Exceed SCAQMD *or Yucaipa CAP* Threshold?	**No**

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

As shown in Table 4.8-2, operational-generated emissions would not exceed the numeric bright-line threshold of 3,000 $MTCO_2e$ annually. The SCAQMD threshold was developed based on substantial evidence that such thresholds represent quantitative levels of GHG emissions, compliance with which means that the environmental impact of the GHG emissions will normally not be cumulatively considerable under CEQA. The threshold was developed as part of the SCAQMD GHG CEQA Significance Threshold 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 OPR, CARB, the Attorney General's Office, a variety of city and county planning departments in the SoCAB, various utilities such as sanitation and power companies throughout the basin, industry groups, and environmental and professional organizations. The 3,000 $MTCO_2e$ per year value represents less than one percent of future 2050 statewide GHG emissions target. This impact is therefore less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

Less than Significant Impact.

In 2015, the City of Yucaipa adopted the City of Yucaipa CAP, a long-range plan to reduce communitywide greenhouse gas emissions from activities within the City limits. The CAP is a strategy for the City to continue to grow in a sustainable way that meets GHG reduction targets while continuing to allow for public and private development and redevelopment that will uphold the City as a vibrant and livable community. According to the CAP, the City selected 3,000 $MTCO_2e$ per year as a significance threshold in order to identify projects that require the use of the CAP Screening Tables or a project-specific technical analysis to quantify and mitigate project emissions. As shown in Tables 4.8-1 and 4.8-2, Project emissions would not exceed the CAP threshold.

Implementing the City's CAP will greatly reduce the regional GHG emissions from transportation, helping to achieve statewide emission reduction targets. All development in the City, including the Project, is required to adhere to all applicable City-adopted policy provisions, including those contained in the City CAP. The City ensures all applicable provisions of the CAP are incorporated into projects and their permits through development review and applications of conditions of approval as applicable.

All of the applicable and feasible provisions of the City GHG-reduction program as promulgated by its CAP will be incorporated into the Proposed Project. Therefore, the Proposed Project would not conflict with the stated goals of the CAP and thus would not interfere with City's ability to achieve the goals set forth in the CAP. The Proposed Project is consistent with the City General Plan land use designation and development intensity for the Project Area. The Proposed Project would not conflict with the CAP GHG-reduction targets. As such, the Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact is therefore less than significant and no mitigation is required.

4.8.3 Mitigation Measures

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

4.9 Hazards and Hazardous Materials

4.9.1 Environmental Setting

A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. A hazardous material is defined by the California Health and Safety Code, Section 25501 as follows:

> "Hazardous material" means any material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. "Hazardous materials" include, but are not limited to, hazardous substances, hazardous waste, and any material that a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

A hazardous material is defined in 22 CCR Section 662601.10 as follows:

> A substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed.

Transporters of hazardous waste in California are subject to several federal and state regulations. They must register with the California Department of Health Services (DHS) and ensure that vehicle and waste container operators have been trained in the proper handling of hazardous waste. Vehicles used for the transportation of hazardous waste must pass an annual inspection by the California Highway Patrol (CHP). Transporters must allow the CHP or DHS to inspect its vehicles and must make certain required inspection records available to both agencies. The transport of hazardous materials that are not wastes is regulated by the U.S. Department of Transportation through national safety standards.

Other risks resulting from hazardous materials include the use of these materials in local industry, businesses, and agricultural production. The owner or operator of any business or entity that handles a hazardous material above threshold quantities is required by state and federal laws to submit a business plan to the local Certified Unified Program Agency (CUPA). The San Bernardino County Fire Protection District (SBCoFD) is designated by the State Secretary for Environmental Protection as the CUPA for the County of San Bernardino in order to focus the management of specific environmental programs at the local government level. The CUPA program is designed to consolidate, coordinate, and uniformly and consistently administer permits and conduct inspection and enforcement activities throughout San Bernardino County. This approach strives to reduce overlapping and sometimes conflicting requirements of different governmental agencies independently managing these programs. As a CUPA, SBCoFD manages six hazardous material and hazardous waste programs. The CUPA is charged with the responsibility of conducting compliance inspections for over 7,000 regulated facilities in the County (SBCoFD 2022). The County will refer large cases of hazardous materials contamination or violations to the Santa Ana RWQCB (Region 8) and the California Department of Toxic Substances Control (DTSC). It is not uncommon for other agencies, such as federal and state Occupational Safety and Health Administrations, to become involved when issues of hazardous materials arise.

Under Government Code Section 65962.5, both the DTSC and the State Water Resources Control Board (SWRCB) are required to maintain lists of sites known to have hazardous substances present in the environment. Both agencies maintain up-to-date lists on their websites.

Yucaipa Fire is responsible for inspecting facilities that handle hazardous materials, generate or treat hazardous waste, and/or operate an underground storage tank. They also respond to situations where local traffic accidents lead to a spillage of hazardous materials. As the CUPA, the SBCoFD implements the hazardous waste and materials standards for the City of Yucaipa (City of Yucaipa 2016a).

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

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐

Less than Significant Impact.

Some hazardous materials, such as diesel fuel, would be used during construction of the Project. The use of such materials would not create a significant hazard to the public as the release of any construction-related spills would be prevented through the implementation of BMPs listed in the Stormwater Pollution Prevention Plan (SWPPP). Equipment maintenance or refueling would not occur in the construction area. No hazardous materials would be transported, used, or disposed of during Project operation. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐

Less than Significant Impact.

As noted above, some hazardous materials, such as diesel fuel, would be used during construction. A SWPPP listing BMPs to prevent construction pollutants and products from violating any water quality standard or waste discharge requirements would be prepared for the Proposed Project. The release of any construction-related spills would be prevented through the implementation of BMPs listed in the SWPPP. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒

No Impact.

The Proposed Project is located approximately 0.60 mile southeast of Ridgeview Elementary School, the closest school to the Project Area. The Project is located more than one-quarter mile from an existing or proposed school. No impact would occur and no mitigation is required.

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

No Impact.

Government Code Section 65962.5 requires the 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.

The California Environmental Protection Agency (CalEPA) Cortese List Data Resources records were reviewed to help determine whether hazardous materials have been handled, stored, or generated in the Project Area or the adjacent properties and businesses (CalEPA 2022).

The Cortese List is a compilation of five separate websites that includes:

1. DTSC's EnviroStor – identifies waste or hazardous substances sites.
2. SWRCB's 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 SWRCB 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 that Project Area was not identified as a hazardous waste or substances site (DTSC 2022). GeoTracker did not identify the Project Area as a location for 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). The nearest leaking underground storage tank cleanup site is at Yucaipa Forest Fire Station, located approximately 0.5 mile from the Project Area at 11416 Bryant Street. The cleanup status is complete and the case was closed in 2001.

A list of solid waste disposal sites with waste constituents 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 Area location. The list of hazardous facilities subject to corrective action do not include the Project Area 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. No impact would occur and no mitigation is required.

		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 Project Area is located approximately 6.8 miles southeast of Redlands Municipal Airport and is located outside of the designated safety zones and referral zones for the airport. The Proposed Project would involve infrastructure improvements within the existing public right-of-way and would not include the construction of habitable structures or other structures that could pose a safety hazard. As such, the Proposed Project would not result in a safety hazard for people residing or working in the Project Area. No impact would occur and no mitigation is required.

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

Less than Significant Impact.

The City of Yucaipa Emergency Operations Plan (EOP) is an all-hazard plan describing how the City will organize and respond to various emergency incidents. The EOP identifies hazards and responses; organizational structures, roles, and responsibilities; and other key activities of government during a disaster.

The City has three levels of evacuation routes, depending on the emergency. Eight arterials (Bryant Street, Oak Glen Road, Yucaipa Boulevard, 14th Street, Wildwood Canyon Road, County Line Road, Calimesa Boulevard, and Mesa Grande Drive) are designated as local evacuation routes. Oak Glen Road is designated as the primary regional evacuation routes for the Oak Glen Mountain community under the

San Bernardino County General Plan. Interstate 10 (I-10) is the primary federal evacuation route while State Route 38 (SR-38) is the primary state-designated evacuation route from the mountain communities. The precise evacuation route to use during an emergency depends on many factors, including the type of natural disaster, location of incident, weather conditions, road conditions, and traffic volume (City of Yucaipa 2016b).

Implementation of the Proposed Project would require construction to occur within the public ROW of Oak Glen Road, a road identified as a local and regional evacuation route. Construction activities may temporarily restrict vehicular traffic; therefore, the Project would be required to implement Mitigation Measure HAZ-1 which requires a Traffic Control Plan. This would ensure proper access to residences and businesses in the area by emergency vehicles during construction, ensure residences and businesses in the area have proper access to evacuation routes during construction, and maintain traffic flow. Upon construction completion, streets affected by construction would be repaved to pre-disturbance conditions. Impacts to an adopted emergency response plan or emergency evacuation route would be less than significant with the incorporation of Mitigation Measure HAZ-1.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Less than Significant Impact.

The City, which is considered a local responsibility area, is mapped as having moderate to very high wildland fire risk. Portions of the City along the southwest, north, and eastern boundaries are in a very high fire hazard severity zone (VHFHSZ) which is the highest wildfire risk classification designated by the California Department of Forestry and Fire Protection (CAL FIRE). These areas extend into VHFHSZ in state and federal responsibility areas outside of the City (CAL FIRE 2022; City of Yucaipa 2016b). Portions of the Project Area are mapped as VHFHSZ in the local responsibility area and moderate, high, and very high in the state responsibility area.

The Proposed Project would involve construction within the existing public ROW and would not include the construction of habitable structures. The reservoirs and booster stations would not expose people to significant risk of loss, injury, or death due to wildland fires. Impacts would be less than significant and no mitigation is required.

4.9.3 Mitigation Measures

HAZ-1: Prior to construction, the Yucaipa Valley Water District (or its contractor) shall prepare a Traffic Control Plan to ensure the following during the construction phase of the Proposed Project: emergency vehicle access to residences and businesses in the area , maintenance of traffic flow, and maintenance of access to evacuation routes.

4.10 Hydrology and Water Quality

4.10.1 Environmental Setting

4.10.1.1 Regional Hydrology

The City of Yucaipa is in the Yucaipa Watershed, which encompasses about 40 square miles and drains from Wilson Creek and Wildwood Creek into Live Oak Canyon in a northeast to southwest direction. Elevation ranges from about 8,700 feet in the upper reaches of the watershed to about 1,900 feet at the lower end of the watershed. The Wilson Creek Watershed divides into three main tributaries: the Gateway Wash as the north fork, Oak Glen Creek as the south fork, and Wilson Creek flowing in between the two. Central Yucaipa is divided into two main drainage systems, Chicken Springs Wash, a tributary of Wilson Creek, and Yucaipa Creek, a tributary of Wildwood Creek. Wildwood and Wilson Creek meet at the southwestern City limits (City of Yucaipa 2015).

Given the number of tributaries, washes, and creeks in the City, areas adjacent to these waterways may be subject to flooding during storm events. The Federal Emergency Management Agency (FEMA) maps river washes on their Flood Insurance Rate Maps (FIRM).

The City lies primarily within the Yucaipa Subbasin of the Upper Santa Ana Valley Groundwater Basin, which underlies the southeast part of the San Bernardino Valley, covering approximately 39 square miles. The Yucaipa Subbasin is bordered by the San Andreas fault to the north, the Redlands fault and the Crafton Hills to the west, the Banning fault to the south, and Yucaipa Hills to the east. Groundwater in the Yucaipa Subbasin is found chiefly in alluvium, with lesser quantities in the San Timoteo Formation and fractured bedrock beneath the alluvium. Dominant recharge to the subbasin occurs through the percolation of precipitation; infiltration within the channels of overlying streams, particularly Yucaipa and Oak Glen Creeks; underflow from the fractures within the surrounding bedrock beneath the subbasin; and artificial recharge at spreading grounds. Construction activities in Yucaipa would not require dewatering because groundwater in the Yucaipa Subbasin is typically between 200 to 280 feet below the surface (City of Yucaipa 2015).

Groundwater in the Yucaipa Subbasin is managed by YVWD. The YVWD also gets a portion of its waters supply from the San Timoteo and Beaumont Subbasins; therefore, the YVWD actively monitors groundwater in the subbasins and participates with other agencies in monitoring and protect the subbasins to ensure groundwater sustainability.

4.10.1.2 Site Hydrology and Onsite Drainage

Elevations in the Project Area range from 2,875 to 3,190 feet above mean sea level. The Project Area encompasses parts of the foothills north of Pisgah Peak and in an area near drainages near the foothills of the San Bernardino Mountains. Two intermittent drainages of Oak Glen Creek and Wilson Creek are within the Project Area.

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

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐

Less than Significant Impact.

The City of Yucaipa is a co-permittee under Santa Ana RWQCB Order Number R8-2010-0036, NPDES Permit No. CAS618036, also known as the Municipal Separate Storm Sewer System or MS4 permit. The San Bernardino County Water Quality Management Plan was developed to implement compliance with the MS4 permit. Pursuant to the requirements of the NPDES permit, the Proposed Project would be required to retain any additional runoff on site and discharge it to the storm drain system at rates that do not exceed pre-project conditions.

The focus of a construction SWPPP is to manage soil disturbance, non-storm water discharges, construction materials, and construction wastes during the construction phase of a Project. Potential water quality impacts associated with the Proposed Project include short-term construction-related erosion/sedimentation from ground-disturbing activities and construction-related hazardous material discharge. Since the SWPPP is specifically prepared to manage storm water quality and quantity, and prevent discharge of polluted runoff from the site, adherence to mandated SWPPP requirements would ensure potential impacts that could cause a violation of any water quality standards or waste discharge requirements is less than significant. No mitigation would be required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the Project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐

Less Than Significant Impact.

YVWD collaborated with other local agencies to create the 2020 Upper Santa Ana River Watershed Integrated Regional Urban Water Management Plan (IRUWMP) to ensure water resources meet the changing water needs of the community. The IRUWMP estimates water supply and demand for YVWD and addresses available water supplies. Water supplies available are sufficient to meet all existing customer demand and anticipated future customer demands. In addition to groundwater resources, YVWD also relies on imported water resources, local surface water resources, and recycled water to meet annual water demands. YVWD produced enough recycled water to meet 16.5 percent of their total water demand in 2020, thus decreasing potable water use.

The Proposed Project would construct four recycled water reservoirs, four booster stations, and approximately 3.4 miles of pipeline for the expansion of YVWD's recycled water system in the North Bench area of the City. The Project would only require minimal water use during construction for compaction and dust control. The footprints of the proposed boosters and reservoirs would be minimal, resulting in a negligible increase in impervious surfaces. Therefore, there would be no substantial interference with groundwater recharge and the Project would not substantially decrease groundwater supplies since it is a recycled water project. A less than significant impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i) result in substantial erosion or siltation onsite or offsite;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding onsite or offsite;	☐	☐	☒	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐

Less than Significant Impact.

Construction of the Proposed Project's four recycled water reservoirs, four booster stations, and 3.4-mile pipeline would require ground-disturbing activities, including excavation, trenching, and paving. These activities have the potential to result in erosion or siltation However, a SWPPP is required to be prepared prior to construction. The SWPPP would identify construction BMPs to eliminate or reduce soil erosion and introduction of pollutants in storm water, as well as eliminate non-storm water discharges to storm water systems and other drainages. BMPs would consist of measures such as a stabilized construction entrance, straw wattles and silt filter bags. Implementation of these measures during construction would minimize or avoid soil erosion during construction of the Proposed Project. Construction impacts would be less than significant with the implementation of standard construction BMPs from the SWPPP. Once pipeline construction in the ROW has completed roads would be returned to pre-project condition.

After construction, above ground components of the Project (the boosters and reservoirs) would increase impervious surfaces. However, this minor increase is not expected to cause flooding or impede or redirect flood flows. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to Project inundation?	☐	☐	☒	☐

Less than Significant Impact.

The B-14.1 booster site, located at the YVRWFF, and a portion of the pipeline on Oak Glen Road is in Zone X, an Area with Reduced Flood Risk due to Levee. The pipeline would cross into Zone A, a Special Flood Hazard Area without Base Flood Elevation (BFE), to connect to the B-17.2/R-17.2 and B-18.2/R-18.2 booster station/reservoir sites (FEMA 2022). Any inundation due to flooding would not result in a significant impact because releases of any spills from construction equipment would be prevented through the implementation of BMPs in the SWPPP to be prepared for the Proposed Project. Therefore, the Proposed Project would have a less than significant impact and no mitigation is required.

The Project Area is more than 60 miles from the Pacific Ocean and is therefore well outside a tsunami inundation zone. Seiches are waves that oscillate in enclosed water bodies, such as reservoirs, lakes, and ponds, or semi-enclosed bodies of water. Seiches may be triggered by moderate or large submarine earthquakes or sometimes by large onshore earthquakes. Inundation from a seiche can occur if the wave overflows a containment of an artificial body of water. The Project Area is not near any dams or dam inundation zones (City of Yucaipa 2015). Therefore, the Project would have no impact because it would not be subject to a tsunami and is not located within a dam inundation zone. Impacts would be less than significant and no mitigation is required.

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

Less than Significant Impact.

The 2020 Upper Santa Ana River Watershed IRUWMP ensures water resources meet the changing water needs of the community.

The Yucaipa Groundwater Sustainability Agency (GSA), acting as the GSA for the Yucaipa Subbasin (Plan Area, Subbasin), developed a Groundwater Sustainability Plan (GSP) in compliance with the 2014 Sustainable Groundwater Management Act (SGMA) and the California Department of Water Resources (DWR) GSP Regulations. DWR designated the Yucaipa Subbasin a high priority basin based primarily on its

reliance on groundwater for water supply. However, this Subbasin is not in a state of critical overdraft. The requirement of the GSP is to maintain or achieve sustainable groundwater management in the Yucaipa Subbasin by 2042 (Dudek 2022).

Potential water quality impacts associated with the Proposed Project include short-term construction-related erosion/sedimentation from ground-disturbing activities and construction-related hazardous material discharge. However, construction-related water quality impacts would be avoided or reduced to a level below significance through implementation of standard construction BMPs via the mandatory SWPPP that would be prepared for the Proposed Project. Additionally, the Proposed Project would expand the recycled water system in the North Bench area of the City of Yucaipa which would increase volume from recycled water sources to meet YVWD's total water demand and decrease potable water use, including water from groundwater sources. Impacts would be less than significant and no mitigation is required.

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 City of Yucaipa encompasses 18,090 acres, and its sphere of influence (SOI) consists of an additional 1,663 acres, for a total of 19,753 acres across the entire plan area. The vast majority of City land is either single-family or rural residential (36.1 percent), open space and recreation (16.9 percent), or vacant (26.6 percent). This is due to the City's low residential density and natural open space character (City of Yucaipa 2015).

The City has significant vacant land available for new housing, commercial, and industrial uses. The General Plan allows significant flexibility in the land use mix, intensity and density of development, and design standards. The City is comprised of six districts: North Bench, Central Yucaipa, Dunlap Acres, Wildwood Canyon, Chapman Heights, and the Freeway Corridor (City of Yucaipa 2016a).

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

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☒

No Impact.

The Proposed Project consists of extending the existing recycled water system in the North Bench area of the City of Yucaipa and the unincorporated Oak Glen community to accommodate existing and planned development. The reservoirs and booster stations will be constructed either adjacent to existing reservoirs or within undeveloped land. The pipeline would be within the ROW of Oak Glen Road, James Birch Road,

Chagall Road, Martell Avenue, and Lan Franc Road which would be returned to their existing condition upon completion of Project. Due to the nature of the Proposed Project, it would not physically divide an established community and no impact would occur. No mitigation is required.

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.

The City's General Plan provides the basis for land use designations in the City and the City's Development Code is the primary tool for implementing the General Plan. The Development Code provides development standards, identifies allowed uses, and specifies other regulations. The Proposed Project would not conflict with any applicable land use plans or policies; and no impact would occur. No mitigation is required.

4.11.3 Mitigation Measures

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

4.12 Mineral Resources

4.12.1 Environmental Setting

Minerals are defined as any naturally occurring chemical elements or compounds formed by inorganic processes and organic substances. Minable minerals are defined as a deposit of ore or minerals having a value materially in excess of the cost of developing, mining, and processing the mineral and reclaiming the project area.

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

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

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

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

According to the California Geological Survey (CGS) mineral resources map, "Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption (P-C) Region, San Bernardino and Riverside Counties, California", the Project Area is within MRZ-3 (CGS 2008). No mining operations currently occur in the Project Area nor in the surrounding area.

4.12.2 Mineral Resources (XII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

No Impact.

The Project Area is within MRZ-3. The Project Area is not located within an area known to be underlain by locally or regionally important mineral resources (CGS 2008). The Project Area is within an area of undetermined mineral resource significance, however due to the fact that the Proposed Project and Project Area do not include mineral resources extraction, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region or residents of the State. No impact would occur and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in 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.

The Project Area is within MRZ-3, in which the significance of mineral resources is undetermined (CGS 2008). There are no identified local or regionally important mineral resources within the Project Area. The Proposed Project would not impact any areas of known mineral resources. No impact would occur and no mitigation is required.

4.12.3 Mitigation Measures

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

4.13 Noise

This section documents the results of a Project Noise Impact Assessment, prepared by ECORP in October 2022 (ECORP 2022d; Appendix F). The analysis provides a comparison of predicted Proposed Project noise levels to noise standards promulgated by the City of Yucaipa General Plan Noise Element, the City of Yucaipa Municipal Code, the San Bernardino County General Plan, and San Bernardino County Municipal Code. The purpose of this section is to estimate Project-generated noise levels and determine the level of impact the Proposed Project would have on the environment. This section describes the existing environmental and regulatory conditions specific to noise and addresses the potential impact of the Proposed Project.

4.13.1 Environmental Setting

4.13.1.1 Noise Fundamentals

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

- Equivalent Noise Level (L_{eq}) is the average acoustic energy content of noise for a stated period of time. Thus, the 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 the night.
- Day-Night Average (L_{dn}) is a 24-hour average Leq with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour 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 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

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

Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB for each doubling of distance from a stationary or point source. Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately 3 dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2011). Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed (FHWA 2011).

The manner in which older structures in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (Caltrans 2002). The exterior-to-interior reduction of newer structures is generally 30 dBA or more (Harris Miller Miller & Hanson Inc. [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 semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in dBA, the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1.0 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3.0-dBA change is considered a just-perceivable difference.
- A change in 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.

The nearest existing noise-sensitive land uses to the Project Area are residential properties adjacent to the northern, southwestern, and northwestern Project Area boundary with the closest being approximately 86 feet from the Project Area.

4.13.1.4 Vibration Fundamentals

Ground vibration can be measured several ways to quantify the amplitude of vibration produced, including through peak particle velocity (PPV) or root mean square velocity. These velocity measurements measure maximum particle at one point or the average of the squared amplitude of the signal, respectively.

Vibration impacts on people can be described as the level of annoyance and can vary depending on an individual's sensitivity. Generally, low-level vibrations may cause window rattling but do not pose any threats to the integrity of buildings or structures.

4.13.1.5 Existing Ambient Noise Environment

The most common and significant source of noise in the City of Yucaipa is mobile noise generated by transportation-related sources. Other sources of noise are the various land uses (i.e., industrial facilities, agricultural uses, residential and commercial) that generate stationary-source noise.

4.13.1.6 Existing Ambient Noise Measurements

The American National Standards Institute (ANSI) Standard 12.9-2013/Part 3 "Quantities and Procedures for Description and Measurement of Environmental Sound – Part 3: Short-Term Measurements with an Observer Present" provides a table of approximate background sound levels in L_{dn}, daytime L_{eq}, and nighttime L_{eq}, based on land use and population density. The ANSI standard estimation divides land uses into six distinct categories. Descriptions of these land use categories, along with the typical daytime and nighttime levels, are provided in Table 4.13-1. At times, one could reasonably expect the occurrence of periods that are both louder and quieter than the levels listed in the table. ANSI notes, "95% prediction interval [confidence interval] is on the order of +/- 10 dB." The majority of the Project Area would be considered ambient noise Category 5 or 6.

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

Category	Land Use	Description	People per Square Mile	Typical L_{dn}	Daytime L_{eq}	Nighttime L_{eq}
1	Noisy Commercial & Industrial Areas and Very Noisy Residential Areas	Very heavy traffic conditions, such as in busy, downtown commercial areas; at intersections for mass transportation or other vehicles, including elevated trains, heavy motor trucks, and other heavy traffic; and at street corners where many motor buses and heavy trucks accelerate.	63,840	67 dBA	66 dBA	58 dBA
2	Moderate Commercial & Industrial Areas and Noisy Residential Areas	Heavy traffic areas with conditions similar to Category 1, but with somewhat less traffic; routes of relatively heavy or fast automobile traffic, but where heavy truck traffic is not extremely dense.	20,000	62 dBA	61 dBA	54 dBA
3	Quiet Commercial, Industrial Areas and Normal Urban & Noisy Suburban Residential Areas	Light traffic conditions where no mass-transportation vehicles and relatively few automobiles and trucks pass, and where these vehicles generally travel at moderate speeds; residential areas and commercial streets, and intersections, with little traffic, compose this category.	6,384	57 dBA	55 dBA	49 dBA
4	Quiet Urban & Normal Suburban Residential Areas	These areas are similar to Category 3, but for this group, the background is either distant traffic or is unidentifiable; typically, the population density is one-third the density of Category 3.	2,000	52 dBA	50 dBA	44 dBA
5	Quiet Residential Areas	These areas are isolated, far from significant sources of sound, and may be situated in shielded areas, such as a small, wooded valley.	638	47 dBA	45 dBA	39 dBA
6	Very Quiet, Sparse Suburban or rural Residential Areas	These areas are similar to Category 4 but are usually in sparse suburban or rural areas; and, for this group, there are few if any nearby sources of sound.	200	42 dBA	40 dBA	34 dBA

Source: ANSI 2013

4.13.2 Noise (XIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

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 onsite 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., land clearing, grading, excavation, building construction, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve 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 (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

Nearby noise-sensitive land uses consist of residences at 86 feet from the pipeline construction component of the Project. The residences located north of the Project Area boundary are located within the City limits while the remaining nearby noise-sensitive land uses are located within the unincorporated San Bernardino County. The City and County both limit the time that construction can take place but do not promulgate numeric thresholds pertaining to the noise associated with construction. Specifically, Chapter 87.0905 of the City's Municipal Code and Chapter 83.01.080 of the County's Municipal Code state that temporary construction, repair, or demolition noise between 7:00 a.m. and 7:00 p.m. are exempted from noise standards, except on Sundays and Federal holidays. Additionally, construction would occur throughout the linear Project Area and would not be concentrated at one point.

Onsite Construction Noise

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor in the Project vicinity in order to evaluate the potential health-related effects (physical damage to the ear) from construction noise, the construction equipment noise levels were calculated using the Roadway Noise Construction Model and compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by the National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of

Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

The anticipated short-term construction noise levels generated for the necessary equipment were calculated using the Roadway Noise Construction Model for the excavation, site preparation, grading, building construction, pipeline installation, and paving anticipated for the Proposed Project. It is acknowledged that the majority of construction equipment is not situated at any one location during construction activities, but rather spread throughout the Project Area and at various distances from sensitive receptors. The anticipated short-term construction noise levels generated for the necessary equipment is presented in Table 4.13-2.

Table 4.13-2. Construction Average (dBA) Noise Levels at Nearest Receptor – Project Area

Equipment	Estimated Exterior Construction Noise Level at Nearest Residences	Construction Noise Standards (dBA L_{eq})	Exceeds Standards?
Excavation			
Concrete Saw	77.9	85	**No**
Dozer	73.0	85	**No**
Tractors/Loaders/Backhoes (3)	75.3 (each)	85	**No**
Combined Excavation Equipment	**82.6**	85	**No**
Site Preparation			
Grader	76.3	85	**No**
Dozer	77.0	85	**No**
Tractors/Loaders/Backhoes	75.3	85	**No**
Combined Site Preparation Equipment	**79.8**	85	**No**
Grading			
Graders	76.3	85	**No**
Dozer	73.0	85	**No**
Tractors/Loaders/Backhoes	75.3	85	**No**
Combined Grading Equipment	**81.2**	85	**No**
Building Construction			

Table 4.13-2. Construction Average (dBA) Noise Levels at Nearest Receptor – Project Area			
Equipment	**Estimated Exterior Construction Noise Level at Nearest Residences**	**Construction Noise Standards (dBA L_{eq})**	**Exceeds Standards?**
Crane	67.9	85	**No**
Forklift	74.7	85	**No**
Generator	72.9	85	**No**
Tractors/Loaders/Backhoes	75.3	85	**No**
Welder/Torch (3)	65.3 (each)	85	**No**
Combined Building Construction Equipment	**80.0**	85	**No**
Pipeline Installation			
Boring Jack Power Unit	75.3	85	**No**
Concrete Saw (2)	77.9 (each)	85	**No**
Tractors/Loaders/Backhoes (2)	75.3 (each)	85	**No**
Excavator	72.0	85	**No**
Forklift	74.7	85	**No**
Generator	72.9	85	**No**
Flat Bed Truck	65.6	85	**No**
Slurry Trenching Machine (2)	72.6 (each)	85	**No**
Crane	67.9	85	**No**
All Other Equipment > 5 HP	77.3	85	**No**
Paver (2)	69.5 (each)	85	**No**
Pavement Scarafier (2)	77.8 (each)	85	**No**
Roller (2)	68.3 (each)	85	**No**
Combined Pipeline Installation Equipment	**87.3**	85	**Yes**
Paving			
Vibratory Concrete Mixer	68.3	85	**No**
Paver	69.5	85	**No**
Pavement Scarafier	77.8	85	**No**
Roller	68.3	85	**No**
Tractors/Loaders/Backhoes	75.3	85	**No**
Combined Paving Equipment	**80.7**	85	**No**

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Appendix F for Model Data Outputs.
Notes: Construction equipment used during construction derived from the Roadway Construction Emissions Model and California Emissions Estimator Model. These models are designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 4.13-2, the NIOSH threshold of 85 dBA L_{eq} would be exceeded at the nearest potential receptors to onsite construction during pipeline installation. It is noted that construction noise was modeled on a worst-case basis. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residences. Implementation of Mitigation Measure NOI-1 would reduce construction noise associated with pipeline installation below the NIOSH threshold of 85 dBA L_{eq}.

As previously described, noise barriers or enclosures such as that recommended in mitigation measure NOI-1 can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory [WEAL] 2000), which would be a reduction robust enough to maintain construction noise levels less than 85 dBA at the nearest residences during pipeline installation. Temporary noise barriers can consist of a solid plywood fence and/or flexible sound curtains, such as an 18-ounce tarp or a 2-inch-thick fiberglass blanket attached to chain link fencing. Therefore, Project construction activities would not expose persons to and generate noise levels in excess of the NIOSH health-based threshold, and therefore would not result in noise-related health effects. (physical damage to the ear).

Offsite Construction Worker Traffic Noise

Project construction would result in minimal additional traffic on adjacent roadways over the time period that construction occurs. According to RCEM and CalEEMod, which are used to predict the number of construction-related automobile trips, the maximum number of construction-related trips traveling to and from the Project Area during a single construction phase would not be expected to exceed 218 daily trips in total (200 construction worker trips and 18 haul truck trips). The worker trips would largely occur within two distinct segments of the day, the morning and afternoon, while the haul trips would occur intermittently throughout the workday. 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 the laboratory, a 3-dBA change is considered a just-perceivable difference). The majority of this construction-related traffic trips would access the Project Area via Oak Glen Road. According to the City of Yucaipa General Plan Draft Environmental Impact Report (City of Yucaipa 2015), the segment of Oak Glen Road east of Bryant Street (the section that traverses the Project Area) accommodates 4,176 average daily trips. Thus, the Project construction would not result in a doubling of traffic on the primary roadway used to access the Project Area, and therefore its contribution to existing traffic noise would not be perceptible. Additionally, it is noted that construction is temporary, and the trips generated from construction would cease upon completion of the Project.

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise-sensitive and may warrant unique measures for protection from intruding noise. The nearest existing noise-sensitive land uses to the Project Area are residential properties adjacent to the north of the Project Area boundary with the closest being approximately 86 feet distant.

Operational noise sources associated with the Proposed Project include mobile and stationary sources from the permit testing of back-up diesel generators.

Thus, a less than significant impact would occur with implementation of Mitigation Measure NOI-1.

Operational Offsite Traffic Noise

Project operations would result in minimal additional traffic on adjacent roadways. The only visitors to the site would be for permit testing of back-up diesel generators and repair or maintenance workers, whose presence at the site would be required infrequently and inconsistently. According to the California Department of Transportation (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 the laboratory, a 3-dBA change is considered a just-perceivable difference). The Proposed Project would not result in a doubling of traffic on vicinity roadways, and therefore its contribution to existing traffic noise would not be perceptible.

Operational Onsite Stationary Noise

Operational noise sources associated with the Proposed Project include mobile and stationary sources from the permit testing of back-up diesel generators. The diesel-powered backup generators would operate at no more than 10 hours per year, with a maximum operating time of 2 hours per day for routine testing. Upon the conclusion of the infrequent permit testing, operational noise associated with the Project would return to baseline noise levels.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Result in generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Less than Significant Impact.

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 Area 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 with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. It is noted that pile drivers would not be necessary during Project construction. Vibration decreases rapidly with distance and it is acknowledged that construction activities would occur throughout the Project Area and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with construction equipment at 25 feet distant are summarized in Table 4.13-3.

Table 4.13-3. Representative Vibration Source Levels for Construction Equipment

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

Source: FTA 2018; Caltrans 2020b

City of Yucaipa Municipal Code Section 87.0910 states that no ground vibration shall be allowed which can be felt without the aid of instruments at or beyond the lot line, nor will any vibration be permitted which produces a particle velocity greater than or equal to two-tenths (0.2) inches per second measured at or beyond the lot line. The nearest structure of concern to the construction site are residences located approximately 86 feet north of the Project Area center.

Based on the representative vibration levels presented for various construction equipment types in Table 4.13-3 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

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

Table 4.13-4 presents the expected Project related vibration levels at a distance of 86 feet.

Table 4.13-4. Onsite Construction Vibration Levels at 86 Feet							
Receiver PPV Levels (in/sec)[1]					Peak Vibration	Threshold	Exceed Threshold
Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jackhammer	Small Bulldozer	Vibratory Roller			
0.01395	0.01191	0.00548	0.00047	0.03291	**0.01395**	0.2	**No**

Notes: [1]Based on the Vibration Source Levels of Construction Equipment included on Table 5-2 (FTA 2018). Distance to the nearest structure of concern is approximately 86 feet.

As shown in Table 4.13-4, vibration as a result of onsite construction activities in the Project Area would not exceed 0.2 PPV at the nearest structures. Thus, onsite Project construction would not exceed the threshold, resulting in a less than significant impact.

Operational sources of groundborne vibration during operations associated with the Proposed Project include mobile and stationary sources from the permit testing of back-up diesel generators. The diesel-powered backup generators would operate at no more than 10 hours per year, with a maximum operating time of 2 hours per day for routine testing. The permit testing associated with the backup generators would not result in measurable amounts of vibration. Therefore, the Project would result in negligible groundborne vibration impacts during operations.

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 Area is located approximately six miles east of the Redlands Municipal Airport. According to Figure 3B, *Aircraft Noise Concerns*, of the Redlands Municipal Airport Land Use Compatibility Plan, the Project Area is located outside of noise contours. Thus, the Proposed Project would not expose people working in the Project Area to excess airport noise levels.

4.13.3 Mitigation Measures

NOI-1: The following measures shall be applied to the Project during pipeline installation activities and shall be monitored and enforced by YVWD:

- All construction equipment, fixed or mobile, will be equipped with properly operating and maintained mufflers, consistent with manufacturer standards.
- All stationary construction equipment will be placed so that emitted noise is directed away from the noise sensitive receptors nearest the Project Area.
- As applicable, shut off all equipment when not in use.
- Equipment staging shall be located in areas that create the greatest distance between construction-related noise/vibration sources and sensitive receptors surrounding the Project Area.
- Jackhammers, pneumatic equipment, and all other portable stationary noise sources will be directed away from sensitive receptors to the extent possible. Either one-inch plywood or sound blankets can be utilized for this purpose. They shall reach up from the ground and block the line of sight between equipment and the nearest off-site residences. The shielding shall be without holes and cracks.
- No amplified music and/or voice will be allowed on the construction site.

4.14 Population and Housing

4.14.1 Environmental Setting

City of Yucaipa is a mature, well-established suburban community in the foothills of the San Bernardino Mountains. The City is primarily a residential community whose economy is based upon service and light manufacturing. Many residents commute for employment to other cities within the region. According to the State Department of Finance (DOF), the City's population in 2021 was 54,739 persons. The City is home to 18,438 households and 2.92 persons per household (DOF 2022).

4.14.2 Population and Housing (XIV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

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. The new infrastructure would accommodate current and planned development and would not directly or indirectly induce population growth. Construction of the Proposed Project would use the local labor force and operation of the Project would be conducted by existing YVWD staff. Therefore, the Proposed Project is not anticipated to generate a substantial increase in employment opportunities capable of inducing population growth. As a result, no impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

No Impact.

The Proposed Project does not include the removal or disturbance of existing housing; therefore, it would not displace people or housing. No impact would occur.

4.14.3 Mitigation Measures

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

4.15 Public Services

4.15.1 Environmental Setting

4.15.1.1 Police Services

The Yucaipa Police Department provides effective safety and emergency response services, community programs, and educational activities. The police department protects residents and businesses from crime, transportation hazards, and other safety hazards The Yucaipa Police Department also implements a wide variety of programs to improve and maintain the safety of neighborhoods (City of Yucaipa 2015).

The eastern portion of the Project Area that falls within the Oak Glen Community is served by the San Bernardino County Sheriff's Department out of the Yucaipa Police Station (County of San Bernardino 2020a).

4.15.1.2 Fire Services

The Yucaipa Fire Department, via a contract with CAL FIRE, prepares a Fire Unit plan to provide fire protection and emergency medical services to the community. Yucaipa Fire maintains aid agreements with surrounding agencies to provide assistance during and after a fire emergency. Automatic aid agreements are in place with the City of Redlands Fire Department and Riverside County Fire Department. Yucaipa Fire maintains mutual aid agreements with the US Forest Service for wildland areas north and east of Yucaipa.

Mutual and automatic aid agreements are also in place with the San Bernardino County Fire Protection District. Yucaipa Fire also maintains a cooperative agreement with the SBCoFD (City of Yucaipa 2015).

The eastern portion of the Project Area that falls within the Oak Glen Community is served by County Service Area (CSA) 38 out of Oak Glen Station 39. The SBCoFD provides administration and support for CSA 38 fire district (County of San Bernardino 2007).

4.15.1.3 Schools

The Yucaipa-Calimesa Joint Unified School District serves the City of Yucaipa and Oak Glen Community. The district offers seven elementary schools (grades K–5/6), three middle schools (grades 6/7– 8), and three high schools (grades 9–12). In addition, alternative schools, charter schools, online classes, and an adult school are also provided (City of Yucaipa 2015).

4.15.1.4 Other Public Facilities

The City of Yucaipa is home to other facilities, including golf courses, senior centers, libraries, equestrian facilities, community centers, and other amenities.

4.15.2 Public Services (XV) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

The Proposed Project would not change existing demand for public services (e.g., fire and police protection, schools, parks, libraries, or health clinics) because no increase in population growth would occur from the proposed reservoirs, booster stations, and water pipeline installation. The Proposed Project

would also not generate new employment or population growth; therefore, no increase in the demand for schools, parks, or other public facilities would occur. No impacts are anticipated.

4.15.3 Mitigation Measures

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

4.16 Recreation

4.16.1 Environmental Setting

City of Yucaipa residents have access to 10 mini and neighborhood parks, 8 community parks, and the 385-acre Yucaipa Regional Park at the base of the Crafton Hills foothills. The park features four lakes for swimming, fishing, paddleboats, water slides, and other amenities. Its natural setting provides walking trails, picnic facilities, a recreational vehicle–only campground, and outdoor tent camping. Yucaipa's special use facilities include a golf club, equestrian center, sports complexes, and BMX facility. Additionally, Yucaipa is framed by the San Bernardino National Forest, Crafton Hills, Wildwood Canyon State Park, El Dorado Ranch Park, Oak Glen, and the San Gorgonio Wilderness (City of Yucaipa 2016a).

San Bernardino County maintains County Service Area 63 which includes a 19-acre park site with a historical schoolhouse, tennis court, playground, picnic area, and paved parking lot for the unincorporated areas in Yucaipa and Oak Glen (County of San Bernardino 2022b). In Oak Glen, The Wildlands Conservancy maintains the 909-acre Oak Glen Preserve which includes a botanic garden, outdoor discovery center, apple farm, picnic area, and hiking trails (The Wildlands Conservancy 2022).

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 and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

No Impact.

No increase in demand, or use of, existing parks or recreational facilities would result from the implementation of the Proposed Project because no population growth would occur. The Proposed Project consists of the construction of the new water infrastructure that would require routine maintenance. Routine maintenance of project facilities would be managed by existing City public works staff and would not result in an increase in employment. Therefore, no increase in demand or use of existing parks or recreational facilities would result from the implementation of the Proposed Project. No impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	☐	☐	☐	☒

No Impact.

The Proposed Project would install water infrastructure and would not affect recreational facilities. As such, the Proposed Project would not require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment. No impact 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

4.17.1.1 Roadway Facilities

The City of Yucaipa's street network is developed to allow for different travel speeds, modal options, and priorities. The main freeway for regional and interregional vehicular travel is I-10 which runs along the southern edge of Yucaipa. A major arterial highway is Mill Creek Road (SR-38) near the northern city limits of Yucaipa (City of Yucaipa 2016a). The Proposed Project's pipeline would run primarily along the existing roadway in Oak Glen Road, a two-lane undivided roadway, which is classified as a controlled/limited access collector east of Bryan Street. Oak Glen Road is classified as a major highway from Calimesa Boulevard to Colorado Street and as a secondary highway between Colorado Street and Bryant Street (City of Yucaipa 2015). Shorter segments of pipeline would be located within the ROW along James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites. James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road are residential roads.

The Oak Glen community's major roadway is the two-lane Oak Glen Road, which begins at I-10 and travels northeast through the City of Yucaipa and eventually turns south into Riverside County. Automobile use is the primary form of transportation for the community (County of San Bernardino 2007).

4.17.1.2 Transit Facilities

Automobile travel remains the primary source of transportation in the Project Area, however, the City acknowledges the need for alternative means of travel. The City's General Plan Transportation Element intends to facilitate safe and efficient movement of automobiles, cyclists, pedestrians, and public transit

riders (City of Yucaipa 2016a). Transit service in Yucaipa is provided by OmniTrans, the regional transportation agency serving San Bernardino Valley. OmniTrans provides three public transit services for Yucaipa that average boardings of 850 riders per day during weekdays. Two of the OmniTrans fixed routes connect the cities of San Bernardino, Loma Linda, Redlands, and Yucaipa. OmniTrans Access provides ADA transit services for eligible residents seeking door-to-door service. More than 300 households currently use this convenient service to access destinations through Yucaipa and surrounding cities. OmniGo is a local fixed-route service that connects to schools, health services, and other points of interest in the City. The City makes infrastructure investments to promote public transit as an alternative mode of transportation. These investments include the new transit center located adjacent to City Hall and the Yucaipa Boulevard widening project. The $2.7 million Yucaipa Transit Center consists of eight bus bay terminals, bus shelters, benches, information kiosks, and a pedestrian plaza (City of Yucaipa 2016a). Public transit is not available in the Oak Glen Community (County of San Bernardino 2007).

4.17.1.3 Bicycle Facilities

Multipurpose trails throughout the City provide opportunities for bicyclists to enjoy scenic views and travel to community destinations. The City maintains over 45 miles of bicycle pathways through Class I Bike Paths, Class II Bike Lanes, Class III Bike Routes, and Class IV Separated Bikeways. The portion of Oak Glen Road spanning the Project Area in the City of Yucaipa includes a Class II Bike Lane and a Class III Bike Route (City of Yucaipa 2015). Roadways in the Oak Glen Community, including Oak Glen Road, do not support bicycle lanes (County of San Bernardino 2020b).

4.17.1.4 Pedestrian Facilities

Oak Glen Road in the City of Yucaipa supports pedestrian facilities with sidewalks along portions of the road (City of Yucaipa 2016a). Roadways in the Oak Glen community, including Oak Glen Road, do not support pedestrian facilities (County of San Bernardino 2020b).

4.17.2 Transportation (XVII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☒

No Impact.

The Proposed Project would generate short-term construction-related vehicle trips. However, traffic generated during construction of the Proposed Project would be temporary and would not conflict with the City's Transportation Element or impede the implementation of City programs supporting walking, bicycling, and use of public transportation. No impacts would occur during construction.

Maintenance activities would generate occasional vehicle trips. The Proposed Project runs primarily along Oak Glen Road, but also includes local streets south of Oak Glen Road such as James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road to connect to the B-16.2/R-16.2 and B-17.2/R-17.2 booster station/reservoir sites. Once pipeline construction in the ROW has completed, all affected roads would be returned to pre-project condition. The operation of the Proposed Project would not conflict with any roadway plans or City programs supporting walking, bicycling, and use of public transportation.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐

Less Than Significant Impact

CEQA Guidelines Section 15064.3 subdivision (b) addresses the criteria for analyzing transportation impacts and establishes the vehicle miles traveled (VMT) metric as the most appropriate measure of transportation impacts in a CEQA document. Section 15064.3(b)(3) allows an agency to determine a project's transportation impact on a qualitative basis if a VMT methodology is unavailable, as is the case with the Proposed Project.

Section 15064.3(b)(3) is as follows:

> "Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's 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."

The Proposed Project would result in a short-term increase in the amount of traffic on the local roadways during construction. Following completion of the Project there would be no increase in traffic beyond current conditions. The Proposed Project would not increase the capacity of any of the affected roadways in the area and, as such, would not lead to a measurable and substantial increase in VMT. Therefore, the Proposed Project would have a less than significant impact.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The Proposed Project would install four recycled water reservoirs, four booster stations, and a new water pipeline below grade along the existing roads of Oak Glen Road, James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road. During construction of the pipeline in existing streets, lane closures may be required, which may require temporary re-routing of traffic, bike lanes, and pedestrian traffic on sidewalks. The nearest bus stop is at Oak Glen Road and Bryant Avenue and would not be affected by the Proposed Project. Mitigation Measure HAZ-1 requires a Project-specific Traffic Control Plan to maintain resident and emergency access during construction. With implementation of Mitigation Measure HAZ-1 a less than significant impact would occur.

After construction ends, the affected roads would be returned to their pre-project condition. The Project does not include any component that would alter existing roadway design features. The Project does not include any component that would introduce new hazards since the Project does not propose any new roadways. Furthermore, the Project is not proposing a new use that could introduce incompatible elements to area roadways. No impact would occur as a result of Project operation.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Result in inadequate emergency access?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

The Yucaipa Fire Department, via a contract with CAL FIRE, prepares a Fire Unit plan to provide fire protection and emergency medical services to the community (City of Yucaipa 2016b). Construction of the Proposed Project would require construction activities to occur within the public ROW along Oak Glen Road, James Birch Road, Chagall Road, Martell Avenue, and Lan Franc Road. Temporary construction truck traffic and road closures has the potential to interfere with emergency response access to areas near the Project Area. Mitigation Measure HAZ-1 requires the YVWD to prepare a Traffic Control Plan to ensure proper access to residences and businesses in the area by emergency vehicles during construction, ensure residences and businesses in the area have proper access to evacuation routes during construction, and to maintain traffic flow. Upon construction completion, roads affected by construction would be returned to pre-project conditions. Impacts to emergency access associated with lane closures during construction would be less than significant with the implementation of Mitigation Measure HAZ-1.

4.17.3 Mitigation Measures

Mitigation measure HAZ-1 is listed in Section 4.9.2 of this IS/MND.

4.18 Tribal Cultural Resources

4.18.1 Environmental Setting

4.18.1.1 Ethnographic Setting

Ethnographic accounts of Native Americans indicate that the Project Area lies predominantly within the original territory of the Serrano and Cahuilla (ECORP 2022c).

Serrano

The Serrano occupied an area in and around the San Bernardino Mountains and northward into the Mojave Desert. Their territory also extended west along the north slope of the San Gabriel Mountains, east as far as Twentynine Palms, north into the Victorville and Lucerne Valley areas, and south to the Yucaipa Valley and San Jacinto Valley (Cultural Systems Research 2005). The Serrano speakers in the Mojave Desert who lived along the Mojave River were known as Vanyume. Serrano is a language within the Takic family of the Uto-Aztecan language stock (ECORP 2022c).

Settlement locations were determined by water availability, and most Serrano lived in villages near water sources. Houses and ramadas were round and constructed of poles covered with bark and tule mats (Kroeber 1925). Most Serrano villages also had a ceremonial house used as a religious center. Other structures within the village might include granaries and sweathouses (Bean and Smith 1978).

Serrano social and political units were clans, patrilineal exogamous territorial groups. Each clan was led by a chief who had both political and ceremonial roles. The chief lived in a principal village within the clan's territory. The clans were part of a moiety system such that each clan was either a wildcat or coyote clan and marriages could only occur between members of opposite moieties (Earle 2004). On the north side of the San Bernardino Mountains, clan villages were located along the desert-mountain interface on Deep Creek, on the upper Mojave River, in Summit Valley, and in Cajon Pass. The principal plant food available near these villages was juniper berries. These villages also had access to mountain resources, such as acorns and pinyon nuts (ECORP 2022c).

Partly due to their mountainous and desert inland territory, contact between Serrano and Euro-Americans was minimal prior to the early 1800s. In 1819, an *asistencia* (mission outpost) was established near present-day Redlands and was used to help relocate many Serrano to Mission San Gabriel. However, small groups of Serrano remained in the area northeast of the San Gorgonio Pass and were able to preserve some of their native culture. Today, most Serrano live either on the Morongo or San Manuel reservations (Bean and Smith 1978).

Cahuilla

The Cahuilla spoke a Takic language. The Takic group of languages is part of the Uto-Aztecan language family. The Cahuilla occupied a territory ranging from the San Bernardino Mountains in the north to the Chocolate Mountains and Borrego Springs in the south, and from the Colorado Desert in the east to Palomar Mountain in the west. They engaged in trade, marriage, shared rituals, and war with other groups

of Native Americans whose territories they overlapped, primarily the Serrano and Gabrielino (Bean 1972, 1978; Kroeber 1925).

Cahuilla subsistence consisted of hunting, gathering, and fishing. Villages were often located near water sources, most commonly in canyons or near drainages on alluvial fans. Major villages were fully occupied during the winter, but during other seasons task groups made periodic forays to collect various plant foods, with larger groupings from several villages organizing for the annual acorn harvest (Bean and Saubel 1972). Bean and Saubel (1972) have recorded the use of several hundred species of plants used for food, building/artifact materials, and medicines. The major plant foods included acorns, pinyon nuts, and various seed-producing legumes. These were complemented by agave, wild fruits and berries, tubers, cactus bulbs, roots and greens, and seeds.

As many as 10,000 Cahuilla may have existed at the time of European contact in the eighteenth century (Bean 1978). Circa 1900, Cahuilla lived in the settlements of La Mesa, Toro, and Martinez on the Augustin and Toro reservations east and southeast of the Project Area (USGS 1904). Approximately 900 people claimed Cahuilla ancestry as of 1974 (Bean 1978).

There was no substantial European-American settlement in the Coachella Valley until the Southern Pacific Railroad completed its line from Los Angeles to Indio (then known as Indian Wells) in 1876. The railroad was completed to Yuma in 1877, linking southern California with Arizona and points east. Wells to supply water for the steam locomotives were dug at Indio, Coachella (originally named Woodspur), Thermal (originally named Kokell), and Mecca (originally named Walters). Settlement began around these wells and railroad stations, forming the nucleus of today's Coachella Valley towns (ECORP 2022c).

4.18.1.2 Regulatory Setting

Assembly Bill 52

Effective July 1, 2015, AB 52 amended CEQA to require that: 1) a lead agency provide notice to those California Native American tribes that requested notice of projects proposed by the lead agency; and 2) for any tribe that responded to the notice within 30 days of receipt with a request for consultation, the lead agency must consult with the tribe. Topics that may be addressed during consultation include TCRs, the potential significance of Project impacts, type of environmental document that should be prepared, and possible mitigation measures and Project alternatives.

Pursuant to AB 52, Section 21073 of the PRC defines California Native American tribes as "a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of the Statutes of 2004." This includes both federally and non-federally recognized tribes.

Section 21074(a) of the PRC defines TCRs for the purpose of CEQA as:

1. Sites, features, places, cultural landscapes (geographically defined in terms of the size and scope), sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

a. included or determined to be eligible for inclusion in the California Register of Historical Resources; and/or

b. included in a local register of historical resources as defined in subdivision (k) of Section 5020.1; and/or

c. 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 Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Because criteria a and b also meet the definition of a historical resource under CEQA, a TCR may also require additional consideration as a historical resource. TCRs may or may not exhibit archaeological, cultural, or physical indicators.

Recognizing that California tribes are experts in their TCRs and heritage, AB 52 requires that CEQA lead agencies provide tribes that requested notification an opportunity to consult at the commencement of the CEQA process to identify TCRs. Furthermore, because a significant effect on a TCR is considered a significant impact on the environment under CEQA, consultation is used to develop appropriate avoidance, impact minimization, and mitigation measures.

Summary of AB 52 Notification and Consultation

On October 3, 2022, YVWD notified the following California Native American tribes traditionally and culturally affiliated with the geographic area of the Proposed Project:

- Morongo Band of Mission Indians
- Yuhaaviatam of San Manuel Nation (YSMN) (formerly known as the San Manuel Band of Mission Indians)

As part of the AB 52 process, each recipient was provided a brief description of the Project and its location, the lead agency contact information, and a notification that the tribe has 30 days to request consultation. The 30-day response period concluded on November 1, 2022.

As a result of the initial notification letters, YVWD received the following responses:

- YSMN: Responded by email indicating the Proposed Project Area lies within Serrano ancestral territory and intersects through culturally sensitive spaces and accepting the consultation invitation.

No response was received from the Morongo Band of Mission Indians within the 30-day response period.

On October 31, 2022, YSMN responded to YVWD's initial notification letter via email and requested more Project information to assist the tribe in ascertaining how they will assume consulting party status and participate in project review and implementation. On November 14, 2022, YVWD responded with the requested information. On December 6, 2022, YSMN concurred with the cultural resource inventory study

(ECORP 2022c) and provided mitigation measures to be included in the IS/MND. These mitigations are included in this IS/MND as CUL-2, TCR-1, and TCR-2.

4.18.2 Tribal Cultural Resources (XVIII) Environmental Checklist and Discussion

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or	☐	☒	☐	☐
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

i-ii) While there are no known TCRs in the Project footprint, ground-disturbing activities have the potential to result in the discovery of, or inadvertent damage to, archaeological contexts and human remains, and this possibility cannot be eliminated. Consequently, there is a potential for significant impacts on TCRs. Implementation of Mitigation Measures CUL-2 (Section 4.5.5) and Mitigation Measures TCR-1 and TCR-2 (Section 4.18.3) would reduce the potential impacts to less than significant.

4.18.3 Mitigation Measures

TCR-1: The Yuhaaviatam of San Manuel Nation Cultural Resources Department (YSMN) shall be contacted, as detailed in CUL-2, of any pre-contact and/or post-contact cultural resources discovered during project implementation, and be provided information regarding the nature of the find so as to provide Tribal input with regards to significance and treatment. Should the discovery be deemed significant, as defined by CEQA (as amended, 2015), a

cultural resources Monitoring and Treatment Plan shall be created by the archaeologist, in coordination with YSMN, and all subsequent finds shall be subject to this Plan. This Plan shall allow for a monitor to represent YSMN for the remainder of the Project, should YSMN elect to place a monitor onsite.

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

4.19 Utilities and Service Systems

4.19.1 Environmental Setting

4.19.1.1 Water Service

YVWD provides water service to a large majority of the City of Yucaipa and its sphere of influence, including the Project Area. YVWD currently uses groundwater wells, surface water, recycled water, and imported water from the California State Water Project to meet its annual demand. Imported water use began in 2006 because YVWD had traditionally used groundwater to meet the bulk of demand, however the district's overreliance on groundwater has shifted in recent years resulting in adding imported water and recycled water to the water service portfolio. YVWD processes the imported drinking water at the YVRWFF, which uses macro-filtration and nanofiltration processes to clean and treat the water (City of Yucaipa 2016b).

Local water service to the Oak Glen community in the unincorporated area of San Bernardino County is provided by the Oak Glen Domestic Water Company. There are also many private wells in the community's plan area with larger pumping systems for various ranches. Some private residences have their own onsite methods such as wells and springs that are recharged annually by winter snows and rain (County of San Bernardino 2007).

4.19.1.2 Wastewater and Storm Drainage

YVWD provides sewer service to the majority of the City of Yucaipa and its sphere of influence, including the Project Area. YVWD encompasses an active service area of 40 square miles, 27 of which are in the City of Yucaipa. YVWD routes the sewage flows to the Henry N. Wochholz Regional Water Recycling Facility (WRWRF) (City of Yucaipa 2016b).

In general, the City of Yucaipa maintains the local storm drain facilities, which discharge into San Bernardino Flood Control District's regional facilities and the Santa Ana River. These agencies maintain flood control facilities to prevent or minimize loss of life and property caused by flooding. Runoff is managed by a combination of open and closed drainage channels and several detention facilities. These channels generally follow the existing ground and slope from east to west and from north to south (City of Yucaipa 2016a).

The entire Oak Glen community area has been developed with septic tanks and leachfield systems (County of San Bernardino 2007).

4.19.1.3 Solid Waste

Solid waste disposal in the City of Yucaipa is regulated by City Ordinance No. 119 and California Government Code, Title 7.3, which relates to solid waste management. Chapter 8.28, Waste Management, of the City's General Plan EIR sets requirements governing storage and collection of solid waste and recyclable materials (City of Yucaipa 2015).

The City has adopted an integrated waste management approach that includes waste prevention (or "source reduction"), recycling and composting, and the combustion or disposal of waste into landfills. The City's General Services/City Clerk's Department provides waste management services through a contractor (City of Yucaipa 2016a). Yucaipa Disposal is under contract with the City to collect its solid waste. The solid waste landfilled from the City is disposed of at the Mid-Valley Sanitary Landfill in the City of Rialto and the San Timoteo Sanitary Landfill in the City of Redlands; both facilities are operated by County of San Bernardino Solid Waste Management Division. Table 4.19-1 shows the capacity of each landfill.

Table 4.19-1. Solid Waste Landfill Capacities

Landfill	Location	Maximum Daily Permitted Tonnage	Remaining Capacity (cubic yards)	Estimated Closure Date
Mid-Valley Sanitary Landfill	2390 North Alder Avenue Rialto, California 92377	7,500	61,219,377	2045
San Timoteo Sanitary Landfill	San Timoteo Canyon Road Redlands, California 92373	2,000	12,360,396	2039

Source: CalRecycle 2022a, 2022b

The County of San Bernardino has exclusive franchise agreements with various waste haulers to provide waste services to residents and businesses in the unincorporated areas. Burrtec Waste Industries – Empire Disposal provides services for the communities of Mentone, Oak Glen, Forest Falls, Mountain Home, Angeles Oaks, and Redlands (County of San Bernardino 2022c).

4.19.1.4 Electricity

Southern California Edison is responsible for providing electrical service to residents and businesses in the City of Yucaipa and the majority of the County of San Bernardino. SCE obtains its electricity from various generating sources, including fossil fuel, wind, nuclear, and geothermal (City of Yucaipa 2016a).

4.19.1.5 Natural Gas

SoCal Gas supplies natural gas services to the City of Yucaipa and the County of San Bernardino. High-pressure transmission lines transport natural gas from the Mojave Valley down the Cajon Pass along the I-15 to transmission lines along I-10 (City of Yucaipa 2016a).

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

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐

Less than Significant Impact.

The Proposed Project is the construction of four recycled water reservoirs, four booster stations, and approximately 3.4 miles of pipeline within Oak Glen Road and other roads for the expansion of the recycled water system in the North Bench area (zones 16 through 20) of the City of Yucaipa. Construction of this Project would not require new or expanded water or wastewater treatment facilities. Further, the Proposed Project would not impact natural gas, electric power, or telecommunication facilities. The environmental effects from constructing the Proposed Project are described in this Initial Study. Impacts would be less than significant and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the Project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☐	☒	☐

Less than Significant Impact (Construction)/Beneficial Impact (Operation).

The 2020 Upper Santa Ana River Watershed IRUWMP ensures water resources meet the changing water needs of the community. Total demands for potable water in 2020 was 11,345 acre-feet (AF) while total water supplies were 13,579 AF. With the implementation of active groundwater recharge and aquifer storage recovery projects, YVWD projects water supply to be 59,000 AF in 2025 and 85,000 AF by 2045. There are sufficient water supplies such that YVWD will not need to reduce groundwater pumping during a single-dry or multi-dry year (Water Systems Consulting, Inc. and Woodard & Curran 2021).

The Project would use water for dust control and compaction during construction; this amount of water would be minor and would not affect the water needs of the community. A less than significant impact would occur. The Project will expand the YVWD's recycled water system by constructing recycled water reservoirs, booster stations, and approximately 3.4 miles of pipeline. A goal of YVWD is to increase the use of recycled water to reduce reliance on imported and local supplies; this Project aligns with the goal of increasing water supplies. A beneficial impact would occur.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Result in a determination by the wastewater treatment provider, which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

No Impact.

The Proposed Project involves construction of water reservoirs and booster stations as well as water infrastructure within existing roads. The Proposed Project would not produce wastewater during construction or operation. No impact would occur, and no mitigation is required.

Would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐

Less than Significant Impact.

Minimal waste would be generated by the Project during construction. Operation of the Project would not generate solid waste. As such, the Proposed Project is not anticipated to generate solid waste in excess of State and local standards. Impacts would be less than significant and no mitigation is required.

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?	☐	☐	☒	☐

Less than Significant Impact.

As outlined in the City's Municipal Code 8.26 *Diversion of Construction and Demolition Waste*, the applicant shall submit a properly completed waste management and diversion plan (WMP) to the WMP compliance official as a portion of the building and/or demolition process. 14 CCR Sections 17380 through 17390 outline regulatory requirements for transferring and disposing of construction and demolition and inert debris. Waste generated by construction of the Proposed Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste. Impacts would be less than significant and no mitigation is required.

4.19.3 Mitigation Measures

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

4.20 Wildfire

4.20.1 Environmental Setting

Wildland fire is a concern in the Project Area. Expansive open areas are susceptible to destructive wildland fires, which can be exacerbated by dry weather and Santa Ana winds.

Responsibility for wildland fire prevention and suppression includes the city, state, and federal government. The federal government has the primary responsibility in Wildwood Canyon, Yucaipa Hills, and National Forest. These Federal Responsibility Areas (FRA) total 8 percent of the acreage within the City and sphere of influence. Areas where the State of California has primary responsibility are State Responsibility Areas and comprise 17 percent, primarily in the Crafton Hills and El Dorado Ranch Park. Local Responsibility Areas (LRA) comprise most of the developed areas in Yucaipa (City of Yucaipa 2016a). According to CAL FIRE, the City is mapped as having moderate to very high wildland fire risk. Portions of the City along the southwest, north, and eastern boundaries are in a VHFHSZ which is the highest wildfire risk classification designated by the CAL FIRE. These areas extend into VHFHSZ in state and federal responsibility areas outside of the City (CAL FIRE 2022; City of Yucaipa 2016b).

The Oak Glen community is mapped within moderate and very high fire hazard severity zones in the State Responsibility Area and Federal Responsibility Area (CAL FIRE 2022).

Portions of the Project Area, including those in the unincorporated area of San Bernardino are mapped as VHFHSZ in the local responsibility area and moderate, high, and very high in the state responsibility area (CAL FIRE 2022).

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?	☐	☒	☐	☐

Less than Significant Impact with Mitigation Incorporated.

The City of Yucaipa has adopted the California Fire Code (CFC) with amendments to address local fire hazard concerns. Specific requirements for fire access include roadway design, road widths, and project perimeters. In accordance with the California Public Resources Code, properties upon or adjoining hazardous fire areas must maintain a 100-foot defensible space around structures, with most intensive fuel management within the first 30 feet around the structure. To facilitate emergency access and evacuation, 10-foot clearances are required along each side of portions of highways and private streets that are improved, designed, or ordinarily used for vehicles (City of Yucaipa 2016a).

Implementation of the Proposed Project would require construction to occur within Oak Glen Road. Construction activities, which may temporarily restrict vehicular traffic, would be required to implement adequate and appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures in accordance with Mitigation Measure HAZ-1. Upon construction completion, the roads would return to pre-project conditions. Operational activities would not impair any emergency response or evacuation plans. Impacts would be less than significant with implementation of Mitigation Measure HAZ-1.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose Project occupants to, pollutant concentrations from, a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐

Less than Significant Impact.

Portions of the Project Area are located in a VHFHSZ (CAL FIRE 2022). The eastern portion of the Project Area along Oak Glen Road approaches the foothills of the San Bernardino Mountains and therefore has a moderate slope. The Proposed Project would not exacerbate wildfire risks. Additionally, the Proposed Project would not involve the construction of habitable structures that could expose occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Impacts would be less than significant and would not require mitigation.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐

Less than Significant Impact.

Portions of the Project Area are located in a VHFHSZ (CAL FIRE 2022). The Proposed Project includes the construction of four recycled water reservoirs, booster stations, and approximately 3.4-miles of pipeline to expand YVWD's recycled water system in the North Bench area (zones 16 through 20). This Project does not require the installation or maintenance of associated infrastructure that would exacerbate fire risk or result in temporary or ongoing impacts. Impacts would be less than significant and no mitigation is required.

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

Less than Significant Impact.

Portions of the Project Area are located in a VHFHSZ (CAL FIRE 2022). The Proposed Project would not alter the slope or drainage patterns of the Project Area and thus would not expose people or structures to significant risk from runoff or post-fire instability. Impacts would be less than significant and no mitigation is required.

4.20.3 Mitigation Measures

Mitigation measure HAZ-1 is listed in Section 4.9.2 of this Initial Study.

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.

As discussed throughout this Initial Study, potentially significant impacts were identified for biological resources, cultural resources, geology and soils, hazards and hazardous materials, noise, and tribal cultural resources. The Proposed Project's impacts would be less than significant with incorporation of Mitigation Measures BIO-1 through BIO-5, CUL-1 and CUL-2, GEO-1, HAZ-1, NOI-1, and TCR-1 and TCR-2.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

Potentially significant impacts from the Proposed Project identified in this IS/MND would occur during construction and would be mitigated to a less than significant level. No significant operational impacts were identified. Accordingly, the Proposed Project would not otherwise combine with impacts of related development to add considerably to any cumulative impacts in the region. With mitigation, the Proposed Project would not have impacts that are individually limited, but cumulatively considerable. Therefore, with mitigation, the Proposed Project would have a less than cumulatively considerable impact.

Does the Project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c) Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Less than Significant with Mitigation Incorporated.

All of the Project's impacts on human beings, both direct and indirect, were identified and mitigated where necessary in this IS/MND document. Therefore, after mitigation, the Proposed Project would not either directly or indirectly cause substantial adverse effects on human beings. Direct and indirect impacts to human beings would be less than significant with the implementation of mitigation measures listed in this Initial Study.

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5.0 LIST OF PREPARERS

5.1 Yucaipa Valley Water District

Lead Agency

Jennifer Ares, Water Resource Manager

Matthew M. Porras, Implementation Manager

Joseph Zoba, General Manager

5.2 ECORP Consulting, Inc.

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

Anne Surdzial, Director of CEQA/NEPA Services

Samantha Alfaro, Assistant Environmental Planner

Lindsay Liegler, Associate Environmental Planner

Amber Williams, Associate Environmental Planner

Phillip Wasz, Senior Wildlife Biologist

Chelsie Brown, Staff Biologist

Seth Myers, Senior Air Quality/GHG/Noise Analyst

Robert Cunningham, Staff Archaeologist

Sonia Sifuentes, Senior Archaeologist

Nicholas Bizzell, Associate Archaeologist

Julian Acuna, Associate Archaeologist

Nathan Hallam, Senior Architectural Historian

Niranjala Kottachchi, Senior Paleontologist

Marc Guidry, GIS Assistant Group Manager

Torrey Rotellini, GIS Assistant

Karla Green, Technical Editor

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6.0 BIBLIOGRAPHY

American National Standards Institute (ANSI). 2013. ANSI Standard 12.9-2013/Part 3 A-weighted Sound Levels Corresponding to Land Use and Population Density.

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

Bean, L. J. 1978. Cahuilla. In *Handbook of North American Indians, Volume 8, California*, edited by R. F. Heizer, pp. 575-587. Smithsonian Institution, Washington, D.C.

_____. 1972. *Mukat's People: The Cahuilla Indians of Southern California*. University of California Press, Berkeley and Los Angeles.

Bean, L. J. and C. R. Smith. 1978. Serrano. In *Handbook of North American Indians, Volume 8: California*, edited by Robert F. Heizer, pp. 570-574. Smithsonian Institution, Washington, D.C.

Bean, L. J. and K. S. Saubel. 1972. *Temalpakh (from the Earth): Cahuilla Indian Knowledge and Usage of Plants*. Malki Museum Press., Banning.

Calflora. 2022. Information on California plants for education, research and conservation. Berkeley, California: The Calflora Database [a non-profit organization], http://www.calflora.org/. Accessed August 2022.

California Air Resources Board (CARB). 2021. California Greenhouse Gas Emission Inventory 2021 Edition, https://ww2.arb.ca.gov/ghg-inventory-data.

_____. 2019. State and Federal Area Designation Maps, http://www.arb.ca.gov/desig/adm/adm.htm. Accessed October 20, 2022.

California Department of Conservation (DOC). 2022. California Important Farmland Finder, https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed May 11, 2022.

California Department of Finance (DOF). 2022. QuickFacts: City of Yucaipa, https://www.census.gov/quickfacts/fact/table/yucaipacitycalifornia/BZA115220. Accessed July 5, 2022.

California Department of Fish and Wildlife (CDFW). 2022a. RareFind California Department of Fish and Game Natural Diversity Database (CNDDB). California. Sacramento, CA, California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed August 2022.

_____. 2022b. State and Federally Listed Endangered and Threatened Animals of California. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Wildlife. Accessed August 2022.

_____. 2022c. Special Animals List. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Game, https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline. Accessed August 2022.

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer, https://egis.fire.ca.gov/FHSZ/. Accessed June 22, 2022.

California Department of Transportation (Caltrans). 2022. California State Scenic Highway System Map, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa. Accessed October 25, 2022.

_____. 2020a. Structure and Maintenance & Investigations, Historical Significance–Local Agency Bridges Database, http://www.dot.ca.gov/hq/structur/strmaint/hs_local.pdf. Accessed July 1, 2022.

_____. 2020b. Transportation and Construction Vibration Guidance Manual.

_____. 2019. Structure and Maintenance & Investigations, Historical Significance–State Agency Bridges Database, http://www.dot.ca.gov/hq/structur/strmaint/hs_state.pdf. Accessed July 1, 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, https://calepa.ca.gov/sitecleanup/corteselist/. Accessed June 21, 2022.

California Geological Survey (CGS). 2008. Updated Mineral Land Classification Map for Portland Cement Concrete-Grade Aggregate in the San Bernardino Production-Consumption (P-C) Region, San Bernardino and Riverside Counties, California, https://filerequest.conservation.ca.gov/?q=SR_206. Accessed July 26, 2022.

California Native Plant Society (CNPS). 2022. Inventory of Rare and Endangered Plants of California (online edition, v9-01 0.0). California Native Plant Society, Sacramento, CA, http://www.rareplants.cnps.org.

CalRecycle. 2022a. SWIS Facility/Site Summary – Mid-Valley Sanitary Landfill (36-AA-0055), https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/2662. Accessed July 27, 2022.

_____. 2022b. SWIS Facility/Site Summary – San Timoteo Sanitary Landfill (36-AA-0087), https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/1906?siteID=2688. Accessed July 27, 2022.

California Energy Commissions (CEC). 2021a. 2020 Total System Electric Generations in Gigawatt Hours, https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2020-total-system-electric-generation.

_____. 2021b. California Energy Consumption Database, http://www.ecdms.energy.ca.gov/Default.aspx.

City of Yucaipa. 2022. City of Yucaipa General Plan Web App Viewer, https://yucaipa.maps.arcgis.com/apps/webappviewer/index.html?id=6be07e1d187d44e3a9cb9cb62df90dc5. Accessed June 22, 2022.

_____. 2016a. City of Yucaipa General Plan, https://yucaipa.org/wp-content/uploads/dev_svcs/general_plan/Yucaipa_General_Plan2016.pdf. Accessed May 3, 2022.

_____. 2016b. City of Yucaipa General Plan Update Final Environmental Impact Report, https://yucaipa.org/wp-content/uploads/dev_svcs/general_plan/FinalEIR.pdf. March 2016. Accessed June 14, 2022.

_____. 2015. City of Yucaipa General Plan Draft EIR, https://yucaipa.org/wp-content/uploads/dev_svcs/general_plan/DraftEIR.pdf. Accessed July 25, 2022.

County of San Bernardino. 2022a. Public San Bernardino County Map Viewer, https://sbcounty.maps.arcgis.com/apps/MapSeries/index.html?appid=f5a50c44766b4c36a3ae014497aa430d. Accessed October 21, 2022.

_____. 2022b. County Service Area 63 Oak Glen, https://specialdistricts.sbcounty.gov/parks-and-recreation/csa-63/. Accessed October 27, 2022.

_____. 2022c. Waste Haulers in Unincorporated Areas, https://dpw.sbcounty.gov/solid-waste-management/waste-hauler/. Accessed October 27, 2022.

_____. 2020a. Countywide Plan – Oak Glen Community Action Guide, https://countywideplan.com/wp-content/uploads/sites/68/2020/10/11_Oak-Glen_CAG_Final2020_rev.pdf. Accessed July 29, 2022.

_____. 2020b. Oak Glen, San Bernardino County Community Profile, https://countywideplan.com/wp-content/uploads/sites/68/2020/10/11_Oak-Glen-Community-Profile_2020_Edits_Accepted-1.pdf. Accessed October 20, 2022.

_____. 2020c. San Bernardino County Countywide Plan – County Policy Plan, http://www.sbcounty.gov/Uploads/LUS/GeneralPlan/Policy%20Plan%20and%20Policy%20Maps.pdf. Accessed October 21, 2022.

_____. 2007. County of San Bernardino General Plan – Oak Glen Community Plan, http://www.sbcounty.gov/Uploads/lus/CommunityPlans/OakGlenCP.pdf. Accessed May 3, 2022.

Crockett, Alexander G. 2011. Addressing the Significance of Greenhouse Gas Emissions Under CEQA: California's Search for Regulatory Certainty in an Uncertain World.

Cultural Systems Research. 2005. Inland Feeder Project: Final Report, Native American Ethnography and Ethnohistory. Prepared for Metropolitan Water District of Southern California, Los Angeles. Report #RI-5088 on file at the Eastern Information Center, University of California, Riverside. Menlo Park, California.

Department of Toxic Substances Control (DTSC). 2022. EnviroStor Database, https://www.envirostor.dtsc.ca.gov/public/. Accessed June 22, 2022.

Dudek. 2022. Final Groundwater Sustainability Plan for the Yucaipa Groundwater Subbasin, https://yucaipasgma.org/final-gsp. Accessed August 1, 2022.

_____. 2019. San Bernardino Countywide Plan Biological Resources Existing Conditions, https://countywideplan.com/policy-plan/natural-resources/. Prepared for County of San Bernardino. Accessed October 24, 2022.

Earle, D. D. 2004. Native Population and Settlement in the Western Mojave Desert in the Eighteenth and Nineteenth Centuries. In Proceedings of the Millennium Conference: the Human Journey and Ancient Life in California's Deserts, May 9-12, 2001. Maturango Museum Press, Ridgecrest, California.

ECORP Consulting, Inc. (ECORP). 2022a. North Bench Recycled Water System Project Air Quality & Greenhouse Gas Emissions Assessment. October.

_____. 2022b. Biological Technical Report, North Bench Recycled Water System Project. October.

_____. 2022c. Cultural Resources Inventory Report, North Bench Recycled Water System Project. October.

_____. 2022d. Noise Impact Assessment, North Bench Recycled Water System Project. October.

Federal Highway Administration (FHWA). 2011. Effective Noise Control During Nighttime Construction, http://ops.fhwa.dot.gov/wz/workshops/accessible/schexnayder_paper.htm. _____. 2006. Roadway Construction Noise Model.

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

Harris Miller Miller & Hanson Inc. (HMMH). 2006. Transit Noise and Vibration Impact Assessment, Final Report.

Kroeber, A. L. 1925. Handbook of the Indians of California. Bulletin 78. Washington, D.C.: Bureau of American Ethnology. p. 7.

LSA. 2020. Biological Resources Assessment, Yucaipa Valley Water District 16.2 Reservoir and Booster Pumping Station Project. November 2020.

National Park Service. 2022. National Register of Historic Places, Digital Archive on NPGallery, https://npgallery.nps.gov/NRHP/BasicSearch/. Accessed July 1, 2022.

National Resource Conservation Service (NRCS). 2022. Natural Resources Conservation Science Web Soil Survey, https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed June 14, 2022.

Office of Historic Preservation (OHP). 2022a. Office of Historic Preservation's Built Environment Resource Directory (BERD) for San Bernardino County.

_____. 2022b. Office of Historic Preservation California Historical Landmarks, http://ohp.parks.ca.gov/?page_id=21387. Accessed July 1, 2022.

_____. 1996. California Historical Landmarks. California Department of Parks and Recreation, Sacramento, California.

San Bernardino County Fire Protection District (SBCoFD). 2022. San Bernardino county Certified Unified Program Agency (CUPA) Hazardous Materials, https://sbcfire.org/hazmatcupa/. Accessed July 22, 2022.

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

South Coast Air Quality Management District (SCAQMD). 2008. Final Localized Significance Threshold Methodology (dated June 2003 [revised 2008]).

_____. 2003. 2003 Air Quality Management Plan.

_____. 1992. 1992 Federal Attainment Plan for Carbon Monoxide.

State Water Resources Control Board (SWRCB). 2022. Geotracker Database, https://geotracker.waterboards.ca.gov/. Accessed June 22, 2022.

Strong, W. D. 1929. Aboriginal Society in Southern California. University of California Press, Berkeley, CA. University of California Publications in American Archaeology and Ethnology.

U.S. Fish and Wildlife Service (USFWS). 2022a. National Wetlands Inventory, https://www.fws.gov/wetlands/data/Mapper.html. Accessed August 2022.

_____. 2022b. IPaC. Information for Planning and Consultation, https://ecos.fws.gov/ipac/. Accessed August 23, 2022.

U.S. Geological Survey (USGS). 2022. The National Map, https://viewer.nationalmap.gov/advanced-viewer/. Accessed August 23, 2022.

_____. 1904. Indio, California, 30-minute quadrangle.

Water Systems Consulting, Inc. and Woodard & Curran. 2021. Upper Santa Ana River Watershed 2020 Integrated Regional Urban Water Management Plan

Western Electro-Acoustic Laboratory (WEAL). 2000. *Sound Transmission Sound Test Laboratory Report No. TL 96-186*.

Western Science Center (WSC). 2022. Record Search Results of the North Bench Project, City of Yucaipa, San Bernardino County, California.

The Wildlands Conservancy. 2022. Oak Glen Preserve, https://wildlandsconservancy.org/preserves/oakglen/#block-yui_3_17_2_1_1607206526236_5371. Accessed October 27, 2022.

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