Rio Vista Water Treatment Plant (RVWTP) Sewer Line Project

Initial Study – Mitigated Negative Declaration

prepared by

Santa Clarita Valley Water Agency
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Initial Study

1. Project Title

Rio Vista Water Treatment Plant (RVWTP) Sewer Line Project

2. Lead Agency/Project Sponsor Name and Address

Santa Clarita Valley Water Agency
27234 Bouquet Canyon Road
Santa Clarita, California 91350

3. Contact Person and Contact Information

Amy Anderson, Project Manager
Phone: (661) 476-0041
Email: engineeringtemp@scvwa.org

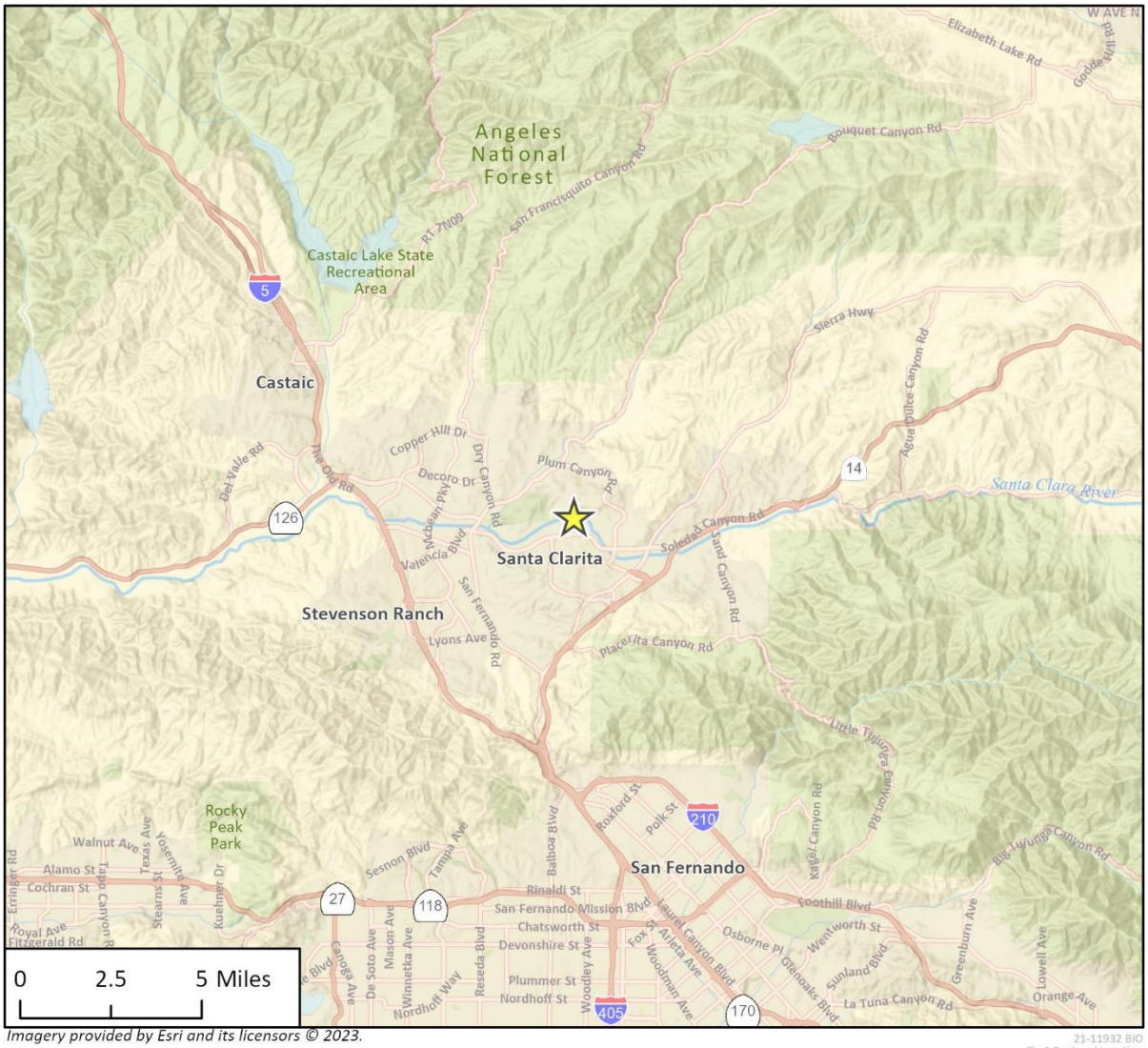
4. Project Location

The project site is located on Assessor's Parcel Number (APN) 2849-003-901 within Santa Clarita, California. The project includes two non-contiguous linear pipeline segments: one 1,900-foot segment would follow an existing dirt access road east of the existing pipeline, and one 350-foot segment located within internal roadways at the RVWTP. See Figure 1 for a map of the regional project location and Figure 2 for a map of the project site location in a local context.

5. General Plan Designation and Zoning

The City of Santa Clarita's General Plan land use designation and zoning for the project site is Open Space (OS).

Figure 1 Regional Location



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21-11932 BIO
Fig 1 Regional Location

Project Location

N

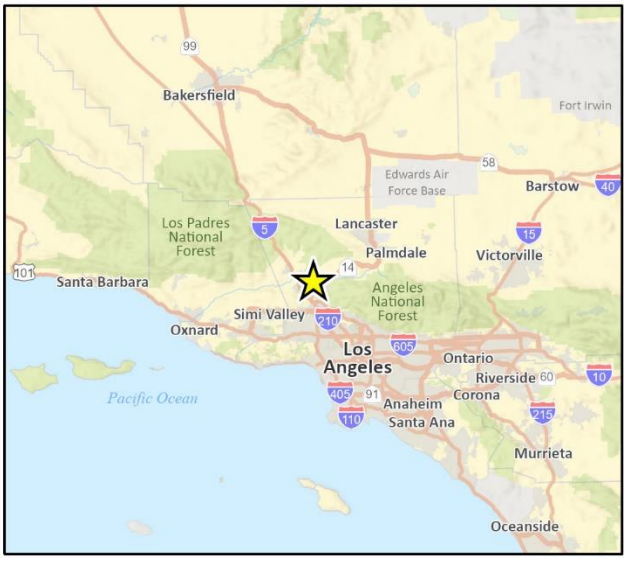
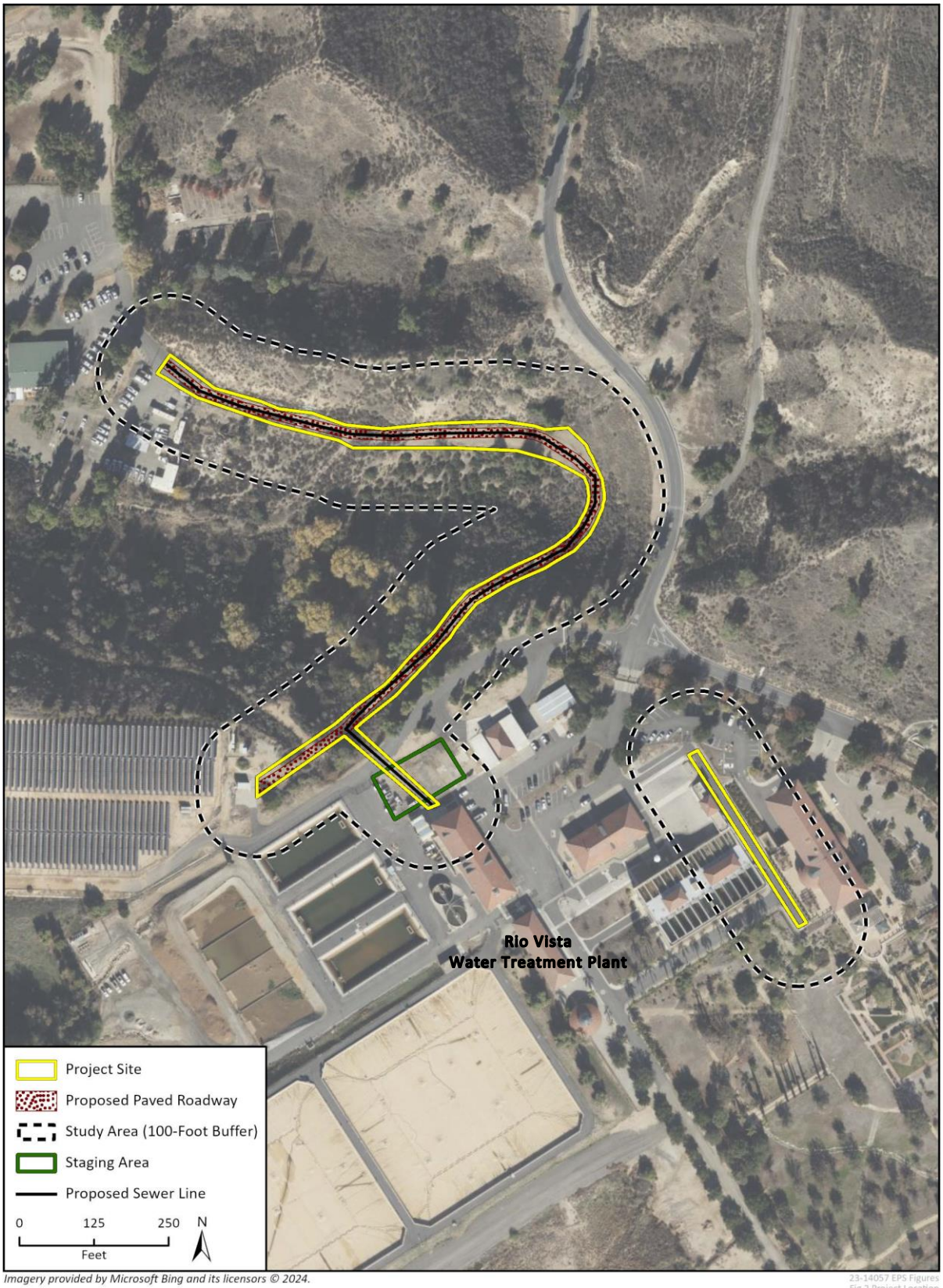


Figure 2 Project Location



6. Project Description

Background

The Rio Vista Water Treatment Plant (RVWTP) Sewer Line is a critical piece of Santa Clarita Valley Water Agency's (SCV Water) infrastructure, installed in the 1970s with a septic system and a leach field that were constructed and later expanded to accommodate additional flow from expansion of the RVWTP. The RVWTP sewer system is no longer connected to the leach field, and now ties into an 8-inch sewer line in the City of Santa Clarita's Central Park. In March and June of 2022, inspections revealed pipelines issues such as deposits, encrustation, root intrusion, and infiltration. SCV Water intends to address these issues via pipeline replacement to ensure reliability and longevity of the sewer system.

Proposed Project

The RVWTP Sewer Line Project (herein referred to as "proposed project" or "project") would replace an existing eight-inch sewer line that connects the RVWTP to the local sewer system. As stated previously, the RVWTP's sewer system is no longer connected to the leach field, and now ties into an eight-inch sewer line approximately 0.2-mile northwest of the RVWTP. This segment runs generally northwest between the RVWTP and an existing connection point to the local sewer pipeline system. The proposed pipeline would follow an existing unpaved access roadway between the RVWTP and the existing connection point to the local sewer pipeline system to avoid steep hillsides and impacts related to erosion. Figure 2 shows the pipeline alignment. This new alignment would be located east of the existing alignment and is approximately 1,900 linear feet in length.

The project also includes upsizing approximately 350 linear feet of an existing sewer pipeline from six inches to eight inches in diameter. This pipeline is located within internal roadways at the RVWTP.

Implementation of the project will include excavation to install the new pipeline segment and replace the existing pipeline segment. The project would also pave the existing dirt access road to a width of 16 feet. The paved road would extend from a paved driveway within the RVWTP adjacent to the solar field, along the existing dirt access road to an existing paved parking area at the south side of Central Park.

The project would require vegetation removal, tree trimming, and tree removal along the pipeline segment, with an anticipated total of four trees to be removed.

Construction

The proposed pipeline would be installed following an existing unpaved access roadway between the RVWTP and the existing connection point to the local sewer pipeline system to avoid steep hillsides and impacts related to erosion. The proposed pipeline would require excavation to a width of up to 7 feet and a depth of up to 12 feet. Temporary ground disturbance during construction would be to a width of approximately 25 feet for paving of the road. While it is not anticipated that construction activities would encounter groundwater, if dewatering becomes necessary during construction, such water would be discharged into the City's storm drain system following approval of a discharge permit, or into the existing sewer system.

Construction of the proposed project would occur between January 2025 and November 2025. Construction activities would typically occur between 7:00 A.M. and 4:00 PM Monday through Friday. No nighttime construction is proposed. Occasional weekend work may be required.

Construction personnel vehicles would be parked within the RVTWP and identified staging area as needed. Staging is anticipated to occur within an unpaved dirt lot at the RVTWP adjacent to the southern extent of the proposed sewer line.

Construction of the project would have a ground disturbance of approximately more than one acre. Therefore, the project would be subject to the requirements of the National Pollutant Discharge Elimination System (NPDES) Construction General Permit, for which a Stormwater Pollution Prevention Plan (SWPPP) must be prepared, including best management practices to implement erosion control measures.

Approximately 2,356 cubic yards of soil would be excavated from the site, with approximately 604 cubic yards exported via haul trucks and the remainder used as fill materials. This would require a total of approximately 38 haul truck trips export. Exported material would be hauled to Chaquita Canyon Landfill via Bouquet Canyon Road and Newhall Ranch Road. Approximately 489 cubic yards of soil would be imported from off-site sources for pipe bedding, requiring a total of approximately 31 haul truck trips.

Standard Construction Practices

SCV Water maintains standard contractor specifications that would be applied to the proposed project. These include:

- **Trench Backfill and Compaction/Soils Test/Geotechnical Reports.** The Developer or Contractor shall engage the services of a geotechnical engineering firm or individual licensed in the State of California to monitor soil conditions during earthwork, trenching, bedding, backfill and compaction operations.
- **Public Safety and Traffic Control.** Requires traffic control plans to be submitted to agencies with jurisdiction, as well as as-needed measures such as signs, lights, flares, barricades, traffic plates, etc.
- **Hazardous Waste and Unknown Physical Conditions.** If hazardous waste is discovered, Contractor shall cease work in the impacted area. If material that may be hazardous waste is discovered, the Developer shall insure that the appropriate government agencies are contacted prior to any further work being performed and that a solution is implemented.
- **Storm Water Pollution Prevention Plan (SWPPP) Requirements**. SCV Water requires contractors to abide by the conditions of the Regional Water Quality Control Board, General Construction Activity Storm Water Permit, and the project Storm Water Pollution Prevention Plan (SWPPP).

Operation and Maintenance

As previously discussed, the proposed project would replace the existing eight-inch sewer line that connects the RVWTP to the local sewer system and upsizing approximately 350 linear feet of an existing sewer pipe from six inches to eight inches diameter.

The project would not involve any new operation and maintenance activities. No new employees would be required.

7. Surrounding Land Uses and Setting

The project site is surrounded by public facilities, including the RVTWP and Central Park.

8. Other Public Agencies Whose Approval is Required

SCV Water is the lead agency for this project. The project would also require the following approvals:

- Regional Water Quality Control Board – NPDES Construction Stormwater General Permit
- City of Santa Clarita – Vegetation Removal Permit
- City of Santa Clarita – Approval of dewatering discharge into City storm drain system (if dewatering is required during construction)

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

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

Determination

Based on this initial evaluation:

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

■ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

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

☐ I find that the proposed project MAY have a "potentially significant impact" or "less than significant with mitigation incorporated" 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 proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	3-14-24 Date
AMY ANDERSON Printed Name	PROJECT MANAGER Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	■	☐
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	■
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	■

a. Would the project have a substantial adverse effect on a scenic vista?

According to the City of Santa Clarita's General Plan Conservation and Open Space Element (2011a), "scenic resources" can include "natural open spaces, topographic formations, and landscapes that contribute to a high level of visual quality." The General Plan describes scenic resources in the Santa Clarita Valley as mountains and canyons, woodlands, water bodies, and Vasquez Rocks County Park. The City's General Plan does not specifically define scenic vistas; therefore, there are no designated scenic vistas in the vicinity of the project site.

The Conservation and Open Space Element of the City's General Plan specifically identifies several large mountain and canyon regions that are of aesthetic importance to the Santa Clarita Valley, including Placerita Canyon, Whitney Canyon, Elsmere Canyon, Bouquet Canyon, San Francisquito Canyon, Sand Canyon, Pico Canyon, and Towsley Canyon (City of Santa Clarita 2011a). The project site is located in Bouquet Canyon; however, the project would not adversely affect this scenic resource as the project consists of pipeline that would be installed underground, and the project

site would be restored to pre-project conditions after the completion of construction activities. Paving of the existing dirt access road would not substantially alter views of the project site.

Although the project site itself contains undeveloped natural land, it is in a suburban setting located adjacent to Central Park and is surrounded by residential and industrial development. Photographs representative of the project site and surrounding area are shown below in Figure 3, Figure 4, and Figure 5. The proposed project would not have a substantial adverse effect on a scenic vista. Impacts would be less than significant.

Figure 3 View of Staging Area within RVWTP Facing Northwest

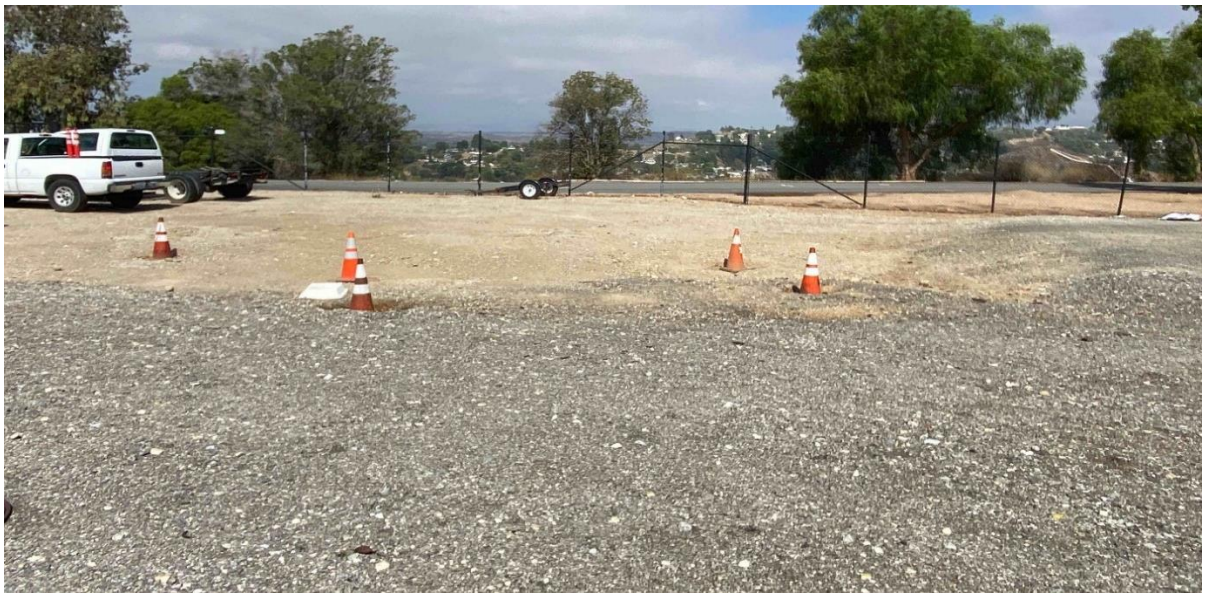


Figure 4 View of Unpaved Road along Proposed Alignment from the North, Facing Southwest

Figure 5 View of Central Park from Proposed Alignment from the South, Facing Northwest

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not located near a designated state scenic highway, as identified by the California Department of Transportation (Caltrans). The closest designated state scenic highway is State Route 2, located approximately 20 miles to the southeast of the project site (Caltrans 2018). Due to the existing topography the project site is not visible from State Route 2. Therefore, the project would not substantially damage scenic resources within a state scenic highway. No impact would occur.

NO IMPACT

c. Would the project, 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 a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Pursuant to Public Resources Code (PRC) Section 21071, an incorporated city with a population of at least 100,000 people meets the criteria for an urbanized area. Santa Clarita has a population of approximately 230,659 people and is considered an urbanized area under the California Environmental Quality Act (CEQA; California Department of Finance 2024). The project would include the replacement of an underground sewer line. Pursuant to California Government Code 53091, the building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. During operation, the sewer pipeline would be below ground, and the project site would return to its existing visual character following completion of

construction. Paving of the existing dirt access road would not substantially alter the visual character of the project site, as existing topography and vegetation largely obstructs views of the existing dirt road. Therefore, the proposed project would not substantially degrade visual character, and does not conflict with any applicable local land use and zoning policies or other regulations governing scenic quality. No impact would occur.

NO IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Construction would occur during daytime hours and would not require the use of lighting. Therefore, construction-related impacts to light and glare would not occur.

No permanent lighting or sources of glare be installed as part of the project Therefore, operational-related impacts to light and glare would not occur.

NO IMPACT

2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
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))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
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?	☐	☐	☐	■

a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

c. Would the project 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))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

e. Would the project 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?

According to the California Department of Conservation (DOC) Farmland Mapping and Monitoring Program (2022a), the project site and surrounding areas are not designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance. The project site is not under the Williamson Act or zoned for agricultural use (DOC 2022b). Therefore, the project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use and would not conflict with zoning for agricultural use or a Williamson Act contract. There is no adjacent land to the project site that is zoned or designated for agriculture. Due to the absence of agricultural land on or near the project site, the project would not involve changes to the existing environment that convert Farmland to non-agricultural use. No impact to agricultural resources would occur.

The project site and its surroundings do not contain forest land. Neither the project site nor surrounding properties are zoned for forest land, timberland, or timberland production. Therefore, the project would not involve changes to the existing environment that could result in the loss of forest land or the conversion of forest land to non-forest use. No impact to forestry resources would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
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?	☐	☐	■	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide, volatile organic compounds (VOC)/reactive organic gases (ROG),[1] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog). Air pollutants can be generated by the natural environment, such as when high winds suspend fine dust particles.

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

[1] CARB defines VOC and ROG similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this IS-MND.

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air Quality Standards and Attainment

The project site is located in the South Coast Air Basin (SCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). As the local air quality management agency, SCAQMD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the SCAB is classified as being in "attainment" or "nonattainment," respectively. In areas designated as nonattainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants. As the local air quality management agency, SCAQMD must monitor air pollutant levels to ensure that the NAAQS and CAAQS are met. If they are not met, the SCAQMD must develop strategies for their region to meet the standards. The strategies to achieve attainment status are included as part of the Air Quality Management Plan (AQMP). The SCAB is currently designated nonattainment for the ozone NAAQS and CAAQS, the PM_{10} CAAQS, and the $PM_{2.5}$ NAAQS and CAAQS. The Los Angeles County portion of the SCAB is also designated nonattainment for lead (CARB 2022a). The proposed project is in Los Angeles County, which is within the SCAB and under the jurisdiction of the SCAQMD. This nonattainment status results from several factors, the primary ones being the naturally diverse meteorological conditions that limits the dispersion and diffusion of pollutants, the limited capacity of the local airshed to eliminate air pollutants, and the number, type, and density of emission sources within the SCAB. The attainment status for Los Angeles County portion of SCAB is included in Table 1.

Table 1 Attainment Status of Criteria Pollutants in Los Angeles County of SCAB

Pollutant	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO_2	Attainment	Attainment
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment

Sources: CARB 2022a

Air Quality Management Plan

To meet the NAAQS and CAAQS, the SCAQMD has adopted a series of AQMPs that serve as a regional blueprint to develop and implement an emission reduction strategy that will bring the area into attainment with the standards in a timely manner. The most significant air quality challenge in the Air Basin is to reduce NO_X emissions to meet the 2037 ozone standard deadline for the non-Coachella Valley portion of the SCAB, as NO_X plays a critical role in the creation of ozone. The 2022 AQMP includes strategies to ensure the SCAQMD does its part to further the district's ability to meet the 2015 federal ozone standards (SCAQMD 2022). The 2022 AQMP builds on the measures already in place from the previous AQMPs and includes a variety of additional strategies such as regulation, accelerated deployment of available cleaner technology, best management practices, co-benefits from existing programs, incentives, and other Clean Air Act measures to meet the 8-hour ozone standard.

The SCAQMD's strategy to meet the NAAQS and CAAQS distributes the responsibility for emission reductions across federal, State, and local levels and industries. The majority of these emissions are from heavy-duty trucks, ships, and other State and federally regulated mobile source emissions that the majority of which are beyond SCAQMD's control. The SCAQMD has limited control over truck emissions with rules such as Rule 1196. In addition to federal action, the 2022 AQMP relies on substantial future development of advanced technologies to meet the standards, including the transition to zero- and low-emission technologies. The AQMP also incorporates the transportation strategy and transportation control measures from Southern California Association of Governments (SCAG)'s 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal) (SCAG 2020).

Air Emission Thresholds

The SCAQMD approved the *CEQA Air Quality Handbook* in 1993. Since then, the SCAQMD has provided supplemental guidance on its website to address changes to the methodology and nature of CEQA. Some of these changes include recommended thresholds for emissions associated with both construction and operation of the project are used to evaluate a project's potential regional and localized air quality impacts (SCAQMD 2023). Table 2 presents the significance thresholds for regional construction and operational-related criteria air pollutant and precursor emissions being used for the purposes of this analysis.

Table 2 SCAQMD Regional Significance Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of VOC	55 pounds per day of VOC
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of SO_X	150 pounds per day of SO_X
150 pounds per day of PM_{10}	150 pounds per day of PM_{10}
55 pounds per day of $PM_{2.5}$	55 pounds per day of $PM_{2.5}$

VOC = volatile organic compound; NO_X = nitrogen oxides; CO = carbon monoxide; SO_X = sulfur oxides; PM_{10} = particulate matter measuring 10 microns in diameter or less; $PM_{2.5}$ = particulate matter measuring 2.5 microns in diameter or less

Source: SCAQMD 2023

In addition to the above regional thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs have been developed for NO_X, CO, PM_{10}, and $PM_{2.5}$ and represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or State ambient air quality standard at the nearest sensitive receptor. LSTs take into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions generated in construction areas up to five acres in size. LSTs only apply to emissions in a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2009).

The project site is within SRA 13 (Santa Clarita Valley). SCAQMD provides LST lookup tables for project sites that measure one, two, or five acres. The project disturbance area is approximately one acre; therefore, this analysis utilizes the one-acre LSTs. LSTs are provided for receptors at distances of 82, 164, 328, 656, and 1,640 feet from the project disturbance boundary to the sensitive receptors. The project analysis assumes construction activity would occur near sensitive receptors as close as approximately 330 feet to the northwest of pipeline construction work. Therefore, the allowable emissions for the project analysis were determined according to the 328-foot threshold. The LSTs for construction of the proposed project are shown in Table 3.

Table 3 SCAQMD LSTs for Construction

	Allowable Emissions for a one-Acre Site in SRA-13 for a Receptor 328 Feet Away (pounds per day)
Pollutant	**Construction**
Gradual conversion of NO_X to NO_2	73.9[1]
CO	1,294.0
PM_{10}	25.0
$PM_{2.5}$	5.6[2]

NO_x = nitrogen oxides; NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns. CAAQS = California Ambient Air Quality Standards; SCAQMD = South Coast Air Quality Management District; USEPA = Untied States Environmental Protection Agency, NAAQS = National Ambient Air Quality Standards; LST = Localized Significance Threshold

[1] The screening criteria for NOx were developed based on the 1-hour NO_2 CAAQS of 0.18 ppm. Subsequently to publication of the SCAQMD's guidance the USEPA has promulgated a 1-hour NO_2 NAAQS of 0.100 ppm. This is based on a 98th percentile value, which is more stringent than the CAAQS. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the 1-hour NO_2 NAAQS, an approximated LST was estimated to evaluate the federal 1-hour NO_2 standard. The revised LST threshold is calculated by scaling the NO_2 LST by the ratio of 1-hour NO_2 standards (federal/state) (i.e., 133 pounds/day * (0.10/0.18) =73.9 pounds/day).

[2] The screening criteria for $PM_{2.5}$ were developed based on an Annual CAAQS of 15 mg/m^3. Subsequently to publication of the SCAQMD's guidance the annual standard was reduced to 12 mg/m^3. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the annual $PM_{2.5}$ CAAQS, an approximated LST was estimated. The revised LST threshold is calculated by scaling the $PM_{2.5}$ LST by the ratio of 24-hour $PM_{2.5}$ standards (federal/state) (i.e., 7 pounds/day * (12/15) =5.6 pounds/day).

Source: SCAQMD 2008a

Toxic Air Containments Thresholds

SCAQMD has developed significance thresholds for the emissions of toxic air contaminants (TACs) based on health risks associated with elevated exposure to such compounds. For carcinogenic compounds, cancer risk is assessed in terms of incremental excess cancer risk. A project would result in a potentially significant impact if it would generate an incremental excess cancer risk of 10 in 1 million (1×10^{-6}) or a cancer burden of 0.5 excess cancer cases in areas exceeding a one-in-one-

million risk. In addition, non-carcinogenic health risks are assessed in terms of a hazard index. A project would result in a potentially significant impact if it would result in a chronic and acute hazard index greater than 1.0 (SCAQMD 2023).

Methodology

Air pollutant emissions generated by project construction were estimated using the California Emissions Estimator Model (CalEEMod), version 2022.1.1.20. CalEEMod uses project-specific information, including land use, square footage for different uses, and location, to model a project's construction and operational emissions.

Project construction would primarily generate temporary criteria pollutants from on-site construction equipment operation, construction worker vehicle trips to and from the site, and off-site export of materials. Construction of the proposed project was analyzed based on pipeline construction details provided by SCV Water, which includes constructing 1,900 linear feet (LF) of 8-inch diameter pipeline and upsizing approximately 350 LF of an existing sewer pipe from 6-inch to 8-inch diameter pipeline. Construction of the pipeline would require excavation to a width of up to 7 feet and a depth of up to 12 feet. Project construction would begin in January 2025 and end in November 2025. Based on construction information provided by SCV Water, approximately 489 cubic yards of soil would be imported on site and 604 cubic yards of soil would be exported off site. The soil material would be hauled to Chiquita Canyon Landfill, located approximately 8.8 miles from the project site. The analysis assumes the construction equipment would be diesel-powered, and the project would comply with the following applicable regulatory standards: SCAQMD Rule 403 for dust control measures and Rule 1113 for architectural coating VOC limits.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project may be inconsistent with the AQMP if it would generate population, housing, or employment growth exceeding forecasts used in the development of the AQMP. The 2022 AQMP, the most recent AQMP adopted by the SCAQMD, incorporates local general plans and SCAG's Connect SoCal socioeconomic forecast projections of regional population, housing, and employment growth.

The proposed project involves construction of a pipeline that would not directly generate population growth through the construction of housing. Given the small-scale nature of project construction activities, it is likely that construction workers would be drawn from the existing, regional workforce and the project would not indirectly result in the relocation of people to Santa Clarita. In addition, no new SCV Water employees would be required to operate and maintain the project. Furthermore, the purpose of the project is to convey wastewater to and from the RVWTP and the City of Santa Clarita's Central Park sewer line and to address pipeline issues (i.e., deposits, encrustation, root intrusion, infiltration) via rehabilitation or replacement. The project would primarily address these pipeline issues and would not expand the capacity for wastewater treatment beyond what is currently available. Therefore, the project would not result in population growth and would not have the potential to conflict with or obstruct implementation of the AQMP. No impact would occur.

NO IMPACT

b. Would the project 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?

Construction

Project construction would generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction equipment and construction vehicles. In addition, construction equipment would release VOC emissions during the pavement drying phase during paving of the dirt access road connecting the RVWTP to the sewer line connection at Central Park. Table 4 summarizes the estimated maximum daily emissions of pollutants during project construction. As shown therein, construction-related emissions would not exceed SCAQMD thresholds. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard. Impacts would be less than significant.

Table 4 Estimated Maximum Daily Construction Emissions

	Pollutant (lbs/day)					
Construction	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	48.5	54.4	120.8	<1	4.6	1.5
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

lbs/day = pounds per day; VOC = volatile organic compounds NO_X = nitrogen oxides; CO = carbon monoxide; SO_2 = sulfur dioxide; PM_{10} = particulate matter 10 microns in diameter or less; $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Source: CalEEMod worksheets in Appendix A, see Table 2.3 "Construction Emissions by Year, Mitigated" emissions. Highest of Summer and Winter emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards.

Operation

The project would not require new operations and maintenance activities within the SCV Water service area upon completion of construction activities. Therefore, no new operational emissions would be generated, and project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard. No impact would occur.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Sensitive Receptors

According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes (SCAQMD 1993). Sensitive receptors near the project site include users of the outdoor sports fields and playground at Central Park. However, because the project would not result in an increase of operational vehicle trips, this project would not emit the levels of CO necessary to result in a

localized hot spot. Therefore, CO hotspots are not discussed further in this document. The project does not include any stationary sources of air pollutant emissions and once construction is complete, the proposed project would not require additional operation or maintenance activities beyond those already occurring to operate and maintain the SCV Water system. Therefore, project operation would not expose sensitive receptors to substantial pollutant concentrations and is not discussed further. Localized air quality impacts to sensitive receptors typically result from localized criteria air pollutant emissions and TACs, which are discussed in the following subsections.

Localized Significance Thresholds

The *Final LST Methodology* was developed to be used as a tool to analyze localized impacts associated with specific proposed projects. If the calculated emissions from the proposed construction or operational activities are below the LST emission levels found on the LST mass rate look-up tables (Appendix C of *Final LST Methodology;* SCAQMD 2009) and no potentially significant impacts are found to be associated with other environmental issues, then the proposed construction or operation activity would not cause a significant impact on air quality. The project analysis assumes construction activity would occur on the existing dirt road that connects the RVWTP to the City of Santa Clarita's Maintenance Center at Central Park, with construction occurring as close as 330 feet from the nearest sports field at Central Park. Staging is anticipated to occur at the unpaved dirt lot at the RVTWP adjacent to the southern extent of the proposed sewer line. Therefore, the allowable emission for the project utilizes the 328-foot receptor distance and uses source receptor area (SRA) 13 for Santa Clarita Valley. Table 5 summarizes the project's maximum localized daily construction emissions from the proposed project. As shown in Table 5, localized construction emissions would not exceed the SCAQMD LST thresholds for any criteria pollutants. Impacts would be less than significant.

Table 5 Project LST Construction Emissions

	Pollutant (lbs/day)			
Year	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Construction On-site Emissions	28.7	78.9	4.5	1.4
SCAQMD LST[1]	73.9[2]	1,294.0	25.0	5.6[3]
Threshold Exceeded?	**No**	**No**	**No**	**No**

lbs/day = pounds per day; NO_x = nitrogen oxide; CO = carbon monoxide; PM_{10} = particulate matter with a diameter no more than 10 microns; $PM_{2.5}$ = particulate matter with a diameter no more than 2.5 microns; SCAQMD = South Coast Air Quality Management District; LST = Localized Significance Threshold; CAAQS = California Ambient Air Quality Standards; USEPA = United States Environmental Protection Agency; NAAQS = National Ambient Air Quality Standards

Notes: Maximum on-site emissions are the highest emissions that would occur on the project site from on-site sources, such as heavy construction equipment and architectural coatings, and excludes off-site emissions from sources such as construction worker vehicle trips and haul truck trips.

[1] All SCAQMD LSTs shown are for source receptor area (SRA) 13 (Santa Clarita Valley).

[2] The screening criteria for NOx were developed based on the 1-hour NO_2 CAAQS of 0.18 ppm. Subsequently to publication of the SCAQMD's guidance the USEPA has promulgated a 1-hour NO_2 NAAQS of 0.100 ppm. This is based on a 98th percentile value, which is more stringent than the CAAQS. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the 1-hour NO_2 NAAQS, an approximated LST was estimated to evaluate the federal 1-hour NO_2 standard. The revised LST threshold is calculated by scaling the NO_2 LST by the ratio of 1-hour NO_2 standards (federal/state) (i.e., 133 pounds/day * (0.10/0.18) =73.9 pounds/day).

[3] The screening criteria for $PM_{2.5}$ were developed based on an Annual CAAQS of 15 mg/m^3. Subsequently to publication of the SCAQMD's guidance the annual standard was reduced to 12 mg/m^3. Because SCAQMD's LSTs have not been updated to address this new standard, to determine if project emissions would result in an exceedance of the annual $PM_{2.5}$ CAAQS, an approximated LST was estimated. The revised LST threshold is calculated by scaling the $PM_{2.5}$ LST by the ratio of 24-hour $PM_{2.5}$ standards (federal/state) (i.e., 7 pounds/day * (12/15) =5.6 pounds/day).

Source: CalEEMod worksheets in Appendix A, see Tables 3.1 through 3.8 "Construction Emissions Details" emissions. The highest of Summer and Winter emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards.

Toxic Air Contaminants

Toxic air contaminants (TACs) are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness, or that may pose a present or potential hazard to human health. TACs generally consist of four types: organic chemicals, such as benzene, dioxins, toluene, and perchloroethylene; inorganic chemicals such as chlorine and arsenic; fibers such as asbestos; and metals such as mercury, cadmium, chromium, and nickel. The primary TAC emitted by project implementation would be diesel particulate matter (DPM) generated by heavy-duty equipment and diesel-fueled delivery and haul trucks during construction activities. DPM was identified as a TAC by the CARB in 1998 and is primarily composed of PM_{10} and $PM_{2.5}$ exhaust emissions (CARB 2023).

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Construction of the proposed project would occur in phases over approximately 11 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, meaning a longer exposure period would result in a higher exposure level for the maximally exposed individual (MEI). The risks estimated for an MEI are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (i.e., 11 months) is approximately 3.1 percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of nine, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (BAAQMD [Bay Area Air Quality Management District] 2023).

Maximum DPM emissions would occur during demolition construction activities, as this phase would require the most equipment. Conversely, DPM emissions would be lower during other construction phases, such as trenching, because this phase would require less construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading would only occur for approximately 7 months, or 64 percent of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than 1.7 percent of the total exposure period for health risk calculation. To present a conservative range for the duration of sensitive receptor exposure, the length of pipeline installed per day was estimated depending on the phase during which pipeline construction would be assumed to occur. If pipeline installation would continuously occur over the entire construction period, approximately 10 LF[2] of pipeline would be installed per day, equating to construction near sensitive receptors for approximately 34[3] construction days. However, if pipeline installation would occur only during the trenching phase, approximately 51 LF[4] of pipeline would be installed per day, equating to construction near sensitive receptors for approximately 7[5] construction days. In addition,

[2] Overall construction period is approximately 11 months. Total pipeline (2,250 linear feet) divided by total construction days, excluding weekends (218 days) = 10.32 linear feet per day.
[3] Estimated pipeline length at the RVWTP closest to residences southeast of site (350 linear feet) divided by linear feet installed per construction day during overall construction period (10.32 linear feet) = 33.9 construction days near sensitive receptors.
[4] Trenching phase is approximately 2 months. Total pipeline (2,250 linear feet) divided by trenching construction days, excluding weekends (44 days) = 51.14 linear feet per day.
[5] Estimated pipeline length at the RVWTP closest to residences southeast of site (350 linear feet) divided by linear feet installed per construction day during trenching phase (51.14 linear feet) = 6.84 construction days near sensitive receptors.

construction will be limited to weekdays during the day and will likely occur during times when residents are not at home. Therefore, project construction activities would not represent the type of long-term TAC emission source exposure that typically subjects sensitive receptors to significant health risk. Furthermore, construction activities would also be subject to and would comply with California regulations limiting the idling of heavy-duty construction equipment to no more than five minutes, which would further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. Compliance with the standard construction measures required by the SCAQMD would also further reduce nearby sensitive receptors' exposure to temporary and variable DPM emissions. As such, project construction would not expose sensitive receptors to substantial TAC concentrations, and impacts would be less than significant.

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d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Project construction could generate odors associated with heavy-duty equipment operation and earth-moving activities. Such odors would be temporary in nature and limited to the duration of construction in the vicinity of the project site. The project contractor(s) would also be required to adhere to SCAQMD Rule 402 (Nuisance), which prohibits discharge of air contaminants or any other material from a source that would cause nuisance to any considerable number of persons or the public, including odor. Project operation would involve conveyance of wastewater via an underground pipeline and would not result in the generation of odors. Therefore, the project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
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?	☐	☐	☐	■
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?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
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?	☐	☐	☐	■

In January 2024, Rincon Consultants, Inc. prepared a Biological Resources Technical Memorandum, including a literature review and field reconnaissance surveys, to document existing site conditions and the potential presence of special-status biological resources, including plant and wildlife species, plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. The biological reconnaissance survey encompassed the proposed project footprint and 100-foot buffer (referred to as "study area" in this section). The following summarizes the findings of the assessment. The complete Biological Resources Technical memorandum is contained in Appendix B of this document.

a. Would the project 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?

Based on queries of biological resource databases performed for the Biological Resources Technical Memorandum, 37 special-status plant species and 33 special-status wildlife species are known to occur or have potential to occur within 5 miles of the project site.

Suitable chaparral (i.e., holly leaf cherry [*Prunus ilicifolia*] chaparral), scrub (i.e., California sagebrush [*Artemisia californica*] scrub), and/or grassland (i.e., wild oats [*Avena* spp.] and annual brome [*Bromus* spp.] grasslands) habitat occurs in the project site to support the following special-status plant species: club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*; California Rare Plant Rank [CRPR] 4.3), late-flowered mariposa lily (*Calochortus fimbriatus*; CRPR 1B.3), Plummer's mariposa lily (*Calochortus plummerae*; CRPR 4.2), Peirson's morning glory (*Calystegia peirsonii*; CRPR 4.2), Parry's spineflower (*Chorizanthe parryi* var. *parryi*; CRPR 1B.1), Ojai navarretia (*Navarretia ojaiensis*; CRPR 1B.1), and Piute Mountains navarretia (*Navarretia setiloba*; CRPR 1B.1).

The project is anticipated to result in approximately 0.32 acre of temporary impact to potentially suitable special-status plant species habitat as a result of pipeline installation, including less than 0.01 acre of temporary impact to wild oats and annual brome grasslands, 0.29 acre of temporary impact to California sagebrush scrub, and 0.03 acre of temporary impact to holly leaf cherry chaparral. The project is also expected to result in approximately 0.05 acre of permanent impact to potentially suitable special-status plant species habitat as a result of paving the existing dirt access road, including less than 0.01 acre of permanent impact to wild oats and annual brome grasslands and 0.05 acre of permanent impact to California sagebrush scrub.

While no special-status plant species were observed during the reconnaissance field surveys performed on March 23, 2023, and January 4, 2024, the surveys did not coincide with the blooming period for the aforementioned species. If these species occur within the work areas, direct impacts (i.e., mortality of individuals) could occur during initial vegetation removal activities associated with the project. Therefore, Mitigation Measure BIO-1 (special-status plant surveys) and Mitigation Measure BIO-2 (special-status plant avoidance measures) are recommended to avoid impacts to special-status plant species. If special-status plant species are found within the project site and avoidance is infeasible, impacts to special-status plant species would be mitigated through Mitigation Measure BIO-3 (special-status plant mitigation and monitoring plan), which would include a minimum mitigation ratio of 1:1 (number of acres/individuals restored to number of acres/individuals impacted). With implementation of Mitigation Measures BIO-1 through BIO-3, impacts to special-status plant species would be reduced to a less-than-significant level.

Suitable chaparral (i.e., holly leaf cherry chaparral), scrub (i.e., California sagebrush scrub), and grassland (i.e., wild oats and annual brome grasslands) habitat occurs in the project site to support coastal whiptail (*Aspidoscelis tigris stejnegeri*; California Department of Fish and Wildlife [CDFW] Species of Special Concern [SSC]) and coast horned lizard (*Phrynosoma blainvillii*; CDFW SSC). The project includes vegetation removal and road paving within suitable habitat for these species. Direct impacts to coastal whiptail and coast horned lizard could occur through direct strikes to individuals if they occur within the project site during initial mobilization to the site and during vegetation removal activities. Additionally, indirect impacts to coastal whiptail and coast horned lizard could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes. Therefore, implementation of Mitigation Measure BIO-4 is recommended to ensure all construction personnel are trained in identifying special-status wildlife species, and Mitigation Measure BIO-5 is recommended to ensure adherence to general Best Management Practices (BMPs). Implementation of Mitigation Measures BIO-6 and BIO-7 would require implementation of pre-construction surveys for special status wildlife species and construction monitoring. Mitigation Measure BIO-7 would minimize impacts to special-status wildlife species through monitoring of initial ground-disturbing activities within suitable special-status wildlife species habitat. With implementation of Mitigation Measures BIO-4 through BIO-7, potential direct and indirect impacts to special-status wildlife species would be reduced to a less-than-significant level.

Migratory or other common nesting birds, while not designated as special-status species, are protected by Section 3503.5 of the California Fish and Game Code (CFGC) and federal Migratory Bird Treaty Act (MBTA) and have the potential to nest within and adjacent to the project site. Particularly, the California sagebrush scrub, Fremont cottonwood (*Populus fremontii*) woodland, holly leaf cherry chaparral, and pepper tree (*Schinus molle*) groves vegetation communities and the ornamental landscaping land cover type have the potential to support nesting birds. Therefore, construction of the project has the potential to directly (by destroying a nest) or indirectly (through construction noise, dust, and other human disturbances that may cause a nest to fail) impact nesting birds protected under the CFGC and MBTA. Implementation of Mitigation Measure BIO-8 would require a pre-construction nesting bird survey if construction occurs during the nesting bird season (typically February 1 to August 31). If active nests are identified, buffers would be implemented to avoid impacts to nesting birds. Implementation of Mitigation Measure BIO-8 would maintain compliance with CFGC 3503 and the MBTA, and impacts to nesting birds would be less than significant.

Mitigation Measure

BIO-1 Special-Status Plant Surveys

To avoid impacts to special-status plants, surveys for special-status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity within this area. The surveys shall be floristic in nature, seasonally timed to coincide with the blooming period of the target species (club-haired mariposa lily, late-flowered mariposa lily, Plummer's mariposa lily, Peirson's morning glory, Parry's spineflower, Ojai navarretia, and Piute Mountains navarretia), and be conducted by a qualified biologist.

Special-status plant species identified on site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys should be conducted in accordance with the most current protocols established by the CDFW and United States Fish and Wildlife Service (USFWS). A report of the survey results shall be submitted to SCV Water for review and approval.

BIO-2 Special-Status Plant Avoidance Measures

If special-status plants are detected during special-status plant surveys, avoidance of the special-status plants shall occur where feasible and vegetation clearing within 50 feet of any identified rare plant will be conducted by hand, if practicable. Any rare plant occurrence shall have bright orange protective fencing installed at least 50 feet beyond its extent, or other distance as approved by a qualified biologist, to protect it from harm.

If avoidance is not feasible, SCV Water shall offset the proposed loss of individual plants at a minimum 1:1 ratio by on-site restoration (salvage, replanting, and propagation) as described in Mitigation Measure BIO-3 (Special-Status Plant Mitigation and Monitoring Plan) below. The scrub and grassland habitats in the Study Area would be a suitable location for on-site restoration. Compensation for impacts to these species may also be accomplished by preservation of on-site populations or off-site populations in the vicinity of the site at a minimum of a 1:1 ratio if present.

BIO-3 Special-Status Plant Mitigation and Monitoring Plan

If special-status plants are detected and would be impacted by project construction, a Special-Status Plant Mitigation and Monitoring Plan that provides for the replacement of the species impacted by the project shall be developed by a qualified restoration specialist.

The Special-Status Plant Mitigation and Monitoring Plan shall specify the following:

- A summary of impacts;
- The location of the mitigation site;
- Methods for harvesting seeds or salvaging and transplanting individuals to be impacted;
- Measures for propagating plants or transferring living plants from the salvage site to the mitigation site;
- Site preparation procedures for the mitigation site;
- A schedule and action plan to maintain and monitor the mitigation area;
- Criteria and performance standards by which to measure the success of the mitigation, including replacement of impacted plants at a minimum 1:1 ratio;
- Measures to exclude unauthorized entry into the mitigation areas; and
- Contingency measures such as replanting or weeding in the event that mitigation efforts are not successful.

The performance standards for the Special-Status Plant Mitigation and Monitoring Plan shall be at a minimum the following:

- Within five years after introducing the plants to the mitigation site, the number of established, reproductive plants should equal the number lost to project construction, and
- Restoration will be considered successful after the success criteria have been met for a period of at least 2 years without any maintenance or remediation activities other than invasive species control.

The Special-Status Plant Mitigation and Monitoring Plan shall be initiated prior to development of the project and implemented over a five-year period. It can also be combined with the Restoration Plan described under Mitigation Measure BIO-9.

Annual reports discussing the implementation, monitoring, and management of the Special-Status Plant Mitigation and Monitoring Plan shall be submitted to SCV Water. Five years after the start of the mitigation project, a final report shall be submitted, which should at a minimum discuss the implementation, monitoring, and management of the Special-Status Plant Mitigation and Monitoring Plan over the five-year period, and indicate whether the Special-Status Plant Mitigation and Monitoring Plan has been successful based on established performance standards. Should the success criteria be met before Year Five, the mitigation effort can be deemed complete.

BIO-4 Worker Environmental Awareness Program

A qualified biologist shall conduct a pre-project environmental education program for all personnel working at the site, which should be focused on conditions and protocols necessary to avoid and minimize potential impacts to biological resources. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status biological resources potentially occurring in the project area. This training shall include information about the special-status species with potential to occur in the project area. The specifics of this program shall include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees working at the project site shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species.

BIO-5 General Best Management Practices

General requirements which shall be followed by construction personnel are listed below.

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries.
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction.
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers only and removed daily from the project site.
- No deliberate feeding of wildlife shall be allowed.
- No pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.

- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills.
- While encounters with special-status species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor should immediately notify SCV Water. SCV Water should follow up with written notification to USFWS and/or CDFW within five working days of the incident. All observations of state or federally listed species should be recorded on CNDDB field sheets and sent to CDFW by SCV Water or the biological monitor.

BIO-6 Pre-activity Survey

Prior to commencement of ground or vegetation disturbing activities at the project site, a qualified biologist shall conduct two surveys for special status wildlife species. The first survey shall be conducted no more than fourteen (14) days prior to commencement of project activities and the second survey shall be conducted no more than three (3) days prior to the commencement of project activities. The survey shall incorporate methods to detect the special status wildlife species that could potentially occur at the site. To the extent feasible, special status species shall be avoided. If avoidance is not feasible, the species shall be captured and transferred to an appropriate habitat and location on-site where it would not be harmed by project activities. The biologist shall hold the requisite permits for the capture and handling of the species, if applicable. Prior to commencement of the proposed activity, the methods and results of the surveys and, if a special status species is found, the measures to be employed to avoid impacts to the species should be presented in a letter report to SCV Water.

BIO-7 Qualified Biological Monitor

A qualified biological monitor familiar with special-status species with potential to occur in the project site shall be present during initial ground disturbance or vegetation removal activities within suitable habitat, including California sagebrush scrub, holly leaf cherry chaparral, and wild oats and annual brome grasslands. The biological monitor shall have the authority to temporarily stop work if one or more special-status species are observed; the monitor shall then relocate these individuals to suitable undisturbed habitat, outside the areas directly and indirectly affected by ground disturbance activities. The biologist shall hold the requisite incidental take permits or authorizations for the capture and handling of the species, if applicable.

The monitor shall recommend measures to ensure compliance with all avoidance and minimization measures and any conditions required by SCV Water. When the biological monitor is present on site, they shall be responsible for:

- Ensuring procedures for verifying compliance with environmental mitigation are followed;
- Lines of communication and reporting methods;
- Daily and weekly reporting of compliance;
- Construction crew WEAP training;
- Authority to stop work; and
- Action to be taken in the event of non-compliance.

BIO-8 Nesting Birds

Project-related activities should occur outside of the bird breeding season (February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than seven days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-feet for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird survey will be required prior to each phase of construction during the nesting season.

Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to SCV Water for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 300 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. The nesting bird buffer zones may also be extended at the discretion of the qualified biologist based on field observations of nesting bird behavior. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

Significance After Mitigation

Mitigation Measure BIO-1 would identify special-status plant species present prior to construction. If identified, Mitigation Measure BIO-2 would enforce avoidance measures to prevent disturbance or harm to special-status plant species. Mitigation BIO-3 would implement a Special-Status Plant Mitigation and Monitoring Plan. These three measures in conjunction would avoid impacts to special-status plants where feasible, and provide replacement plantings to mitigate impacts where avoidance is not feasible to a less-than-significant level.

Mitigation Measure BIO-4 would provide construction personnel with the necessary knowledge to identify special-status species, including identification and procedures to follow. Mitigation Measure BIO-5 would establish best management practices for project construction that would prevent entrapment of wildlife, protect wildlife from construction-associated safety hazards, and protect wildlife from affects associated with nighttime lighting and noise.

Mitigation Measures BIO-6 and BIO-7 would identify special-status wildlife species present prior to and during initial ground disturbance associated with construction of the project, and require avoidance or transfer of individuals of a protected species. Mitigation Measure BIO-8 would identify nesting birds present prior to construction, and require protective buffers around identified active nests.

These measures would focus on the necessary conditions and protocols to prevent and minimize potential impacts on special-status species with avoidance when feasible, and relocation or restoration when avoidance is not feasible. Implementation of Mitigation Measures BIO-1 through

BIO-8 would reduce construction-related impacts to special-status species to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

One sensitive plant community was documented within the project site: holly leaf cherry chaparral, which is located to the south and west of the unpaved access road where sewer line replacement and road paving are proposed (Figure 6 and Figure 7). The project may result in approximately 0.03 acre of temporary impact to holly leaf cherry chaparral during initial vegetation removal. If the project cannot avoid the holly leaf cherry chaparral vegetation community, direct impacts (i.e., vegetation removal within this sensitive plant community) would occur. Therefore, implementation of habitat restoration in accordance with Mitigation Measure BIO-9 is warranted if sensitive plant communities cannot be avoided. With implementation of Mitigation Measure BIO-9, impacts to sensitive plant communities would be reduced to a less-than-significant level.

Mitigation Measure

BIO-9 Sensitive Plant Community Restoration

Temporary impacts to sensitive plant communities shall be avoided to the extent feasible. Where avoidance is not feasible, mitigation for impacts to sensitive plant communities shall be accomplished through on-site restoration at a minimum ratio of 1:1. A Restoration Plan shall be prepared and submitted to SCV Water prior to initiating impacts. At minimum, the Restoration Plan shall include the following:

- A description of the purpose and goals of the restoration
- Identification of success criteria and performance standards
- Methods of site preparation
- Irrigation plan and schedule
- Best Management Practices (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

Significance After Mitigation

Mitigation Measure BIO-9 would avoid direct impacts to sensitive plant communities where feasible, and provide restoration at a minimum ratio of 1:1 for unavoidable temporary impacts through preparation and implementation of a restoration plan. Implementation of Mitigation Measure BIO-9 would reduce construction-related impacts to sensitive plant communities to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

Figure 6 Vegetation Communities and Land Cover Types - West

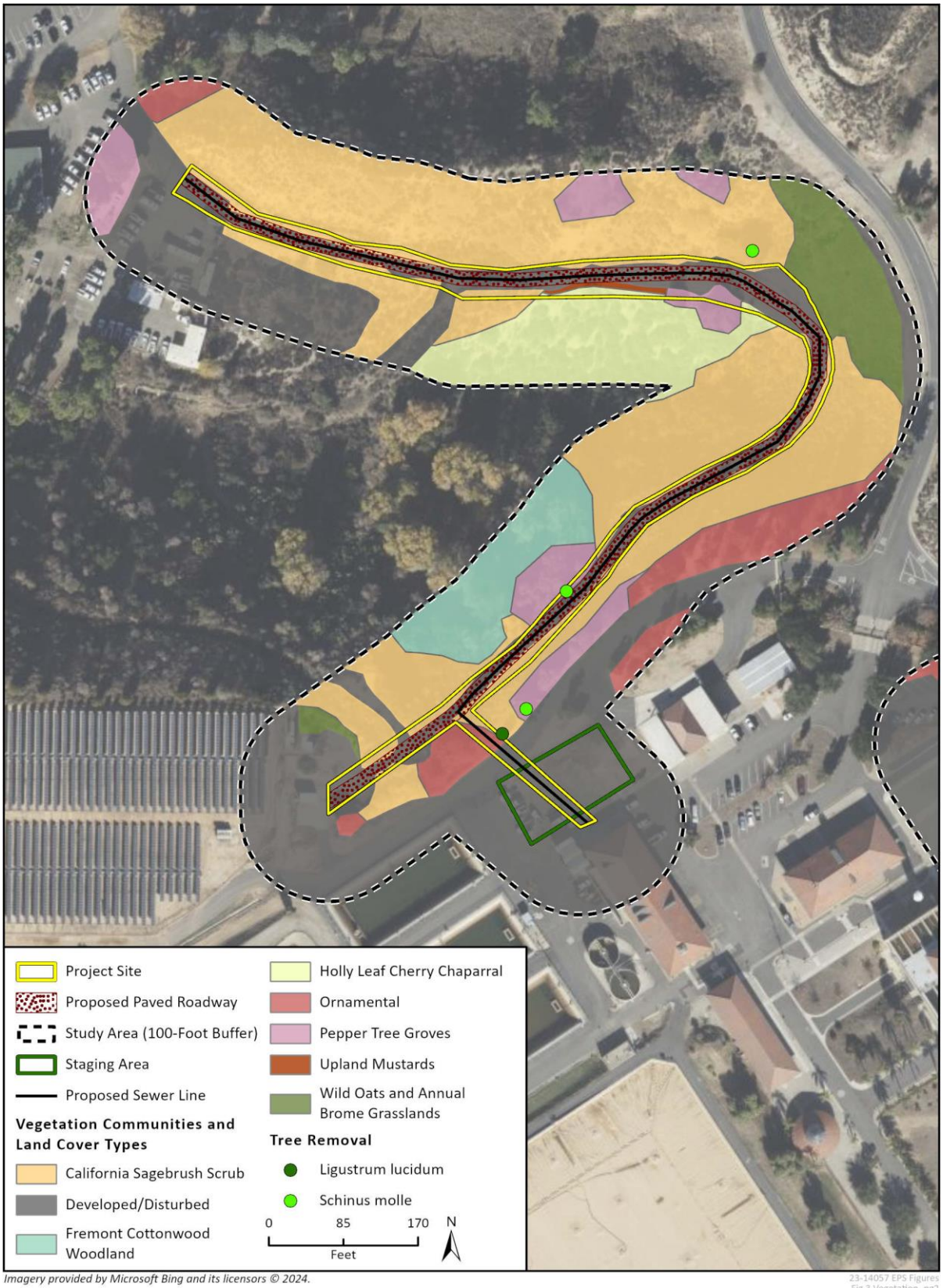

Figure 7 Vegetation Communities and Land Cover Types - East

c. Would the project 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?

As discussed in the Biological Resources Technical Memorandum (Appendix B), no state- or federally-protected jurisdictional resources occur within the project site, or within 100 feet of the project site. As a result, no direct or indirect impacts to jurisdictional resources are expected, and no further actions are recommended.

NO IMPACT

d. Would the project 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?

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around "checkerboard" residential development. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The project site does not contain any large- or small-scale wildlife movement corridors. The naturally vegetated portions of the project site are disconnected from undeveloped open space to the east and southwest of the of the project site by existing development. Additionally, the proposed project activities would primarily occur within the existing developed/disturbed dirt access road and ornamental landscaped portions of the project site, which offer little to no value to wildlife movement. Therefore, the proposed project is not anticipated to have an incremental effect on localized wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement. In addition, adherence to Mitigation Measure BIO-5, which includes shielding and directing night-time lighting downward to reduce impacts on local wildlife, would further reduce impacts.

LESS-THAN-SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Open Space Areas

The entirety of the project site is designated as open space by the City (City of Santa Clarita 2016). Certain activities in open space areas, including removal of vegetation or harassment of wildlife, are prohibited without a permit granted by the Santa Clarita City Manager. According to Government Code Section 53091, building and zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water. However, SCV Water would voluntarily comply with the City of Santa Clarita's preservation of such resources during implementation of the proposed project.

Vegetation removal would occur within the wild oats and annual brome grasslands, California sagebrush scrub, pepper tree groves, holly leaf cherry chaparral, and upland mustards vegetation communities as well as the ornamental landscaping land cover type in order to install the sewer pipeline and pave the existing dirt roadway. Impacts to sensitive plant communities would be mitigated through implementation of Mitigation Measure BIO-9. Therefore, the project would not conflict with local policies specifically regarding open space areas.

City of Santa Clarita General Plan

The City of Santa Clarita's General Plan contains objectives and policies for biological resources that are relevant to the proposed project given its location and/or proposed activities. These objectives and policies focus on conservation of existing natural areas; restoration of damaged natural vegetation; oak trees (*Quercus* spp.) and other indigenous woodlands, and endangered or threatened species and habitat; and protection of biological resources in Significant Ecological Areas (SEAs) and significant wildlife corridors.

The proposed project does not propose new development, but rather upgrades to existing infrastructure. The project site does not overlap with any SEAs designated by the City. Additionally, in compliance with the objectives and policies outlined above, the project would not impact: (a) oak trees or other woodlands, as these resources are either not present within the project site (i.e., oak trees) or are outside the project site where impacts will not occur (i.e., Fremont cottonwood woodland); (b) endangered or threatened species and habitat, as no federal or state listed species have moderate or high potential to occur within the project site; or (c) SEAs or wildlife movement and corridors, since the project site does not contain any SEAs or large-/small-scale wildlife movement corridors. Furthermore, Mitigation Measure BIO-9, described above, would require restoration of impacted sensitive plant communities, such as those protected by the City's General Plan. Therefore, the project would not conflict with the Santa Clarita General Plan and no further actions are recommended.

Significant Ecological Areas

The project site does not overlap with any SEAs designated by the City of Santa Clarita. Therefore, the project would not conflict with the City of Santa Clarita's General Plan and Municipal Code regarding SEAs, and no further actions are recommended.

Protected Trees

Multiple mature Fremont cottonwood, coast live oak (*Quercus agrifolia*), arroyo willow (*Salix lasiolepis*), and blue elderberry (*Sambucus nigra*) trees are located within 100 feet of the project site. These tree species may meet the qualifications to be considered as protected trees by the City of Santa Clarita's Parkway Trees Ordinance. The project proposes to remove a total of four trees, including three pepper trees and one glossy privet (*Ligustrum lucidum*) tree (Figure 3). These are non-native trees that do not meet the criteria of a protected tree under the City of Santa Clarita's Parkway Trees Ordinance. Therefore, no impacts to protected trees are proposed and no further actions are recommended.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project site is not located in an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no further actions are recommended.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

The following analysis is based on the Cultural Resources Assessment prepared for the project by Rincon Consultants, Inc. in January 2024. The Cultural Resources Assessment is included as Appendix C.

This section provides an analysis of the project's impacts on cultural resources, including historical and archaeological resources as well as human remains. CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (*CEQA Guidelines* Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

- Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The impact analysis included here is organized based on the cultural resources thresholds included in CEQA Guidelines Appendix G: Environmental Checklist Form. Threshold A broadly refers to historical resources. To more clearly differentiate between archaeological and built environment resources, the analysis under item (a) is limited to built environment resources. Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under item (b).

Methodology and Results of Cultural Resources Assessment

In support of the project, Rincon prepared a cultural resources assessment report summarizing the methods and results of a California Historical Resources Information System (CHRIS) records search at the South Central Coastal Information Center (SCCIC), a Sacred Lands File (SLF) search through the California Native American Heritage Commission (NAHC), a geoarchaeological review, and a cultural resources pedestrian survey (Appendix C).

On March 23, 2023, Rincon staff conducted an in-person (CHRIS) records search at the SCCIC housed at California State University, Fullerton. The SCCIC is the official state repository for cultural resources records and reports for Los Angeles County. The purpose of the records search was to identify previous cultural resources studies and previously recorded cultural resources within the project site and a 0.5-mile radius. The records search results indicate three cultural resources have been previously recorded within the 0.5-mile record search radius including: one historic-period built environment resource (P-19-002105 [Los Angeles Aqueduct]), one historic-period archaeological site (P-19-004453 [refuse deposit]), and one prehistoric isolate (P-19-100134 [primary flake]). None of these three resources are located within or immediately adjacent to the project. The results of the analysis are presented in the Cultural Resources Assessment, which is included as Appendix C.

Rincon contacted the Native American Heritage Commission on March 23, 2023, to request a search of the SLF as well as a contact list of Native Americans culturally affiliated with the project site. On April 4, 2023, the NAHC responded to Rincon's SLF request, stating that the results of the SLF search were positive. The NAHC did not provide details regarding the positive result but recommended the Fernandeño Tataviam Band of Mission Indians (FTBMI) be contacted for additional information. Potential project impacts to tribal cultural resources are discussed in Environmental Checklist Section 18, *Tribal Cultural Resources.*

Rincon completed a geoarchaeological review in support of this study in September and October 2023. The desktop archival research included a review of historical topographic maps and aerial photographs, as well as geologic and soils maps. The intent of the archival research is to provide a development history of the APE and its vicinity, as well as to assess the likelihood for the APE to contain subsurface archaeological deposits. The archival research indicates the sediments mapped at surface within the project are not generally conducive to the natural burial and preservation of archaeological resources given they were deposited during the Pleistocene, a period that largely

pre-dates human occupation of the region. The soils map indicates the project site is underlain by Saugus loam, which has a soil profile comprised of topsoil directly overlaying sedimentary parent material, with no indication of buried soil horizons. Given the age of the geologic units and the absence of buried soil horizons as suggested by the geologic and soils maps, the APE has low sensitivity for the presence of subsurface archaeological deposits. Moreover, the degree of previous disturbance within the project site associated with the construction of the RVWTP, the dirt access road, and Central Park, would further reduce the likelihood for encountering intact subsurface archaeological deposits during project construction.

On September 20, 2023, Rincon conducted a cultural resources survey of the project site. The survey's objectives were to document the current conditions of the project site and to identify the presence of previously unrecorded resources within or immediately adjacent to the project site. No archaeological resources were identified as a result of the survey, but one historic-period built environment resource comprised of a stone and mortar retaining wall was documented along the access road in the central and northern portions of the project site. Rincon evaluated the wall for inclusion in the California Register of Historical Resources (CRHR), which included desktop archival research to assess if the resource meets any of the four CRHR criteria. Based on the archival research, Rincon recommended the resources as not eligible for listing in the CRHR and, therefore, does not qualify as a historical resources pursuant to CEQA.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Rincon's cultural resources assessment identified one built environment resource comprised of a stone and mortar retaining wall within the project site. The resource has been evaluated as ineligible for listing in the CRHR, as discussed above. Therefore, it does not qualify as a historical resource under CEQA. As such, the project would not cause a substantial adverse change in the significance of a historical resource. No impact would occur.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

This study did not identify the presence of archaeological resources in the project site. Furthermore, the geoarchaeological review research suggests the project has low sensitivity for the presence of intact subsurface archaeological deposits. Although there is low potential for encountering subsurface archaeological deposits, it is always possible that unknown archaeological materials are encountered during project construction. Disturbance of these resources would result in a substantial adverse change in the significance of an archaeological resource, and impacts would be potentially significant. Mitigation Measure CUL-1 would be required.

Mitigation Measure

CUL-1 Unanticipated Discovery of Cultural Resources

In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (NPS 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative shall also be contacted to participate in the

evaluation of the resource. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations (CCR) Guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. SCV Water shall review and approve the treatment plan and archaeological testing as appropriate, and the resulting documentation shall be submitted to the regional repository of the California Historical Resources Information System, per CCR Guidelines Section 15126.4(b)(3)(C).

Significance After Mitigation

Mitigation Measure CUL-1 would minimize potential impacts to unanticipated cultural resources by establishing appropriate procedures for evaluation and treatment of any discoveries made during construction. Therefore, implementation of Mitigation Measures CUL-1 would reduce impacts to archaeological resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

No human remains are known to be present within the project site (Appendix C). However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, California Health and Safety Code Section 7050.5 states no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately by United. If the human remains are determined to be of Native American origin, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. With adherence to existing regulations, impacts to human remains would be less than significant.

LESS-THAN-SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	■
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Construction

Energy use during project construction would be primarily in the form of fuel consumption to operate heavy equipment, light-duty vehicles, machinery, and generators. Temporary grid power may also be provided to construction trailers or electric construction equipment. Energy use during construction would be temporary, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13, Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes, which would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard (40 Code of Federal Regulations Parts 1039, 1065, and 1068), which would minimize inefficient fuel consumption. Additionally, in the interest of cost efficiency, construction contractors would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, project construction would not result in a potential impact due to wasteful, inefficient, or unnecessary consumption of energy resources, and construction-related energy impacts. There would be no impact.

Operation

As discussed under Initial Study Section 6, *Project Description,* the project involves operation of a pipeline and paved access roadway which does not involve electricity consumption. The project would not involve the operation and maintenance of new activities as the project replaces an existing pipeline that undergoes routine maintenance activities. No new employees would be required. Electricity and fuel consumption would not be wasteful, inefficient, or unnecessary because ongoing maintenance activities would only occur as necessary for system operation. In addition, the purpose of the project is to address the pipelines issues such as deposits, encrustation,

root intrusion, and infiltration to ensure reliability and longevity for the SCV Water system. Consequently, there would be no operational energy impacts.

NO IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

SCV Water has not adopted a renewable energy or energy efficiency plan with which the project could comply. The proposed project would not result in operational energy use beyond existing conditions; therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. No impact would occur.

NO IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	☐	☐	■	☐
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	■	☐
4. Landslides?	☐	☐	■	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	■	☐
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?	☐	☐	☐	■
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?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	■	☐	☐

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

The project site is not located in an Alquist-Priolo Fault Zone. In addition, there are no faults present on the project site, and the closest fault to the project site is the San Gabriel fault zone, located approximately 1.2 miles to the southwest (United States Geological Survey [USGS] 2023a). Liquefaction occurs when the strength and stiffness of a soil is reduced by intense ground shaking typically associated with an earthquake in areas with a high groundwater table. According to the DOC (2022c), a majority of the project site is in a potential liquefaction zone. The proposed project involves installation of an underground pipeline and would not involve any habitable structures. Design and construction of the proposed project would consider the seismic environment and would comply with applicable seismic design standards. A large seismic event, such as a fault rupture, seismic shaking, or ground failure, could result in breakage of the proposed pipeline, failure of joints, and/or underground leakage from the pipeline. In the event an earthquake compromised any project component during operation, SCV Water would temporarily shut off the facility and conduct emergency repairs as soon as possible. Therefore, while the project is located within a seismically active area and would place new infrastructure in an area that could be affected by seismic activity, the project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving fault rupture, strong seismic ground shaking, and seismic-related ground failure. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

According to the DOC (2022c), the project site is not located within an earthquake fault zone or landslide zone. The project does not include habitable structures and would therefore not expose people to loss, injury, or death involving landslides. Additionally, implementation of the project would not exacerbate the existing risk of earthquake-induced landslides in the immediate vicinity. In the event an earthquake compromised any project component due to landslides during operation, SCV Water would temporarily shut off the facility and conduct emergency repairs as soon as possible.

The pipeline alignment follows an existing dirt access road, which is adjacent to steep slopes but already graded at a gentle slope. During construction, the project may exacerbate landslide risk along the hillside due to machinery maneuvering along the project alignment within sloped areas adjacent to the dirt road. Construction would generally avoid steep hillsides, limiting the potential for erosion caused by the movement of construction equipment within the anticipated disturbance footprint. Additionally, the project would pave the existing dirt access road to a width of 16 feet. The paved road would extend from a paved driveway within the RVWTP adjacent to the solar field, along the existing dirt access road to an existing paved parking area at the south side of Central Park. Therefore, operational erosion control and landslide risk would be reduced.

In the event of a seismic event, such as a landslide, implementing specific pipeline engineering methods would substantially reduce structural damage risks. Design features in the project include incorporating restrained joints for pipeline installation along the slope and minimizing the use of fittings wherever feasible. By incorporating these design features, the probability of pipeline rupture during a landslide is greatly reduced, thereby minimizing the potential for water escape from the pipeline and reducing the possibility of exacerbating the landslide's severity along the hillside.

The project would not introduce new infrastructure to the site that would exacerbate landslide hazards, the proposed project would not directly or indirectly cause potential adverse effects involving landslides. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. Construction activities would include grading, excavation, and trenching activities, which could potentially result in erosion.

Construction-related stormwater pollutant discharges are regulated pursuant to the NPDES Construction General Permit. SCV Water requires construction contractors to abide by the conditions of the Construction General Permit and Stormwater Pollution Prevention Plan (SWPPP). The Construction General Permit requires implementation of a SWPPP that outlines project-specific BMPs to control erosion. Such BMPs include the use of temporary de-silting basins and installation of silt fences and erosion control blankets. With adherence to SCV Water's standard construction practices, potential impacts to substantial soil erosion and the loss of topsoil would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Ground subsidence has occurred in Los Angeles County due to falling and rising groundwater tables. Subsidence is caused by a variety of activities, which include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydro-compaction.

As discussed under criteria (a.1) through (a.3), although the project site is located in a seismically active and sloped area within a potential liquefaction zone, the project is not anticipated to adversely affect soil stability. As discussed under criterion (a.4), the project is located within an area susceptible to landslides. The proposed pipeline would follow an existing unpaved access road between the RVWTP and the existing connection point to the local sewer pipeline and would occur in previously disturbed soil. The design and construction of the proposed project would comply with applicable seismic design. Therefore, the project would not increase the potential for local or regional landslides, liquefaction, lateral spreading, or collapse. standards. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on expansive soil, as defined in Table 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soil are soils with high shrink-swell potential. The shrink-swell potential is low if the soil has a linear extensibility of less than three percent (United States Department of Agriculture [USDA] 2017). The proposed pipeline alignment is composed of Saugus loam which has a linear extensibility rating of 1.5 percent. Other soil on site includes Metz loamy sand and Ojai loam, all of which have a linear extensibility rating of 1.5 percent. All soils on site would be considered soils with a low shrink-swell potential. In addition, the project does not include construction of habitable structures and would be unmanned during operation. Therefore, the proposed project would not expose people to risks related to expansive soils. The proposed project would not be located on expansive soils and would not introduce risk to life or property as a result of expansive soils. No impact would occur.

NO IMPACT

e. Would the project 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?

The proposed project would not include the use of septic tanks or alternative wastewater disposal systems. No impact would occur.

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

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks. Although rare, fossils can also be preserved in volcanic rocks and low-grade metamorphic rocks under certain conditions (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

Rincon evaluated the paleontological sensitivity of the geologic units that underlie the project site to assess the project's potential for significant impacts to scientifically important paleontological resources. The analysis was based on the results of a paleontological locality search and a review of existing information in the scientific literature regarding known fossils within geologic units mapped at the project site. According to the SVP (2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. Following the literature review, a paleontological sensitivity classification was assigned to each geologic unit mapped within the project site. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

The project site is situated in the Transverse Ranges geomorphic province, one of the eleven geomorphic provinces in California (California Geological Survey 2002). The Transverse Ranges extend approximately 275 miles west-east from Point Arguello in Santa Barbara County, east to the San Bernardino Mountains, and south to the Anacapa-Santa Monica-Hollywood-Raymond-Cucamonga fault zone (Yerkes and Campbell 2005). The Transverse Ranges are composed of Proterozoic to Mesozoic intrusive crystalline igneous and metamorphic rocks overlain by Cenozoic marine and terrestrial sedimentary deposits and volcanic rock (Norris and Webb 1976). Locally, the project site lies just north of the Santa Clara River, on the southern slope of Bouquet Canyon.

The project site is located in the *Newhall, California* USGS 7.5-minute topographic quadrangle. The geology of the region was mapped by Bedrossian and Roffers (2012) and Yerkes and Campbell (2005), who identified three geologic units underlying the project: Quaternary young alluvial valley deposits, Quaternary old alluvial valley deposits, and Saugus Formation (Figure 8).

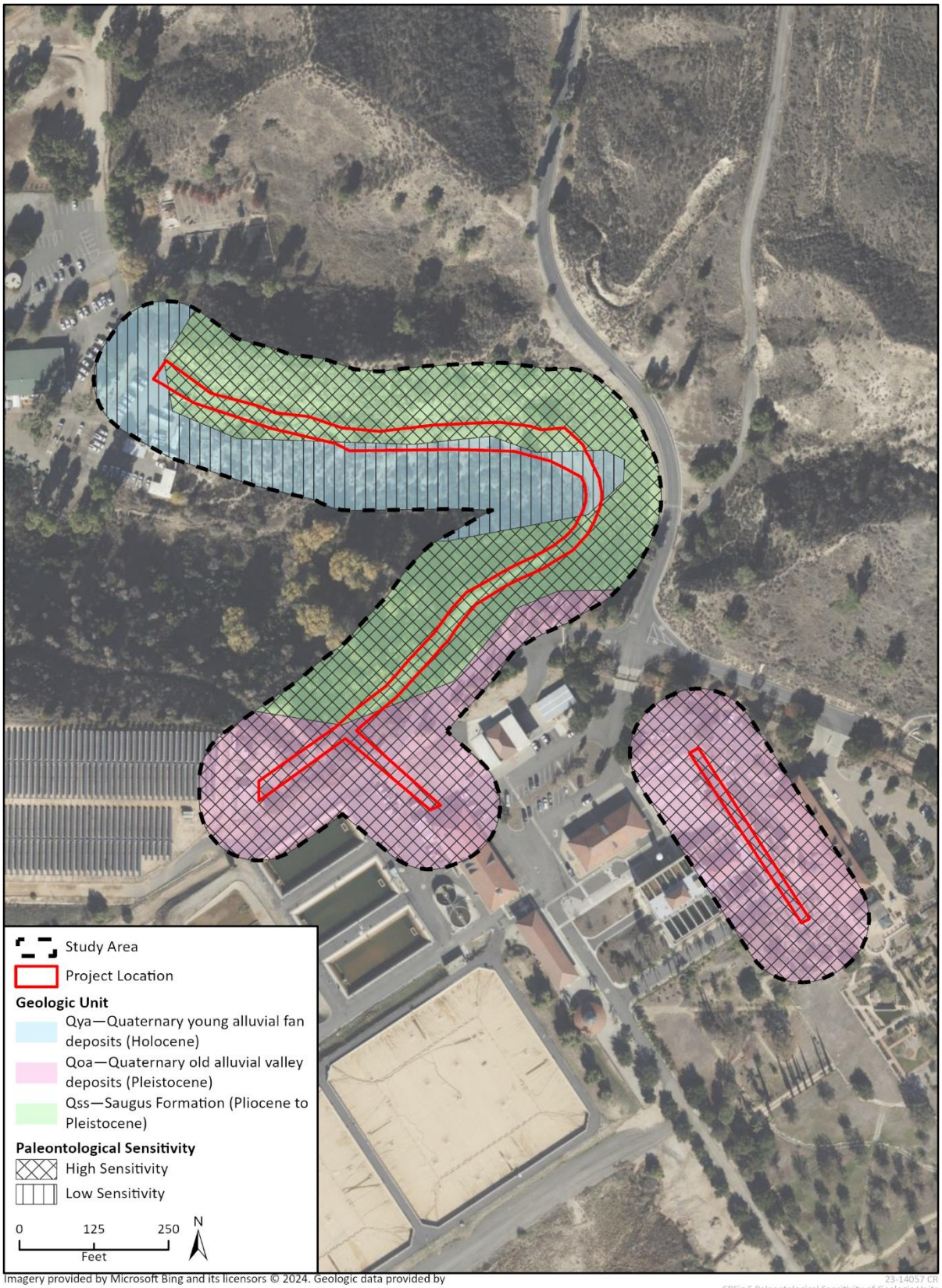
Quaternary young alluvial valley deposits underlie two small segments of the new sewer line alignment (Figure 8). Quaternary young alluvial valley deposits consist of unconsolidated to slightly consolidated clay, silt, sand, and gravel, that is generally Holocene in age (Bedrossian and Roffers 2012). Holocene-aged sediments are generally considered too young (i.e., less than 5,000 years old) to preserve paleontological resources (SVP 2010). Therefore, Quaternary young alluvial valley deposits have low paleontological sensitivity.

Quaternary old alluvial valley deposits underlie the southern part of the new sewer line alignment and the entire upsized sewer line alignment, lying primarily on top of the ridge (Figure 8). Quaternary old alluvial valley deposits consist of slightly to moderately consolidated, clay, silt, sand, and gravel, that is late to middle Pleistocene in age (Bedrossian and Roffers 2012). Pleistocene-aged alluvial sediments have produced numerous scientifically significant paleontological resources in Los Angeles County, including mammoth (*Mammuthus*), saber-toothed cat (*Smilodon*), ground sloth (*Megalonyx*, *Paramylodon*), other mammals, reptiles, birds, fish, and invertebrates (Jefferson 2010; Paleobiology Database 2023; University of California Museum of Paleontology 2023). Given the fossil-producing history of similar sediments in the region, Quaternary old alluvial valley deposits have high paleontological sensitivity.

The Saugus Formation underlies much of the new sewer line alignment, being exposed primarily along the slope of the ridge (Figure 8). The Saugus Formation is Pliocene to Pleistocene in age and consists of gray to yellowish-gray, weakly consolidated, commonly cross-bedded, conglomerate, sandstone, and claystone (Campbell et al. 2016). Multiple fossil localities are known from the Saugus Formation bearing taxa such as sharks, bivalves, gastropods, and brachiopods (Paleobiology Database 2023; University of California Museum of Paleontology 2023). Given this fossil-producing history, the Saugus Formation has high paleontological sensitivity.

Rincon requested a fossil locality search from the Natural History Museum of Los Angeles County on October 30, 2023, which recovered no known fossil localities within the project site (Bell 2023). The nearest known fossil localities occur 1.0 to 1.1 miles east and northeast of the project site and have produced horse (Equidae), rodent, and bird fossils.

Figure 8 Paleontological Sensitivity of Geologic Units



Imagery provided by Microsoft Bing and its licensors © 2024. Geologic data provided by "Geologic Compilation of Quaternary Surficial Deposits in Southern California," CGS, 2012.

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CRFig 5 Paleontological Sensitivity of Geologic Units

Ground-disturbing activities within previously undisturbed sediments with high paleontological sensitivity (i.e., Quaternary old alluvial valley deposits, Saugus Formation) could result in significant impacts to paleontological resources. Ground-disturbing activities associated with this project are expected to consist of trenching for the installation of 1,900 linear feet of new sewer line, paving the existing dirt access road, and upsizing 350 linear feet of existing sewer line. Trenching for the new sewer line is expected to require a trench up to 7 feet wide and reach up to 12 feet below the surface. Trenching for the new sewer line alignment will occur within an existing dirt road built into the side of the ridge, meaning that these excavations will partially impact previously disturbed sediments; however, given the depth of some sections of this trench, some previously undisturbed sediments will likely be impacted. Most of the alignment for the new sewer line is mapped as high-sensitivity sediments (Figure 8); therefore, trenching for the new sewer line may have a significant impact on paleontological resources and mitigation would be required to reduce impacts to a less-than-significant level.

Trenching to upsize the existing sewer line would only impact previously disturbed sediments since the activity will involve uncovering and replacing the existing line. Therefore, this activity is not expected to result in a significant impact to paleontological resources.

The following mitigation measure would address the potentially significant impacts if paleontological resources were discovered during project implementation and ground-disturbing activities. This measure would apply to all phases of project construction and would ensure any significant fossils present on-site are preserved. Implementation of Mitigation Measure GEO-1 would reduce potential impacts to paleontological resources to a less-than-significant level and would effectively mitigate the project's impacts to these resources through the recovery, identification, and curation of previously unrecovered fossils.

GEO-1 Paleontological Resources Monitoring and Mitigation

Qualified Professional Paleontologist. Prior to excavation, SCV Water shall retain a Qualified Professional Paleontologist, as defined by the Society of Vertebrate Paleontology (SVP 2010), who shall direct all mitigation measures related to paleontological resources.

Paleontological Worker Environmental Awareness Program. Prior to excavation, the Qualified Professional Paleontologist or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and procedures for notifying paleontological staff should fossils be discovered by construction personnel.

Paleontological Monitoring. Initial part-time monitoring (i.e., spot-checking) shall be conducted for all ground-disturbing activities during trenching for the new sewer line to check for the presence/depth of previously undisturbed sediments. The monitor shall be present on the first day that trenching occurs within an area mapped as high paleontological sensitivity. If the monitor observes that only previously disturbed and/or artificial fill sediments are being impacted by trenching, then spot-checking shall continue on a weekly basis. If, during the initial spot-check or subsequent weekly spot-checks, the monitor observes that trenching is impacting previously undisturbed sediments assignable to the Saugus Formation or Quaternary older alluvium, then full-time paleontological monitoring shall ensue to ensure that potential impacts to paleontological resources remain less than significant. Paleontological monitoring shall be conducted by a paleontological monitor with experience with collection and salvage of paleontological resources and who meets the minimum standards of the SVP (2010) for a Paleontological Resources Monitor.

In the event of a fossil discovery by the paleontological monitor or construction personnel, all construction activity within 50 feet of the find shall cease, and the Qualified Professional Paleontologist shall evaluate the find. If the fossil(s) is (are) not scientifically significant, then construction activity may resume. If it is determined that the fossil(s) is (are) scientifically significant, the following shall be completed:

- **Fossil Salvage.** The paleontological monitor shall salvage (i.e., excavate and recover) the fossil to protect it from damage/destruction. Typically, fossils can be safely salvaged quickly by a single paleontological monitor with minimal disruption to construction activity. In some cases, larger fossils (such as complete skeletons or large mammal fossils) require more extensive excavation and longer salvage periods. Bulk matrix sampling may be necessary to recover small invertebrates or microvertebrates from within paleontologically sensitive deposits. After the fossil(s) is (are) salvaged, construction activity may resume.
- **Fossil Preparation and Curation**. Fossils shall be identified to the lowest (i.e., most-specific) possible taxonomic level, prepared to a curation-ready condition, and curated in a scientific institution with a permanent paleontological collection along with all pertinent field notes, photos, data, and maps. Fossils of undetermined significance at the time of collection may also warrant curation at the discretion of the Qualified Professional Paleontologist.

Final Paleontological Mitigation Report. Upon completion of ground-disturbing activities (or laboratory preparation and curation of fossils, if necessary), the Qualified Professional Paleontologist shall prepare a final report describing the results of the paleontological monitoring efforts. The report shall include a summary of the field and laboratory methods employed; an overview of project geology; and, if fossils were discovered, an analysis of the fossils, including physical description, taxonomic identification, and scientific significance. The report shall be submitted to SCV Water and, if fossil curation occurred, the designated scientific institution.

Significance After Mitigation

Mitigation Measure GEO-1 would minimize potential impacts to unanticipated paleontological resources by establishing appropriate procedures for evaluation and treatment of any discoveries made during construction and education of construction personnel. Therefore, implementation of Mitigation Measures GEO-1 would reduce impacts to paleontological resources to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	■	☐

Overview of Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of greenhouse gas (GHG) emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and from human activities, such as burning of fossil fuels, decomposition of landfill wastes, raising of livestock, deforestation, and some agricultural practices. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of a specific GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule-per-molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).

The United Nations IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07

degrees Celsius between the years 2010 through 2019 (IPCC 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (California Natural Resource Agency 2019).

Significance Thresholds

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]).

According to the *CEQA Guidelines*, projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the proposed project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. This approach is considered by the Association of Environmental Professionals (2016) in its white paper, *Beyond Newhall and 2020*, to be the most defensible approach presently available under CEQA to determine the significance of a project's GHG emissions. SCV Water and the City of Santa Clarita have not adopted a numerical significance threshold for assessing impacts related to GHG emissions, but the City of Santa Clarita has adopted a Climate Action Plan (CAP) for reduction of GHG emissions. The SCAQMD, California Office of Planning and Research, CARB, CAPCOA, or any other state or applicable regional agency have not adopted a numerical significance threshold for assessing GHG emissions that is applicable to the proposed project.

In the absence of any adopted numeric threshold, the significance of the proposed project's GHG emissions is evaluated consistent with *CEQA Guidelines* Section 15064.4(b) by considering whether the proposed 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 most directly applicable adopted regulatory plans to reduce GHG emissions are SCV Water's Sustainability Plan, CARB's 2022 Scoping Plan, and the City of Santa Clarita General Plan. GHG emissions from the construction and operation of the proposed project are provided for informational purposes.

Methodology

GHG emissions associated with project construction were estimated using CalEEMod, version 2022.1, with the assumptions described under Environmental Checklist Section 3, *Air Quality*. Construction emissions occur for a limited period of a project's lifetime; as a standard practice, GHG emissions from construction are amortized over a presumed project lifetime. A project lifetime of 30 years is recommended by SCAQMD (2008b).

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

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

Plans and policies have been adopted to reduce GHG emissions in the Southern California region, including the SCV Water Sustainability Plan, City of Santa Clarita General Plan, and CARB's 2022 Scoping Plan. The following policies apply to the proposed project:

- **SCV Water Sustainability Plan: Measure CR-1**: Reduce construction emissions 15% by 2030 through decarbonization of construction machinery.
  - **Action CR-1-1**: Include electric and zero emission equipment in the preferred procurement policy for all applicable off-road equipment.
- **City of Santa Clarita General Plan: Conservation and Open Space Element Goal CO 1:** A balance between the social and economic needs of Santa Clarita Valley residents and protection of the natural environment, so that these needs can be met in the present and in the future.
  - **Objective CO 1.3:** Conserve and make more efficient use of non-renewable resource systems, such as fossil fuels, minerals, and materials.
    - **Policy CO 1.3.1**: Explore, evaluate, and implement methods to shift from using non-renewable resources to use of renewable resources in all aspects of land use planning and development.
    - **Policy CO 1.3.2**: Promote reducing, reusing, and recycling in all Land Use designations and cycles of development.
- **City of Santa Clarita General Plan:** Goal CO 8: Development designed to improve energy efficiency, reduce energy and natural resource consumption, and reduce emissions of greenhouse gases.
  - **Objective CO 8.1:** Comply with the requirements of State law, including AB 32, SB 375 and implementing regulations, to reach targeted reductions of greenhouse gas (GHG) emissions.
- **2022 Scoping Plan Goal:** Support climate adaptation and biodiversity that includes protection of the state's water supply, water quality, and infrastructure to achieve carbon neutrality as soon as possible (CARB 2022b).

The proposed project would improve the reliability and resiliency of the existing deteriorating pipeline system that discharges wastewater from the RVWTP. Currently, this pipeline system is the only sewer available for the discharge of wastewater from the RVWTP's bathrooms, laboratory sinks, kitchens, laboratory sample taps, clarifiers, and cooling towers. By upgrading this pipeline system, removal of wastewater from the RVWTP will become more effective and potential environmental impacts resulting from failure/breakdown of this pipeline system will be minimized, if not avoided. Therefore, the proposed project would improve the reliability and resiliency of wastewater discharge from the RVWTP. Furthermore, SCV Water would implement Sustainability Plan Action CR-1-1 during the construction equipment procurement phase of the project, which would aid in achieving the goals and policies of the Santa Clarita Geneal Plan reproduced above, by increasing the use of electric and zero emission construction equipment during construction. Thus, although the project would generate temporary construction emissions, the project would ultimately be consistent with the goals of the SCV Water Sustainability Plan, City of Santa Clarita General Plan, and CARB's 2022 Scoping Plan. The proposed project would not conflict with any

applicable plans, policies, or regulations to reduce GHG emissions. Therefore, impacts related to GHG emissions would be less than significant.

Quantified GHG Emissions for Informational Purposes

Construction of the project would generate GHG emissions. Since the project would not include new operational activity, this analysis considers the GHG emissions from construction for informational purposes. Calculations of CO_2, CH_4, and N_2O emissions are provided to identify the magnitude of potential project effects.

Construction facilitated by the project would generate temporary GHG emissions primarily from the operation of construction equipment on site, as well as from vehicles transporting construction workers to and from the project site and heavy trucks transporting materials and equipment. As shown in Table 6, construction associated with the project would generate 375 metric tons (MT) of CO_2e over the 11-month construction period. Amortized over a 30-year period, construction associated with the project would generate 12.5 MT of CO_2e per year.

Table 6 Construction GHG Emissions

Year	Emissions (MT of CO_2e)
2025	375
Amortized over 30 years	**12.5**

MT = metric tons; CO_2e = carbon dioxide equivalents

Source: Table 2.3 "Construction Emissions by Year, Mitigated" emissions. Annual emissions results are shown for all emissions. The mitigated emissions account for project sustainability features and/or compliance with specific regulatory standards. No mitigation measures are required for this project. See CalEEMod worksheets in Appendix A.

LESS THAN SIGNIFICANT IMPACT

9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
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?	☐	☐	■	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material 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?	☐	☐	■	☐
e. For a project located in 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 or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	■	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project 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?

Construction of the proposed project would temporarily increase the transport and use of hazardous materials in the project area through the operation of vehicles and equipment. Such substances include diesel fuel, oil, solvents, and other similar materials brought onto the construction site for use and storage during the construction period. These materials would be contained within vessels specifically engineered for safe storage and would not be transported, stored, or used in quantities that would pose a significant hazard to the public or construction workers themselves. Project construction activities would adhere with all relevant regulations, including the enforcement of hazardous materials transportation regulations. Additionally, as described in Initial Study Section 6, *Project Description*, SCV Water maintains standard construction practices related to the discovery of hazardous waste during construction activities. Compliance with these regulations and SCV Water standard construction practices would ensure that potential hazardous materials impacts from construction activities would be less than significant.

The project would not operate and maintain the storage of hazardous chemicals on site. Therefore, there would be no impact related to hazardous materials during project operation.

LESS THAN SIGNIFICANT IMPACT

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The nearest schools to the project site are Saugus High School, located at 21900 Centurion Way in Santia Clarita, and Highlands Elementary School, located at 27332 Catala Avenue in Santa Clarita. The pipeline alignment is approximately 0.30 mile north of Highlands Elementary School and 0.30 mile northwest of Saugus High School. As described under criteria (a) and (b), construction of the proposed project would comply with existing federal and state requirements for the transport, use, or disposal of hazardous materials. No facilities or infrastructure expected to contain lead-based paint or asbestos-containing materials would be demolished as part of project construction. In addition, no hazardous waste disposal sites, solid waste disposal sites, or hazardous substance release sites were identified within the project site that could result in a release of hazardous emissions or materials (State Water Resources Control Board [SWRCB] 2023a; DTSC 2023a). Furthermore, the project would implement SCV Water's standard construction practices related to the discovery of hazardous materials on site. Therefore, project construction would not emit hazardous emissions or handle hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site that is included on a list of hazardous material 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?

Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to maintain the Cortese List, which provides information about the location of hazardous materials release sites. The California Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List, while other state and local government agencies are required to provide additional hazardous material release information. The analysis for this section included a review of the following resources on November 13, 2023, to provide hazardous material release information:

- SWRCB GeoTracker database (SWRCB 2023a)
- DTSC EnviroStor database (DTSC 2023a)
- List of "active" Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO) from RWQCBs (CalEPA 2023a)
- Solid Waste Disposal Sites (CalEPA 2023b)

Based on review of these databases, the project site is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

The nearest SWRCB sites include six leaking underground storage tank (LUST) sites, located at 26801 Bouquet Canyon Road (Shell Service Station and Shell), approximate 0.59 mile to the west; 26829 Seco Canyon Road, approximately 0.62 mile to the west; 26753 Bouquet Canyon Road, approximately 0.73 mile to the west; and 26954 Seco Canyon Road, approximately 0.65 northwest of the site. However, these cases were completed and closed in 2012, 1996, 2008, 2019, and 2019, respectively (SWRCB 2023b, 2023c, 2023d, 2023e, 2023f, 2023g). The nearest active site listed by SWRCB is the former One Hour Martinzing dry cleaners at 26825 Bouquet Canyon Road, approximately 0.65 mile west of the project site (SWRCB 2023g). The One Hour Martinzing site is classified as a Clean Up Program Site for volatile organic compounds. The nearest DTSC site cleanup program is at the Saugus High School Auditorium, located at 219000 West Centurion Way, approximately 0.30 mile northeast of the project stie (DTSC 2023b).

Due to the distance and closure status of these active sites (greater than 0.25 mile), it is not likely that hazardous materials from these sites have infiltrated soil underlying the project site. Furthermore, the project would implement SCV Water's standard construction practices related to the discovery of hazardous materials on site, which would ensure that the presence of unanticipated hazardous materials on site is properly addressed. The project site is not currently listed as a hazardous materials site according to Government Code Section 65962.5, and impacts would be less than significant.

LESS THAN SIGNIFICANT 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 or excessive noise for people residing or working in the project area?

The closest public or public use airport to the project site is the Whiteman Airport, located approximately 20 miles southeast of the project site. The project site is not located within an airport land use plan or within two miles of a public or public use airport. As a result, the project would

have no impact related to safety hazards or excessive noise for people residing or working in the project area due to proximity to an airport.

NO IMPACT

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

SCV Water maintains a Local Hazard Mitigation Plan (LHMP) to identify potential natural hazards to SCV Water and to formulate mitigation measures for protection of infrastructure and community safety (SCV Water 2024). Additionally, the City of Santa Clarita maintains a LHMP that is updated and adopted every five years (City of Santa Clarita 2021). The LHMP sets forth hazard mitigation strategies along with action items to help mitigate and combat various threats such as wildfire, drought, earthquakes, landslides, extreme heat, cyber-attacks, energy disruption, floods, and terrorism.

Construction of the proposed project would occur on an unpaved access dirt road and within the existing RVWTP. No temporary lane closures of local roadways would be necessary during construction of the project. Therefore, the project would not interfere with an emergency response plan or evacuation plan, and no impact would occur.

NO IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The proposed project is not located in a designated Very High Fire Hazard Severity Zone (VHFHSZ) (CAL FIRE 2023). The proposed pipeline would be located within developed/disturbed areas and ornamental landscaping, closely surrounded by brush-covered open space adjacent to the existing dirt access road. Potential ignition sources may include sparks from exhaust pipes, discarded cigarette butts, contact of mufflers with dry grass, other sources of sparks or flame, and spills or releases of flammable materials such as gasoline. Construction equipment would be subject to standard operating procedures that would limit sources of ignition that could generate a wildland fire. All construction activities on the project site, require fire safety protocols, including, but not limited to, on-site fire extinguishing equipment. Compliance with applicable federal and State laws and regulations related to the proper use, storage, and transport of hazardous materials would also reduce the risk of wildfire ignition from the use of hazardous materials (such as fuels) during construction activities. As such, project construction would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

Project operation would not involve potentially flammable materials or activities that could result in wildfire ignition, and the pipeline would be located entirely underground. Impacts related to wildland fires would be less than significant.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	■	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(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?	☐	☐	■	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	■
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	■	☐

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Construction

Grading, excavation, and other construction activities associated with the project could adversely affect water quality due to erosion resulting from exposed soils and the generation of water pollutants, including trash, construction materials, and equipment fluids. Soil disturbance associated with site preparation and grading activities would result in looser, exposed soils, which are more susceptible to erosion. Additionally, spills, leakage, or improper handling and storage of substances such as oils, fuels, chemicals, metals, and other substances from vehicles, equipment, and materials used during project construction could contribute to stormwater pollutants or leach to underlying groundwater.

The proposed pipeline would follow an existing unpaved access roadway between the RVWTP and the existing connection point to the local sewer pipeline system to avoid steep hillsides and impacts related to erosion. Temporary ground disturbance during construction would be to a width of approximately 25 feet for paving of the road.

SCV Water maintains standard contractor specifications that would be applied to the proposed project, some of which are summarized in Initial Study Section 6, *Project Description*. These include monitoring soil conditions, properly handling and disposing of discovered hazardous waste, and abiding by SWPPP requirements as part of SCV Water's standard construction practices. The SWPPP must outline project-specific BMPs to control erosion. Such BMPs include the use of temporary de-silting basins and installation of silt fences and erosion control blankets. Compliance with these standard specifications would ensure construction activities do not result in discharge to surface water or groundwater that could affect the quality of such waters. Impacts would be less than significant.

Operation

The project would not involve the storage of chemicals on site. Project operation would not involve ground disturbance, which would limit the potential for off-site migration of sediment and adsorbed pollutants in runoff. Operational activities of the project would be the same as under existing conditions for the existing pipeline. Given that chemicals would not be stored on site and that the project would not introduce new sources of potential pollutants, project operation would not violate any water quality standards, waste discharge requirements, or otherwise substantially degrade water quality. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The project consists of a pipeline that would be installed underground and paving of the existing dirt access road to an existing paved parking area would extend from a paved driveway within the RVWTP. This addition of impervious surfaces would be minimal due to the limited footprint of the paved road, and stormwater runoff would continue to percolate into the groundwater alongside the paved road in adjacent natural areas. During large storm events, some runoff from the paved road may flow into the storm drain system associated with the paved roadways within the RVWTP;

however, the amount of runoff that would be diverted from groundwater recharge would be minimal. Therefore, the proposed project would not interfere substantially with groundwater recharge.

During the construction phase, the pipeline installation between the RVWTP and the existing connection point to the local sewer pipeline system is not likely to encounter groundwater. The new alignment would be approximately 100 feet higher in elevation than the nearest waterway: Bouquet Creek. In the event groundwater is encountered, dewatering activities would be temporary and short-term as pipeline construction activities move along the alignment. Groundwater from dewatering during construction would be discharged into the City's storm drain system. Dewatering activities will affect shallow groundwater levels over a maximum time period of 11 months and will not substantially decrease groundwater supplies or impede sustainable groundwater management. Accordingly, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

c.(iii) Would the project 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 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?

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The project would not alter the course of a stream or river, as none are located within the project footprint. While the project would generally preserve drainage patterns on site, with water continuing to flow from higher elevations to lower elevations, the addition of pavement to the existing dirt access road would increase impervious surfaces along the alignment.

The pipeline would be installed via open-cut trenching. As described in Environmental Checklist Section 4, *Biological Resources*, the project would implement Mitigation Measure BIO-5, which requires that general best management practices be followed by construction personnel which includes but is not limited to the contractor clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries and vehicle or equipment maintenance be performed in the designated staging areas. As a result, the project would not substantially alter the existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site; substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; 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 impede or redirect flood flows. Impacts would be less than significant.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the project site is located in Zone D (FEMA 2021). Zone D Areas are areas with possible but undetermined flood hazards. As the project would not substantially modify the existing drainage patterns on site, no changes to the flooding pattern of the project site and its vicinity would occur as a result. The project would not result in flooding on- or off-site, and would not impede or redirect flood flows.

During large storm events, some runoff from the paved road may flow downhill into the storm drain system associated with the paved roadways within the RVWTP; however, the amount of runoff that would be diverted from groundwater recharge would be minimal. No expansion of stormwater drainage systems would be necessary to accommodate runoff from the project.

The project would not alter the course of a stream or river, and would not divert or redirect flood flows, potential impacts related to the alteration of the site's drainage pattern would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is approximately 35 miles from the Pacific Ocean, separated by the Santa Susana and Santa Monica mountain ranges, and is not subject to tsunami risk. The nearest inland surface water body that may be subject to risk of a seiche is Castaic Reservoir, approximately 10 miles to the north. Given the distance to this water body, the occurrence of a seiche would not affect the project site. In addition, the project site is outside of the dam failure inundation zone for both Castaic Reservoir and Bouquet Reservoir (City of Santa Clarita 2011a). As discussed above, the project site is located in FEMA Zone D (FEMA 2021).

The proposed pipelines would be located underground and would not risk the release of pollutants due to project inundation during flood events. No impact would occur.

NO IMPACT

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

Water Quality Control Plan

The Los Angeles RWQCB Basin Plan designates beneficial uses for surface waters in the Los Angeles region and associated water quality objectives to fulfill such uses. The project site is within the Santa Clara River watershed and drains to Reach 6 of the Santa Clara River. Reach 6 and all downstream reaches have designated beneficial uses of Municipal and Domestic Supply (potential), Industrial Service Supply, Industrial Process Supply, Agricultural Supply, Groundwater Recharge, Freshwater Replenishment, Warm Freshwater Habitat, Wildlife Habitat, Rare, Threatened and Endangered Species, Wetland Habitat, Water Contact Recreation, and Non-contact Water Recreation (Los Angeles RWQCB 2020). Multiple reaches of the Santa Clara River downstream of the project site are listed as impaired for numerous pollutants. Table 10 summarizes impairments for all downstream reaches of the Santa Clara River, including the Santa Clara River estuary.

Table 7 Water Quality Impairments for Downstream Reaches of the Santa Clara River

Santa Clara River Reach	Impairments
Reach 6 (West Pier Highway 99 Bridge to Bouquet Canyon Road)	Chloride, Chlorpyrifos, Temperature, Toxicity
Reach 5 (Blue Cut Gaging Station to West Pier Highway 99 Bridge)	Chloride, Indicator Bacteria, Iron, Trash
Reach 4B (Piru Creek to Blue Cut Gaging Station)	Not impaired
Reach 4A (A Street [Fillmore] to Piru Creek)	Trash
Reach 3 (Freeman Diversion to A Street [Fillmore])	Chloride, Indicator Bacteria, Selenium, Total Dissolved Solids, Toxicity, Trash
Reach 2 (Highway 101 Bridge to Freeman Diversion)	Not impaired
Reach 1 (Estuary to Highway 101 Bridge)	Dissolved Oxygen, pH, Toxicity, Trash
Santa Clara River Estuary	Ammonia, ChemA,[1] Indicator Bacteria, Toxaphene, Toxicity
Bouquet Canyon Creek (below Bouquet Reservoir)	Temperature, Water

[1] ChemA refers to the sum of the chemicals aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, lindane, endosulfan, and toxaphene.

Source: Los Angeles RWQCB 2020

As described under criterion a, project operation would not contribute to runoff of sediment or sediment-bound pollutants. Furthermore, the project does not involve septic systems, pet parks, agricultural land, or other land uses commonly associated with high concentrations of nutrients, indicator bacteria, or chemical toxicity. No chemicals would be stored on site. Therefore, the project would not exacerbate existing impairments to nearby water sources and would not impair existing or potential beneficial uses of nearby water bodies. The project would not conflict with or obstruct implementation of the Basin Plan. Impacts would be less than significant.

Sustainable Groundwater Management Plan

The project site overlies the Saugus Formation Aquifer. The Santa Clarita Valley Groundwater Sustainability Agency (GSA), consisting of representatives from SCV Water, County of Los Angeles, City of Santa Clarita, and Los Angeles County Waterworks District Number 36, oversees management of the subbasin. The Groundwater Sustainability Plan (GSP) governing the Santa Clara River Valley Groundwater Basin, East Subbasin was adopted in January 2022.

The project is not anticipated to involve dewatering activities during installation of the pipeline. In the event that groundwater is encountered, dewatering activities would not conflict with the implementation of the GSP and would not substantially decrease groundwater levels within the Basin. Groundwater from dewatering during construction would be discharged into the City's storm drain system. Dewatering activities would be temporary and short-term as pipeline construction activities.

Furthermore, the project does not propose residential, commercial, industrial, or other land uses that would increase wastewater services. The project would address the existing pipelines issues such as deposits, encrustation, root intrusion, and infiltration, but would not increase the overall capacity of the system. As such, the project would not increase groundwater extraction beyond previous operating conditions and, therefore, would not conflict with or obstruct implementation of the GSP. Impacts related to the GSP would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
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?	☐	☐	☐	■

a. Would the project physically divide an established community?

The proposed project would replace an existing underground sewer line and pave an existing access road. No modifications to existing land uses would occur. Therefore, project developments would not physically divide an established community. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Pursuant to California Government Code 53091, the building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. The project would entail the construction and operation and replacement of an existing eight-inch sewer line that connects the RVWTP to the local sewer system and paving of an existing dirt access road. Therefore, the building and zoning ordinances of the City of Santa Clarita would not apply to the proposed project. Additionally, the project is evaluated herein for consistency with the City of Santa Clarita General Plan for informational purposes.

The City of Santa Clarita General Plan identifies objectives and policies to maintain public infrastructure and provide clean water for Valley residents and businesses. The proposed project's consistency with applicable General Plan goals, objectives, and policies is described in Table 8. As shown therein, the proposed project would actively support the City's goals, policies, and objectives related to providing an adequate supply of clean water to meet local demands. Therefore, the project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and no impact would occur.

Table 8 General Plan Consistency

General Plan Goal or Policy	Proposed Project Consistency
Policy CO 4.4.4. Promote the extension of sanitary sewers for all urban uses and densities, to protect groundwater quality, where feasible.	**Consistent.** The proposed project would enable SCV Water to continue to provide reliable wastewater services.
Policy LU 7.3.4. Implement best management practices for erosion control throughout the construction and development process.	**Consistent.** As discussed in Environmental Checklist Section 8, *Geology and Soils,* and Section 9, *Hazards and Hazardous Materials,* the proposed project would implement erosion control BMPs and cease work in the event hazardous waste is discovered.
Goal LU 9: Adequate public facilities and services, provided in a timely manner and in appropriate locations to serve existing and future residents and businesses.	**Consistent:** As discussed in Initial Study Section 6, *Project Description*, the proposed project would ensure the reliability and longevity of the sewer system.

Source: City of Santa Clarita 2011

NO IMPACT

12 Mineral Resources

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

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

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

According to the Santa Clarita General Plan Environmental Impact Report (2011b), the project is in a Mineral Resources Zone 2 (MRZ-2). Mineral Resource Zone 2 (MRZ-2) areas are concentrated along waterways, such as the Santa Clara River within and outside the city boundaries, as well as State Route 126, Castaic Creek, and east of Sand Canyon Road (City of Santa Clarita 2011b). The site is not located in a zone of oil and natural gas extraction and production (City of Santa Clarita 2011b). No mines or quarries exist near the project site. The proposed project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project result in:				
a. 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?	☐	☐	■	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	■	☐
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?	☐	☐	☐	■

Noise Overview

The unit of measurement used to describe a noise level is the decibel (dB). However, the human ear is not equally sensitive to all frequencies within the sound spectrum. Therefore, a method called "A weighting" is used to filter noise frequencies which are not audible to the human ear. A-weighting approximates the frequency response of the average young ear when listening to most ordinary everyday sounds. A person's relative judgment of the loudness or annoyance of a sound correlates well with the "A-weighted" levels of those sounds. Therefore, the A-weighted noise scale is used for measurements and standards involving the human perception of noise. In this analysis, all noise levels are A-weighted, and "dBA" is understood to identify the A-weighted decibel.

Decibels are measured on a logarithmic scale which quantifies sound intensity in a manner similar to the Richter scale used for earthquake magnitudes. A 10 dB increase represents a 10-fold increase in sound intensity, a 20 dB change is a 100-fold difference, 30 dB is a 1,000-fold increase, etc. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; a halving of the energy would result in a 3 dB decrease.

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; a change of 5 dBA is readily perceptible; and an increase of 10 dBA sounds twice as loud.

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs, and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level (L_{eq}). The L_{eq} is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period. Typically, L_{eq} is equivalent to a one-hour period, even when measured for shorter durations as the noise level of a 10- to 30-minute period would be the same as the hour if the noise source is relatively steady. L_{max} is the highest Root Mean Squared (RMS) sound pressure level within the sampling period, and L_{min} is the lowest RMS sound pressure level within the measuring period.

Propagation

Sound from a small, localized source (approximating a "point" source) radiates uniformly outward as it travels away from the source in a spherical pattern, known as geometric spreading. The sound level decreases or drops off at a rate of 6 dBA for each doubling of the distance. Traffic noise is not a single, stationary point source of sound. Over some time interval, the movement of vehicles makes the source of the sound appear to emanate from a line (line source) rather than a point. The drop-off rate for a line source is 3 dBA for each doubling of distance.

The propagation of noise is also affected by the intervening ground, known as ground absorption. A hard site (such as parking lots or smooth bodies of water) receives no additional ground attenuation and the changes in noise levels with distance (drop-off rate) are simply the geometric spreading of the source. A soft site (such as soft dirt, grass, or scattered bushes and trees) receives an additional ground attenuation value of 1.5 dBA per doubling of distance.

Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features such as hills and dense woods, and man-made features such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011).

Vibration Overview

Vibration levels are usually expressed as a single-number measure of vibration magnitude in terms of velocity or acceleration, which describes the severity of the vibration without the frequency variable. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal, usually measured in inches per second. Since it is related to the stresses experienced by buildings, PPV is often used in monitoring and controlling construction vibration. Although PPV is appropriate for evaluating the potential of building damage, it is not suitable for evaluating human response. It takes some time for the human body to respond to vibrations. In a sense, the human body responds to an average vibration amplitude (Federal Transit Administration [FTA] 2018). Because vibration waves are oscillatory, the net average of a vibration signal is zero. Thus, the RMS amplitude is used to describe the "smoothed" vibration amplitude (FTA 2018). The RMS of a signal is the square root of the average of the squared amplitude of the signal, usually measured in inches per second. The average is typically calculated over a one-second period. The RMS amplitude is always less than the PPV and is always positive. Decibel notation is used to

compress the range of numbers required to describe vibration. The abbreviation "VdB" is used in this analysis for "vibration decibels" to reduce the potential for confusion with sound decibels.

Sensitive Receptors

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Typical noise sensitive uses include residential, residential care, child/elder care facilities, schools, places of worship, and hospitals. Vibration-sensitive receptors, which are similar to noise-sensitive receptors, include residences and institutional uses, such as schools, churches, and hospitals. However, vibration-sensitive receptors also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studios or medical facilities with sensitive equipment). The closest sensitive receptors are single-family residences located as close as approximately 0.3 mile northwest of the northernmost segment of main pipeline and multi-family residences located as close as approximately 0.2 mile southeast of the southernmost pipeline segment at the RVWTP facility.

Project Noise Setting

The primary noise sources in the vicinity of the project site are motor vehicles (e.g., automobiles, buses, and trucks) along Newhall Ranch Road and Bouquet Canyon Road. In addition, noise is generated from recreational use of the sports fields and playground by occupants of Central Park.

Significance Thresholds

The Santa Clarita Municipal Code (SCMC) addresses construction noise in the following section:

> **SCMC Section 11.44.080.** No person shall engage in any construction work which requires a building permit from the City on sites within 300 feet of a residentially zoned property except between the hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, and 8:00 AM. to 6:00 PM. on Saturday. Further, no work shall be performed on the following public holidays: New Year's Day, Independence Day, Thanksgiving, Christmas, Memorial Day, and Labor Day. Emergency work [defined as "…work made necessary to restore property to a safe condition following a public calamity, or work required to protect persons or property from an imminent exposure to danger, or work by private or public utilities when restoring utility service" in SCMC Section 11.44.020(D)] is permitted at all times. The Department of Community Development may issue a permit for work to be done "after hours"; provided that containment of construction noises is provided.

The SCMC does not provide a quantitative construction noise threshold. Therefore, based on FTA Transit Noise and Vibration Impact Assessment (2018) criteria, construction noise would be significant if noise levels exceed 80 dBA L_{eq} for an 8-hour period at residential uses or construction is conducted outside the allowable hours for construction as stated in Section 11.44.080.

The SCMC also does not provide a quantitative vibration threshold. Therefore, vibration limits used in this analysis to determine a potential impact to local land uses are based on guidelines for vibration damage potential contained in Caltrans' (2020) *Transportation and Construction Vibration Guidance Manual*, shown in Table 9. According to the values presented in Table 9, construction vibration impact would be significant if vibration levels exceed 0.3 in/sec PPV at the nearest single-family and multi-family residences.

Table 9 Caltrans Vibration Damage Potential Threshold Criteria

Type of Situation	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Extremely fragile historic buildings, ruins, and ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic sites and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

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

Construction

Temporary noise levels caused by construction activity would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of noise-generating activities. For a construction noise assessment, construction equipment can be considered to operate in two modes: stationary and mobile. As a rule, stationary equipment operates in a single location for one or more days at a time, with either fixed-power operation (e.g., pumps, generators, and compressors) or variable-power operation (e.g., pile drivers, rock drills, and pavement breakers). Conversely, mobile equipment moves around the construction site with power applied in cyclic fashion, such as bulldozers, graders, and loaders (FTA 2018). Noise impacts from stationary equipment are assessed from the center of the equipment, while noise impacts from mobile construction equipment are assessed from the center of the equipment activity area (e.g., construction site).

Construction noise was estimated using the Federal Highway Administration's (FHWA) Roadway Construction Noise Model (RCNM). Typical construction projects have long-term noise averages that are lower than louder short-term noise events due to equipment moving from one point to another on the site, work breaks, and idle time. Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some may have discontinuous high-impact noise levels. The maximum hourly L_{eq} of each phase is determined by combining the L_{eq} contributions from each piece of equipment used in that phase (FTA 2018). Project construction phases would include demolition, site preparation, grading, trenching, and paving. It is assumed diesel engines would power all construction equipment. For assessment purposes, the loudest phase (demolition) was modeled under the conservative assumption that a backhoe, cement and mortar mixer, two compressors, a crane, crushing and processing equipment, and a generator would be operating simultaneously.

Construction would occur from 7:00 a.m. to 5:00 p.m., Monday through Friday, and would therefore not conflict with the SCMC. Pipeline construction activities would be mobile and would be constantly moving in a linear path along the pipeline alignment. Construction equipment would travel linearly along the pipeline alignment, therefore exposure to the nearest sensitive receptors

would be temporary, and the distance to the receptors would vary over the course of a construction day. It was assumed the single-family residences located to the northwest would be exposed to construction noise at an average distance of approximately 1,750 feet, the multi-family residences located to the southeast would be exposed to construction noise at an average distance of approximately 1,000 feet, and the closest sports field at Central Park to the northwest would be exposed to construction noise at an average distance of 325 feet throughout a typical construction workday. Table 10 shows the results of the noise modeling from RCNM.

Table 10 Construction Noise Levels at Sensitive Receptors During Loudest Construction Phase (Demolition)

Sensitive Receptor	Distance (feet)	Noise Level (dBA L_{eq})
Single-family homes to the northwest	1,750	62.0
Multi-family homes to the southeast	1,000	66.9
Nearest sports field at Central Park to the northwest	325	76.6

Note: Noise levels were calculated assuming that a backhoe, cement and mortar mixer, two compressors, a crane, crushing and processing equipment, and a generator would be operating simultaneously.

See Appendix D for construction noise modeling output.

As shown in Table 10, construction noise levels would be approximately 62 dBA L_{eq} at the nearest single-family home northwest of the site, approximately 67 dBA L_{eq} at the nearest multi-family home southeast of the site, and approximately 77 dBA L_{eq} at the nearest sports field at Central Park northwest of the site. Therefore, noise levels at the nearest noise-sensitive receptors to the project alignment due to pipeline construction activities would not exceed the FTA's 80 dBA L_{eq} threshold for an 8-hour period. Impacts would be less than significant.

Operation

Because the project consists of an underground pipeline, project operation would not generate noise at the aboveground sensitive receptors. In addition, the project would not require new maintenance activities that would generate noise. Therefore, no operational noise impacts would occur.

LESS THAN SIGNIFICANT IMPACT

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

Construction activities known to generate excessive groundborne vibration, such as pile driving, would not be conducted as part of the project. Therefore, the greatest known source of vibration during project construction activities would be a vibratory roller, which would be used as close as 1,000 feet to the nearest residential structures. A vibratory roller would generate a vibration level of approximately 0.210 in/sec PPV at a distance of 25 feet (Caltrans 2020), which would equate to a vibration level of approximately 0.001 in/sec PPV at a distance of 1,000 feet.[6] This would be much lower than 0.3 in/sec PPV, the level at which structural damage occurs to older residential structures. Therefore, temporary impacts associated with use of the roller (and other potential equipment) would be less than significant.

[6] $PPVEquipment = PPVRef (25/D)^n$ (in/sec), PPVRef = reference PPV at 25 feet, D = distance ,and n = 1.1

Operation of the project would involve the operation of an underground pipeline. The project would not include any vibration sources during operation. Therefore, no operational vibration impacts would occur.

LESS THAN SIGNIFICANT 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?

The closest public or public use airport to the project site is the Whiteman Airport (WHP), located approximately 13 miles southeast of the project site. The project site is not located within the noise contours for the airport according to Figures 9-6 and 9-7 of the Whiteman Airport Master Plan (County of Los Angeles 2011). Therefore, project construction workers would not be exposed to temporary and short-term airport noise. No impact would occur.

NO IMPACT

14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	■
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

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

Due to the relatively small nature of the proposed project, construction workers would likely be local to the Santa Clarita region; therefore, construction would not generate new population growth. As previously discussed, the project would not increase the production capacity of the SCV wastewater system nor would it increase demand for wastewater services. During project operation, the proposed project would not directly induce population growth because it would not produce additional wastewater treatment capacity for residential or commercial use. The project would not require any new employees for operation and maintenance activities as SCV Water staff already conduct operation and maintenance for the existing pipeline in the project's location. Furthermore, the proposed project would not result in the construction of new homes or new commercial or industrial uses. Therefore, the project would not induce substantial unplanned population growth in an area, either directly or indirectly, and no impact would occur.

NO IMPACT

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

There is no existing housing within the project alignment, and no demolition of existing housing would occur as part of project construction. Therefore, the project would not displace substantial numbers of existing people or housing, and no impact would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The closest fire station is the Los Angeles County Fire Department Station #104, located at 26901 Golden Valley Road, Santa Clarita, approximately 1.6 miles (driving distance) west of the project site. The proposed project would not result in increased demand for fire protection services because no population growth would occur as a result of construction or operation of the proposed project, as discussed in Environmental Checklist Section 14, *Population and Housing*. The project would not require additional or unusual fire protection resources beyond those required for the existing facilities on the project site. Therefore, no impact to fire protection services would occur.

NO IMPACT

a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The nearest police station is the Santa Clarita Valley Sheriff's Station, located at 26201 Golden Valley Road in Santa Clarita, approximately 1.8 miles south (driving distance) of the project site. The proposed project would not result in increased demand for police protection services because no population growth would occur as a result of construction or operation of the proposed project, as discussed in Environmental Checklist Section 14, *Population and Housing*. Thus, the proposed project would not result in an impact associated with the provision of new or physically altered police protection facilities. Therefore, no impact to police protection services would occur.

NO IMPACT

a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The proposed project would not result in increased demand for schools because no population growth would occur as a result of construction or operation of the proposed project, as discussed in Environmental Checklist Section 14, *Population and Housing*. Therefore, no impact to schools would occur.

NO IMPACT

a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The proposed project would not result in increased demand for parks because no population growth would occur as a result of construction or operation of the proposed project, as discussed in Environmental Checklist Section 14, *Population and Housing*. Therefore, no impact to parks would occur.

NO IMPACT

a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The proposed project would not change existing demand for public facilities because population growth would not result from construction or operation of the proposed project, as discussed in Environmental Checklist Section 14, *Population and Housing*. Therefore, no impact to public facilities would occur.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

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

As discussed in Environmental Checklist Section 14, *Population and Housing*, the proposed project would not directly or indirectly generate population growth and therefore would not 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 would occur.

NO IMPACT

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

The project would involve construction of a water pipeline. The project would not involve construction or expansion of recreational facilities. No impact would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	■	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	☐	■	☐

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

Construction-related vehicle trips would include construction workers traveling to and from the project site, haul trucks (including for soil import), and other trucks associated with equipment and material deliveries. Given the minimal number of trips generated and the limited impact to public transit and pedestrian facilities, the proposed project would not conflict with adopted policies, plans, or programs addressing the circulation system, including public transit, bicycle, or pedestrian facilities.

Regional and local plans and policies addressing the circulation system include the City of Santa Clarita General Plan Circulation Element and the SCAG 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (City of Santa Clarita 2011a; SCAG 2020). No transit stops, sidewalks, or bicycle lanes are located along the segment of the dirt access road where the pipeline alignment would be located. Construction traffic would be temporary and limited to the duration of the construction schedule (January 2025 and November 2025). After construction is complete, no changes to existing transportation patterns would occur because the pipeline would be located underground, and no new operation and maintenance activities would be required for the project. The minimal level of traffic generated during project construction would not have the potential to conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts. Specifically, the guidelines state vehicle miles traveled (VMT) exceeding an applicable threshold of significance may indicate a significant impact. According to Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic. A VMT calculation is typically conducted on a daily or annual basis, for long-range planning purposes. Increases in VMT from construction would be short-term, minimal, and temporary. Project operation would not involve any new maintenance activities compared to existing conditions. Therefore, operational VMT in the project area would not be increased. In addition, as stated in the City of Santa Clarita's Transportation Analysis Updates guidance, projects that generate less than 110 daily trips are presumed to result in less than significant VMT impacts absent substantial evidence to the contrary (City of Santa Clarita 2020). Project construction would not result in substantial vehicle trips and would stay below the 110 trips per day threshold. The project would involve no new operation and maintenance activities compared to existing conditions. Therefore, the project would not generate any operational VMT. Impacts associated with VMT would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Project components consist of a water pipeline that would be located underground, and paving of the existing dirt access road. The project would result in no changes to the existing road geometry of the access road, and would improve the quality of the road through the addition of pavement. The proposed project would therefore not create or substantially increase traffic hazards due to a geometric design feature or incompatible use. No impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

Construction activities associated with the proposed project would not result in road lane closures or associated traffic impacts, as construction of the project would only temporarily increase heavy vehicle trips to and from the project site. If any traffic disturbances would result from construction, SCVW requires standard construction practices for traffic control, which would address such effects. Such effects would be localized and temporary and would not have potential to impede emergency access in the project area. Operational activities associated with the proposed project would occur solely on the project site and would not interfere with emergency response and would not be greater than existing maintenance. Consequently, the project would not result in inadequate emergency access, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

18 Tribal Cultural Resources

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

PRC Section 21074 (a)(1)(A-B) defines tribal cultural resources as "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and is:

1. Listed or eligible for listing in the CRHR, or in a local register of historical resources as defined in PRC Section 5020.1(k), or
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in PRC Section 5024.1(c). In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project." Native American tribes to be included in the process are those that have requested notice of

projects proposed within the jurisdiction of the lead agency. The consultation process must be completed before a CEQA document can be adopted/certified.

The NAHC was contacted to request a review of the SLF on March 23, 2023. On April 4, 2023, the NAHC stated that the results of the SLF search were positive.

As part of the AB 52 consultation, SCV Water sent AB 52 consultation letters to 16 individuals from 13 tribal organizations in November 2023, including the following tribes:

- Barbareño/Ventureño Band of Mission Indians
- Chumash Council of Bakersfield
- Coastal Band of the Chumash Nation
- Fernandeño Tataviam Band of Mission Indians (FBTMI)
- Gabrieleño Band of Mission Indians – Kizh Nation
- Gabrieleño/Tongva San Gabriel Band of Mission Indian
- Gabrielino Tongva Indians of California Tribal Council
- Gabrielino/Tongva Nation
- Gabrielino-Tongva Tribe
- Northern Chumash Tribal Council
- San Fernando Band of Mission Indians
- San Luis Obispo County Chumash Tribal Council
- Santa Ynez Band of Chumash Indians

Of the 16 individuals contacted, one responded to the outreach. In an email dated November 21, 2023, Sarah Brunzell, Cultural Resources Manager for FTBMI, requested completion of FBTMI's digital project intake form. Consultation between SCV Water and FTBMI is ongoing.

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

No tribal cultural resources have been identified within the project site. The NAHC SLF search was returned with positive results, which means the NAHC identified a potentially sensitive tribal cultural resource within the USGS quadrangle in which the project site is located. USGS quadrangles cover approximately 49 to 70 square miles, and a positive SLF result does not necessarily indicate the presence of a known tribal cultural resource on the project site. As outlined in Environmental Checklist Section 5, *Cultural Resources*, Mitigation Measure CUL-1 requires implementation of procedures for the unanticipated discovery of archaeological resources, including those of Native American origin. In addition, Mitigation Measures TCR-1, TCR-2, and TCR-3 have been included in response to the FTBMI's request for Native American monitoring of initial ground-disturbing activities, unanticipated discovery of tribal cultural resources, and compliance with existing regulations outlined in California Health and Safety Code Section 7050.5 should human remains be

inadvertently discovered during construction, respectively. With implementation of Mitigation Measures CUL-1, TCR-1, TCR-2, and TCR-3, the project would not cause a substantial adverse change in the significance of a tribal cultural resource, and impacts would be less than significant with mitigation incorporated.

Mitigation Measures

TCR-1 Tribal Cultural Resources Construction Monitoring

SCV Water shall retain a professional Tribal Monitor procured by the Fernandeño Tataviam Band of Mission Indians (FBTMI) to observe the first (5) days of ground-disturbing activities which include excavating, digging and/or trenching. Tribal Monitoring Services will continue until all (5) days, consecutive or non-consecutive, of ground-disturbing activities are completed. If the project's scheduled activities require the Tribal Monitor to leave the project for a period of time and return, confirmation shall be submitted to the Tribe by SCV Water, in writing, upon completion of each set of scheduled activities and a minimum of 48 hours' notice shall be submitted to the Tribe by SCV Water, in writing, prior to recommencement. If cultural resources are encountered, the Tribal Monitor will have the authority to request ground disturbing activities cease within 60-feet of the discovery to assess and document potential finds in real time. A qualified archaeologist meeting Secretary of Interior standards shall also assess the find.

Should the find be deemed significant, as defined by CEQA (as amended, 2015), SCV Water shall retain a professional Tribal Monitor procured by the FTBMI to observe all remaining ground-disturbing activities including, but not limited to, clearing, grading, excavating, digging, trenching, plowing, drilling, tunneling, quarrying, leveling, driving posts, auguring, blasting, stripping topsoil or similar activity, and archaeological work.

TCR-2 Unanticipated Discovery of Tribal Cultural Resources

SCV Water shall, in good faith, consult with the FTBMI on the disposition and treatment of any Tribal Cultural Resource encountered during all ground disturbing activities.

TCR-3 Unanticipated Discovery of Human Remains

If human remains or funerary objects are encountered during any activities associated with the project, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code Section 7050.5 and that code shall be enforced for the duration of the project.

Inadvertent discoveries of human remains and/or funerary object(s) are subject to California State Health and Safety Code Section 7050.5, and the subsequent disposition of those discoveries shall be decided by the Most Likely Descendant (MLD), as determined by the Native American Heritage Commission (NAHC), should those findings be determined as Native American in origin.

Significance After Mitigation

Implementation of Mitigation Measures CUL-1, and TCR-1 through TCR-3 during ground-disturbing activities would reduce potential tribal cultural resource impacts to a less than significant level by implementing a Tribal Monitor, consultation with FTBMI, and procedures for the unanticipated discovery of human remains.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	■
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	■
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?	☐	☐	☐	■
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?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project 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?

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

Water and Wastewater

The proposed project would involve the construction and operation of a sewer pipeline, the environmental effects of which are analyzed in this IS-MND. The project would address operational deficiencies of the current pipeline and would allow the pipeline to operate at the system's design capacity as intended. The project would not increase the system capacity such that additional customers could be served, thus creating increased demand for water services. Therefore, the project would not require relocation or construction of new water or wastewater facilities, and no impact would occur.

Stormwater Drainage

As discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, the project would generally preserve existing drainage patterns on site. During large storm events, some runoff from the paved road may flow into the storm drain system associated with the paved roadways within the RVWTP; however, the amount of runoff that would be diverted from groundwater recharge would be minimal. No expansion of stormwater drainage systems would be necessary to accommodate runoff from the project.

The project would not involve dewatering activities during installation of the pipeline. In the event that groundwater is encountered, dewatering activities would not conflict with the implementation of the GSP and would not substantially decrease groundwater levels within the Basin. While groundwater from dewatering during construction would be discharged into the City's storm drain system, this temporary discharge would not occur unless approved by the City and covered under the appropriate discharge permit. This discharge would be temporary and would not exceed the capacity of the stormwater system. The project would not require new or expanded stormwater drainage infrastructure. Therefore, no impact related to stormwater drainage would occur.

Electric Power

As discussed in Environmental Checklist Section 6, *Energy*, the project would not require electricity to operate the pipeline. No new or relocated energy facilities would be required as a result of the proposed project. No impact would occur.

Natural Gas

The project would not involve any components requiring natural gas service and is not anticipated to involve the relocation of existing natural gas facilities. Therefore, no impact to natural gas facilities would occur.

Telecommunications

The project would not require telecommunications to operate the supervisory control and data acquisition system. The project would not involve the relocation of existing telecommunications facilities. Therefore, no impacts related to telecommunications facilities would occur.

NO IMPACT

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

The project itself would not introduce a new operational water demand. Project construction water requirements would be met via existing SCV Water supplies and facilities. Moreover, the project would have a beneficial effect on existing water supplies by replacing an existing sewer pipeline to address issues with the existing pipeline, including deposits, encrustation, root intrusion, and infiltration. Therefore, no adverse impact would occur related to sufficient water supplies.

NO IMPACT

d. Would the project 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?

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

Construction activities may temporarily generate solid waste, including soil spoils, pavement debris, or other construction waste, which would be disposed of in accordance with all applicable federal, state, and local statutes and regulations. While most soil is expected to be reused as backfill material within the project area, exported soil and minimal remaining inert construction waste would be disposed of at existing construction waste landfills in the area. Due to the temporary nature of construction and minimal amount of construction waste anticipated to require disposal, the project would not generate quantities of solid waste that would account for a substantial percentage of the total daily regional permitted capacity available at landfills accepting such waste. Therefore, waste generated by construction activities would not exceed the available capacity at the landfills serving the project area that would accept debris generated by the project, such as the Chiquita Canyon Landfill and the Sunshine Canyon Landfill. The Chiquita Canyon Landfill has a remaining capacity of 60,408,000 cubic yards and an estimated closure date of 2047 (California Department of Resources Recycling and Recovery [CalRecycle] 2023a). The Sunshine Canyon Landfill has a remaining capacity of 77,900,000 cubic yards and an estimated closure date of 2037 (CalRecycle 2023b).

As standard practice, SCV Water complies with all applicable laws and regulations related to solid waste generation, collection, and disposal. The project would result in a short-term and temporary increase in solid waste generation during construction but would not substantially affect standard solid waste operations of any landfill accepting waste. Recycling and reuse activities during construction would comply with the California Integrated Waste Management Act of 1989 (AB 939). Once operational, the project would include unmanned facilities and would not generate solid waste. Therefore, solid waste impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
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?	☐	☐	■	☐
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?	☐	☐	■	☐
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	■	☐

The project site is not located within a designated VHFHSZ (CAL FIRE 2023). The project site is not located within a State Responsibility Area (SRA). The nearest VHFHSZ is located 3.1 miles northeast of the project stie, and the nearest SRA is located 0.8 mile northeast of the project site. In addition, as discussed in Environmental Checklist Section 4, *Biological Resources,* the project site would be located within brush-covered open space vegetated with native plant communities, which are highly combustible.

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

SCV Water's LHMP (2023), and the City of Santa Clarita's LHMP (2021) set forth hazard mitigation strategies related to a variety of threats, including wildfire. Strategies towards mitigating wildfire include working with the Los Angeles Fire Department to enhance emergency service and increase the efficiency of response times, enhancing outreach and education programs on wildfires, encouraging and increasing communication among wildland/urban interface property owners, and

enhancing the City's Urban Forestry ability to manage wildfire events. As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials*, the proposed project would not interfere with implementation of SCV Water's LHMP the City's LHMP.

As discussed in Environmental Checklist Section 17, *Transportation*, the project would not impede access to emergency services and would not require temporary lane closures during construction. Although construction of the project would increase heavy vehicle trips to and from the project site, such effects would be localized and temporary, and would not impede emergency access in the project area. Consequently, the proposed project would not substantially impair an adopted emergency response plan or emergency evacuation plan in wildfire risk zones. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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?

As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials,* project operation would not involve potentially flammable materials or activities that could result in wildfire ignition, and the pipeline would be located entirely underground. However, the wildland-urban interface could pose the potential for incidents of fire during project construction. Potential ignition sources may include sparks from exhaust pipes, discarded cigarette butts, contact of mufflers with dry grass, other sources of sparks or flame, and spills or releases of flammable materials such as gasoline. Construction equipment would be subject to standard operating procedures that would limit sources of ignition that could generate a wildland fire, including the use of spark arrestors pursuant to California Vehicle Code 38366. Compliance with applicable federal and State laws and regulations related to the proper use, storage, and transport of hazardous materials would also reduce the risk of wildfire ignition from the use of hazardous materials during construction activities. Therefore, impacts related to wildland fires during project construction would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The proposed project consists of the construction and operation of a sewer pipeline. As discussed in Environmental Checklist Section 19, *Utilities and Service Systems,* the project would not result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities beyond the pipeline alignment evaluated in this analysis. The proposed project would not include fuel breaks, emergency water sources, power lines, or other aboveground utilities that would exacerbate fire risk or result in temporary or ongoing impacts to the environment. Furthermore, the proposed project does not

include habitable structures and, as described under Environmental Checklist Section 7, *Geology and Soils*, the project would be constructed in compliance with standard pipeline engineering techniques intended to minimize structural damage risks that could lead to landslide onto off-site properties. The project would therefore not expose people to significant risks as a result of runoff, post-fire slope instability, or drainage changes. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less-than - Significant Impact	No Impact
Does the project:				
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?	☐	☐	■	☐
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)?	☐	■	☐	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

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

Potential impacts to biological resources are addressed in Environmental Checklist Section 4, *Biological Resources*. As described therein, there is low to moderate potential for certain special-status wildlife species to occur on the project site, including two species of special concern: coastal whiptail and coast horned lizard. However, the project site is limited in size, as compared to the total size of habitats supporting fish and wildlife species, and the project would only result in temporary impacts to special-status species during construction, as the proposed pipeline would be located underground and would not affect any species during operation. Therefore, the project would not substantially reduce the habitat of fish and wildlife species, cause a fish or wildlife

population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Environmental Checklist Section 5, *Cultural Resources*, the project would not eliminate important examples of the major periods of California history or prehistory because none are known to be present in the project area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

As described in the discussion of Environmental Checklist Sections 1 through 20, with respect to all environmental issues, the proposed project would not result in significant and unmitigable impacts to the environment. All anticipated impacts associated with project construction and operation would be less than significant. This is largely due to the fact project construction activities would be temporary and project operation would result in minimal changes to the environmental baseline condition. Additionally, where it was determined the project would have no impact (aesthetics, agriculture and forestry resources, energy, land use and planning, mineral resources, population and housing, public services, and recreation), no cumulative impact would be exacerbated as a result of the project.

Cumulatively considerable impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same vicinity, such that the effects of similar impacts of multiple projects combine to expose adjacent sensitive receptors to greater levels of impact than would occur under the proposed project. For example, if the construction of other projects in the area occurs at the same time as construction of the proposed project, potential impacts associated with noise and traffic to residents in the project area may be more substantial. There is one cumulative project near the project site: a battery energy storage system (BESS) within the RVWTP (SCV Water 2023). Construction of the BESS is anticipated to occur in Fall of 2024. However, construction of the proposed project and BESS project could occur concurrently if there are delays in the construction schedule. Because both projects are minimal in size and scale, it is not anticipated that cumulative construction-related impacts in the vicinity of the project site would be significant. Additionally, with the mitigation described in this document, the proposed project's contribution to this cumulative impact would not be considered cumulatively considerable.

The project would result in no change to existing operations and maintenance activities in the SCV Water service area and would not increase wastewater treatment or conveyance capacity. Therefore, the project would not contribute to cumulative impacts related to direct or indirect population growth, such as impacts to public services, recreation, and population and housing. Impacts related to cultural resources, geology and soils, hazards and hazardous materials, land use and planning, mineral resources, and tribal cultural resources are inherently restricted to the project site and would not contribute to cumulative impacts associated with existing and future development in Santa Clarita. In addition, air quality and GHG impacts are cumulative by nature, and as discussed in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 8, *Greenhouse Gas Emissions*, the project would not generate air pollutant emissions in excess of SCAQMD thresholds or GHG emissions that would conflict with any applicable plans, policies, or regulations to reduce GHG emissions. Therefore, the project would not contribute to the existing significant cumulative air quality impacts related to the SCAB's nonattainment status for ozone,

PM_{10}, $PM_{2.5}$, and lead, or the existing significant cumulative climate change impact. Furthermore, project impacts to resources such as aesthetics, agriculture and forestry resources, biological resources, hydrology and water quality, noise, transportation, and utilities and service systems would be minimal with mitigation, where proposed, and would not have the potential to constitute a considerable contribution to cumulative impacts that may occur due to existing and future development in the region. Therefore, the proposed project would not result in a cumulatively considerable contribution to a significant impact.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality, hazards and hazardous materials, or noise. Therefore, impacts to human beings would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

CalEEMod Output Files

SCVWA RVWTP Sewer Line Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	SCVWA RVWTP Sewer Line
Construction Start Date	1/1/2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	16.0
Location	34.431165, -118.516829
County	Los Angeles-South Coast
City	Santa Clarita
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	3610
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.20

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Construction	0.43	Mile	0.21	0.00	0.00	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-C	Water Unpaved Construction Roads

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.84	3.23	28.7	30.5	0.07	1.14	3.47	4.61	1.05	0.39	1.45	—	7,284	7,284	0.30	0.06	0.60	7,311
Mit.	3.84	3.23	28.7	30.5	0.07	1.14	3.47	4.61	1.05	0.39	1.45	—	7,284	7,284	0.30	0.06	0.60	7,311
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	45.1	44.4	17.7	79.7	0.04	1.43	0.82	2.25	1.20	0.11	1.30	—	3,717	3,717	0.15	0.04	0.02	3,732
Mit.	45.1	44.4	17.7	79.7	0.04	1.43	0.82	2.25	1.20	0.11	1.30	—	3,717	3,717	0.15	0.04	0.02	3,732
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.85	3.63	9.44	14.4	0.02	0.44	0.95	1.39	0.39	0.11	0.51	—	2,257	2,257	0.09	0.02	0.12	2,266
Mit.	3.85	3.63	9.44	14.4	0.02	0.44	0.95	1.39	0.39	0.11	0.51	—	2,257	2,257	0.09	0.02	0.12	2,266
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.70	0.66	1.72	2.62	< 0.005	0.08	0.17	0.25	0.07	0.02	0.09	—	374	374	0.02	< 0.005	0.02	375
Mit.	0.70	0.66	1.72	2.62	< 0.005	0.08	0.17	0.25	0.07	0.02	0.09	—	374	374	0.02	< 0.005	0.02	375
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.84	3.23	28.7	30.5	0.07	1.14	3.47	4.61	1.05	0.39	1.45	—	7,284	7,284	0.30	0.06	0.60	7,311
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	45.1	44.4	17.7	79.7	0.04	1.43	0.82	2.25	1.20	0.11	1.30	—	3,717	3,717	0.15	0.04	0.02	3,732
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.85	3.63	9.44	14.4	0.02	0.44	0.95	1.39	0.39	0.11	0.51	—	2,257	2,257	0.09	0.02	0.12	2,266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.70	0.66	1.72	2.62	< 0.005	0.08	0.17	0.25	0.07	0.02	0.09	—	374	374	0.02	< 0.005	0.02	375

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	3.84	3.23	28.7	30.5	0.07	1.14	3.47	4.61	1.05	0.39	1.45	—	7,284	7,284	0.30	0.06	0.60	7,311
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	45.1	44.4	17.7	79.7	0.04	1.43	0.82	2.25	1.20	0.11	1.30	—	3,717	3,717	0.15	0.04	0.02	3,732
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	3.85	3.63	9.44	14.4	0.02	0.44	0.95	1.39	0.39	0.11	0.51	—	2,257	2,257	0.09	0.02	0.12	2,266
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.70	0.66	1.72	2.62	< 0.005	0.08	0.17	0.25	0.07	0.02	0.09	—	374	374	0.02	< 0.005	0.02	375

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	45.0	44.3	17.7	78.9	0.04	1.43	—	1.43	1.20	—	1.20	—	3,547	3,547	0.14	0.03	—	3,559
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.71	2.67	1.06	4.76	< 0.005	0.09	—	0.09	0.07	—	0.07	—	214	214	0.01	< 0.005	—	215
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.49	0.19	0.87	< 0.005	0.02	—	0.02	0.01	—	0.01	—	35.4	35.4	< 0.005	< 0.005	—	35.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	158	158	0.01	0.01	0.02	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	< 0.005	12.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.67	9.67	< 0.005	< 0.005	0.02	9.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12

3.2. Linear, Grubbing & Land Clearing (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	45.0	44.3	17.7	78.9	0.04	1.43	—	1.43	1.20	—	1.20	—	3,547	3,547	0.14	0.03	—	3,559
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.71	2.67	1.06	4.76	< 0.005	0.09	—	0.09	0.07	—	0.07	—	214	214	0.01	< 0.005	—	215
Dust From Material Movement	—	—	—	—	—	—	0.04	0.04	—	< 0.005	< 0.005	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.49	0.19	0.87	< 0.005	0.02	—	0.02	0.01	—	0.01	—	35.4	35.4	< 0.005	< 0.005	—	35.5
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.07	0.82	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	158	158	0.01	0.01	0.02	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.4	11.4	< 0.005	< 0.005	< 0.005	12.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.67	9.67	< 0.005	< 0.005	0.02	9.82
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.69	0.69	< 0.005	< 0.005	< 0.005	0.72
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.60	1.60	< 0.005	< 0.005	< 0.005	1.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.11	0.11	< 0.005	< 0.005	< 0.005	0.12

3.3. Linear, Grading & Excavation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.57	10.0	0.02	0.36	—	0.36	0.33	—	0.33	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.57	10.0	0.02	0.36	—	0.36	0.33	—	0.33	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.80	2.38	< 0.005	0.09	—	0.09	0.08	—	0.08	—	373	373	0.02	< 0.005	—	375
Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	0.44	< 0.005	0.02	—	0.02	0.01	—	0.01	—	61.8	61.8	< 0.005	< 0.005	—	62.0
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	66.7	66.7	< 0.005	< 0.005	0.24	67.8
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.07	28.8
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.0	47.0	< 0.005	0.01	0.11	49.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.3	63.3	< 0.005	< 0.005	0.01	64.2
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	< 0.005	28.7
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.0	47.0	< 0.005	0.01	< 0.005	49.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.56	6.56	< 0.005	< 0.005	0.01	6.85
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.8
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.13

Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.95

3.4. Linear, Grading & Excavation (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.57	10.0	0.02	0.36	—	0.36	0.33	—	0.33	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.57	10.0	0.02	0.36	—	0.36	0.33	—	0.33	—	1,567	1,567	0.06	0.01	—	1,572
Dust From Material Movement	—	—	—	—	—	—	0.66	0.66	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.80	2.38	< 0.005	0.09	—	0.09	0.08	—	0.08	—	373	373	0.02	< 0.005	—	375

Dust From Material Movement	—	—	—	—	—	—	0.16	0.16	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.33	0.44	< 0.005	0.02	—	0.02	0.01	—	0.01	—	61.8	61.8	< 0.005	< 0.005	—	62.0
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	66.7	66.7	< 0.005	< 0.005	0.24	67.8
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	0.07	28.8
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.0	47.0	< 0.005	0.01	0.11	49.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.3	63.3	< 0.005	< 0.005	0.01	64.2
Vendor	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.5	27.5	< 0.005	< 0.005	< 0.005	28.7
Hauling	< 0.005	< 0.005	0.07	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	47.0	47.0	< 0.005	0.01	< 0.005	49.3
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	15.3	15.3	< 0.005	< 0.005	0.02	15.5
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.56	6.56	< 0.005	< 0.005	0.01	6.85
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.2	11.2	< 0.005	< 0.005	0.01	11.8

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.53	2.53	< 0.005	< 0.005	< 0.005	2.57
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.09	1.09	< 0.005	< 0.005	< 0.005	1.13
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.85	1.85	< 0.005	< 0.005	< 0.005	1.95

3.5. Linear, Drainage, Utilities, & Sub-Grade (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	28.7	29.5	0.07	1.14	—	1.14	1.05	—	1.05	—	7,117	7,117	0.29	0.06	—	7,142
Dust From Material Movement	—	—	—	—	—	—	3.31	3.31	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.65	5.97	6.15	0.01	0.24	—	0.24	0.22	—	0.22	—	1,482	1,482	0.06	0.01	—	1,487
Dust From Material Movement	—	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.12	< 0.005	0.04	—	0.04	0.04	—	0.04	—	245	245	0.01	< 0.005	—	246
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	0.93	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.4	33.4	< 0.005	< 0.005	0.05	33.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.53	5.53	< 0.005	< 0.005	0.01	5.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Linear, Drainage, Utilities, & Sub-Grade (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74	3.14	28.7	29.5	0.07	1.14	—	1.14	1.05	—	1.05	—	7,117	7,117	0.29	0.06	—	7,142
Dust From Material Movement	—	—	—	—	—	—	3.31	3.31	—	0.36	0.36	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.78	0.65	5.97	6.15	0.01	0.24	—	0.24	0.22	—	0.22	—	1,482	1,482	0.06	0.01	—	1,487
Dust From Material Movement	—	—	—	—	—	—	0.69	0.69	—	0.07	0.07	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.12	1.09	1.12	< 0.005	0.04	—	0.04	0.04	—	0.04	—	245	245	0.01	< 0.005	—	246
Dust From Material Movement	—	—	—	—	—	—	0.13	0.13	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.06	0.93	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.01	0.18	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.4	33.4	< 0.005	< 0.005	0.05	33.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.53	5.53	< 0.005	< 0.005	0.01	5.62
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	6.06	7.98	0.01	0.29	—	0.29	0.26	—	0.26	—	1,159	1,159	0.05	0.01	—	1,163

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	6.06	7.98	0.01	0.29	—	0.29	0.26	—	0.26	—	1,159	1,159	0.05	0.01	—	1,163
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.07	0.55	0.72	< 0.005	0.03	—	0.03	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.3	17.3	< 0.005	< 0.005	—	17.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	66.7	66.7	< 0.005	< 0.005	0.24	67.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.3	63.3	< 0.005	< 0.005	0.01	64.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.80	5.80	< 0.005	< 0.005	0.01	5.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Linear, Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	6.06	7.98	0.01	0.29	—	0.29	0.26	—	0.26	—	1,159	1,159	0.05	0.01	—	1,163
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.86	0.73	6.06	7.98	0.01	0.29	—	0.29	0.26	—	0.26	—	1,159	1,159	0.05	0.01	—	1,163
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.08	0.07	0.55	0.72	< 0.005	0.03	—	0.03	0.02	—	0.02	—	105	105	< 0.005	< 0.005	—	105
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	17.3	17.3	< 0.005	< 0.005	—	17.4
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.37	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	66.7	66.7	< 0.005	< 0.005	0.24	67.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	63.3	63.3	< 0.005	< 0.005	0.01	64.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.80	5.80	< 0.005	< 0.005	0.01	5.89
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.96	0.96	< 0.005	< 0.005	< 0.005	0.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequest ered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	1/1/2025	1/31/2025	5.00	22.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	2/1/2025	6/2/2025	5.00	87.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	6/3/2025	9/17/2025	5.00	76.0	—
Linear, Paving	Linear, Paving	9/18/2025	11/3/2025	5.00	33.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Grubbing & Land Clearing	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
Linear, Grubbing & Land Clearing	Air Compressors	Diesel	Average	2.00	10.0	37.0	0.48
Linear, Grubbing & Land Clearing	Cranes	Diesel	Average	1.00	10.0	367	0.29
Linear, Grubbing & Land Clearing	Crushing/Proc. Equipment	Gasoline	Average	1.00	10.0	12.0	0.85
Linear, Grubbing & Land Clearing	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
Linear, Grubbing & Land Clearing	Graders	Diesel	Average	1.00	10.0	148	0.41
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Grading & Excavation	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	10.0	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00	10.0	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	10.0	96.0	0.40

Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	10.0	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	10.0	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	10.0	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	10.0	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
Linear, Paving	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
Linear, Paving	Sweepers/Scrubbers	Diesel	Average	1.00	10.0	36.0	0.46

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Grubbing & Land Clearing	Cement and Mortar Mixers	Diesel	Average	1.00	10.0	10.0	0.56
Linear, Grubbing & Land Clearing	Air Compressors	Diesel	Average	2.00	10.0	37.0	0.48
Linear, Grubbing & Land Clearing	Cranes	Diesel	Average	1.00	10.0	367	0.29
Linear, Grubbing & Land Clearing	Crushing/Proc. Equipment	Gasoline	Average	1.00	10.0	12.0	0.85
Linear, Grubbing & Land Clearing	Generator Sets	Diesel	Average	2.00	10.0	14.0	0.74
Linear, Grubbing & Land Clearing	Graders	Diesel	Average	1.00	10.0	148	0.41

Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Grading & Excavation	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	10.0	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00	10.0	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Average	2.00	10.0	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Average	2.00	10.0	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Average	1.00	10.0	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	10.0	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Average	1.00	10.0	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Average	1.00	10.0	37.0	0.48
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Average	1.00	10.0	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Average	1.00	10.0	14.0	0.74
Linear, Paving	Pavers	Diesel	Average	1.00	10.0	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	10.0	89.0	0.36
Linear, Paving	Rollers	Diesel	Average	1.00	10.0	36.0	0.38
Linear, Paving	Sweepers/Scrubbers	Diesel	Average	1.00	10.0	36.0	0.46

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	25.0	8.80	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.36	8.80	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	10.0	8.80	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	1.49	8.80	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	8.80	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	8.80	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	10.0	8.80	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	8.80	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	25.0	8.80	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	8.80	HHDT,MHDT

Linear, Grubbing & Land Clearing	Hauling	0.36	8.80	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	10.0	8.80	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	8.80	HHDT,MHDT
Linear, Grading & Excavation	Hauling	1.49	8.80	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	25.0	8.80	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	8.80	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	8.80	HHDT
Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	10.0	8.80	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	8.80	HHDT,MHDT
Linear, Paving	Hauling	0.00	8.80	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	—	59.0	0.21	0.00	—
Linear, Grading & Excavation	489	545	0.21	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.21	0.00	—

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Road Construction	0.21	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2025	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	20.0	annual days of extreme heat

Extreme Precipitation	6.35	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	1	4	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	5	1	4	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	93.6
AQ-PM	48.2
AQ-DPM	74.0
Drinking Water	72.2
Lead Risk Housing	7.45
Pesticides	0.00

Toxic Releases	39.8
Traffic	73.8
Effect Indicators	—
CleanUp Sites	89.3
Groundwater	27.8
Haz Waste Facilities/Generators	74.9
Impaired Water Bodies	51.2
Solid Waste	70.4
Sensitive Population	—
Asthma	20.4
Cardio-vascular	33.1
Low Birth Weights	9.64
Socioeconomic Factor Indicators	—
Education	44.3
Housing	27.8
Linguistic	37.0
Poverty	17.7
Unemployment	43.1

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	94.9570127
Employed	57.44899269
Median HI	86.94982677
Education	—

Bachelor's or higher	58.50121904
High school enrollment	100
Preschool enrollment	63.77518286
Transportation	—
Auto Access	77.83908636
Active commuting	48.29975619
Social	—
2-parent households	92.82689593
Voting	81.5603747
Neighborhood	—
Alcohol availability	66.63672527
Park access	17.19491852
Retail density	9.80366996
Supermarket access	49.26215835
Tree canopy	61.95303477
Housing	—
Homeownership	98.85794944
Housing habitability	96.13755935
Low-inc homeowner severe housing cost burden	89.88836135
Low-inc renter severe housing cost burden	79.71256256
Uncrowded housing	74.48992686
Health Outcomes	—
Insured adults	75.28551264
Arthritis	14.1
Asthma ER Admissions	82.2
High Blood Pressure	25.1
Cancer (excluding skin)	6.6

Asthma	76.7
Coronary Heart Disease	13.8
Chronic Obstructive Pulmonary Disease	40.0
Diagnosed Diabetes	51.3
Life Expectancy at Birth	90.0
Cognitively Disabled	48.3
Physically Disabled	37.2
Heart Attack ER Admissions	42.5
Mental Health Not Good	74.9
Chronic Kidney Disease	35.4
Obesity	65.8
Pedestrian Injuries	78.7
Physical Health Not Good	60.5
Stroke	34.3
Health Risk Behaviors	—
Binge Drinking	43.3
Current Smoker	74.7
No Leisure Time for Physical Activity	74.8
Climate Change Exposures	—
Wildfire Risk	43.9
SLR Inundation Area	0.0
Children	77.6
Elderly	15.7
English Speaking	87.6
Foreign-born	39.2
Outdoor Workers	65.7
Climate Change Adaptive Capacity	—

Impervious Surface Cover	82.3
Traffic Density	58.7
Traffic Access	23.0
Other Indices	—
Hardship	34.9
Other Decision Support	—
2016 Voting	61.1

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	36.0
Healthy Places Index Score for Project Location (b)	81.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification

Construction: Off-Road Equipment	Defaults changed to reflect data received from client regarding construction info.
Construction: Trips and VMT	Trip length changed from default values. Distance from project site to landfill specified for project is 8.8 miles.

Appendix B

Biological Resources Technical Memorandum

Rincon Consultants, Inc.
250 East 1st Street, Suite 1400
Los Angeles, California 90012
213-788-4842

February 5, 2023
Project No: 23-14057

Jason Yim
Principal Engineer
Santa Clarita Valley Water Agency
26515 Summit Circle
Santa Clarita, California 91350
Via email: jyim@scvwa.org

Subject: Biological Resources Technical Memorandum for the Rio Vista Water Treatment Plant Sewer Line Project, Santa Clarita, Los Angeles County, California

Dear Mr. Yim:

This Biological Resources Technical Memorandum (TM) documents the findings of a biological survey conducted by Rincon Consultants, Inc. (Rincon), for the Santa Clarita Valley Water Agency's (SCV Water) Rio Vista Water Treatment Plant (RVWTP) Sewer Line Project (project). The project is located within the city of Santa Clarita, California. The assessment was completed to document existing site conditions via desktop analysis and field survey, and to evaluate potential impacts to sensitive biological resources based upon current project plans. Rincon understands the TM will support an Initial Study-Mitigated Negative Declaration (IS-MND) being prepared for California Environmental Quality Act (CEQA) review of the project. As such, the TM is prepared in accordance with the CEQA Guidelines Appendix G Initial Study Checklist for Biological Resources. It assesses the potential for sensitive biological resources on the project site, evaluates anticipated project impacts to these resources if present, and recommends (as appropriate) avoidance and minimization measures to reduce potential impacts to a less-than-significant level. All other materials reviewed for this report are identified in Attachment A.

Project Location and Description

The project is located within and to the north of the RVWTP, located at 27234 Bouquet Canyon Road in Santa Clarita, Los Angeles County, California (Attachment B, Figure 1). The project site occurs in an area zoned by the city of Santa Clarita (City) as "Open Space". The RVWTP Sewer Line is a critical piece of SCV Water's infrastructure, installed in the 1970s with a septic system and a leach field that were constructed and later expanded to accommodate additional flow from expansion of the RVWTP. The RVWTP sewer system is no longer connected to the leach field, and now ties into an 8-inch sewer line in the City's Central Park. In March and June of 2022, inspections revealed pipeline issues such as deposits, encrustation, root intrusion, and infiltration. SCV Water intends to address these issues via pipeline replacement to ensure reliability and longevity of the sewer system.

SCV Water intends to replace an existing 8-inch sewer line that connects the RVWTP to the local sewer system. As stated previously, the RVWTP's sewer system is no longer connected to the leach field, and now ties into an 8-inch sewer line approximately 0.2 mile northwest of the RVWTP. This segment runs generally northwest between the RVWTP and an existing connection point to the local sewer pipeline system. The proposed pipeline would follow an existing unpaved access roadway between the RVWTP and the existing connection point to the local sewer pipeline system to avoid steep hillsides and

impacts related to erosion. This new alignment would be located east of the existing alignment and is approximately 1,900 linear feet in length. The project also includes upsizing approximately 350 linear feet of an existing sewer pipe from six inches to eight inches in diameter. This pipe is located within internal roadways at the RVWTP. Implementation of the project would include excavation to install the new pipeline segment and replace the existing pipeline segment. The proposed pipeline would require excavation to a width of up to 7 feet and a depth of up to 12 feet. The project would also pave the existing dirt access road to a width of 16 feet. The paved road would extend from a paved driveway within the RVWTP adjacent to the solar field, along the existing dirt access road to an existing paved parking area at the south side of Central Park. The project would require vegetation removal, tree trimming, and tree removal along the pipeline segment, with an anticipated total of four trees to be removed. Temporary ground disturbance during construction would be to a width of approximately 25 feet for paving of the road. Construction personnel vehicles would be parked within the RVTWP and identified staging area as needed. Staging is anticipated to occur within an unpaved dirt lot at the RVTWP adjacent to the southern extent of the proposed sewer line (Attachment B, Figure 2).

The project site includes the developed RVWTP where upscaling of an existing pipe is proposed, and the existing access road where sewer line replacement and road paving is proposed (Attachment B, Figure 2).

Methodology

Regulatory Overview

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, and locally protected resources, such as protected trees.

Environmental Statutes

For the purpose of this report, potential impacts to biological resources were analyzed based on the following statutes:

- California Environmental Quality Act (CEQA)
- Federal Endangered Species Act (ESA)
- California Endangered Species Act (CESA)
- Federal Clean Water Act (CWA)
- California Fish and Game Code (CFGC)
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- City of Santa Clarita General Plan (2011)
- City of Santa Clarita Municipal Code

Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

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.
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.
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.
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
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.

Literature Review

A literature review was conducted to establish the environmental and regulatory setting of the proposed project. Specific literature reviewed for the subject analysis is provided in the references section (Attachment A). The reviewed literature also included the United States Department of Agriculture, Natural Resources Conservation Service (USDA, NRCS) Soil Survey (USDA, NRCS 2023a), and literature detailing the habitat requirements of subject species. Aerial photographs, topographic maps, and soil survey maps were also examined.

Queries of the United States Fish and Wildlife Service (USFWS) Environmental Conservation Online System (ECOS): Information, Planning and Conservation System (IPaC) Official Species List (USFWS 2023a), USFWS Critical Habitat Portal (USFWS 2023b), USFWS National Wetland Inventory (NWI; (USFWS 2023c), United States Geological Survey (USGS) National Hydrography Dataset (NHD; USGS 2023), California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2023a), CDFW Biogeographic Information and Observation System (BIOS; CDFW 2023b), and California Native Plant Society (CNPS) Online Inventory of Rare, Threatened and Endangered Plants of California (CNPS 2023), were assessed. The queries were assessed to obtain comprehensive information regarding state and federally listed species, sensitive communities and federally designated Critical Habitat known to or considered to have potential to occur within the vicinity of the project site.

Field Reconnaissance Survey

The field reconnaissance survey was limited to providing an overview of site biological constraints and the potential presence of sensitive biological resources, including special-status plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, protected trees, wildlife movement, and habitat for nesting birds. The Study Area for the field survey and this analysis consists of the project site and a 100-foot surrounding buffer.

Rincon Biologist/Botanist Kyle Gern conducted the first field reconnaissance survey on March 23, 2023, from 0900 to 1200. The survey was performed by walking the Study Area to characterize the existing biological resources present (e.g., vegetation communities, potential presence of special-

status species and/or habitats, and presence of potentially jurisdictional waters). Weather conditions during the survey included an average temperature of 52 degrees Fahrenheit, with winds between one and three miles per hour and mostly cloudy skies (95 percent at survey start) to partly cloudy skies (50 percent at survey end). An additional field reconnaissance survey was performed on January 4, 2024, from 0900 to 1100 to survey additional project components in the southwestern portion of the Study Area. During this survey, weather conditions included an average temperature of 50 degrees Fahrenheit, with winds between one and four miles per hour and mostly clear skies (25% cloud cover). Representative photographs of the site are available in Attachment C.

Vegetation mapping and classification followed Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW 2018) and was based on the classification system provided in A Manual of California Vegetation, Second Edition (Sawyer et al. 2009). Alternatively, vegetation communities or land cover types that are not described in A Manual of California Vegetation were classified using conventional naming practices (i.e., developed) or were defined by the dominant species.

Existing Conditions

Physical Characteristics

The project site is located in an existing developed/disturbed area along a north-facing slope that slopes downward from the RVWTP in the southern end of the project site along an existing access road toward Central Park to the north and outside the project site. The Study Area contains native vegetation adjacent to and overlapping the project site.

Elevations within the Study Area range from approximately 1,250 to 1,450 feet above mean sea level (amsl). Soils underlying the Study Area consist of Ojai loam, 2 to 9 percent slopes; Metz loamy sand, 2 to 9 percent slopes; Saugus loam, 15 to 30 percent slopes; and Saugus loam, 30 to 50 percent slopes, eroded. None of these soil types are considered hydric (USDA, NRCS 2023b).

The USGS NHD maps one reservoir feature within the Study Area (USGS 2023). This area aligns with an existing water treatment facility associated with the RVWTP, which consists of a concrete-lined and developed water treatment basin (Attachment C, Photograph 14). No other NHD resources or wetlands mapped by the USFWS NWI occur within the Study Area (USFWS 2023c).

Vegetation Communities and Land Cover Types

Vegetation communities documented within the Study Area during the reconnaissance survey include California sagebrush scrub, Fremont cottonwood woodland, holly leaf cherry chaparral, pepper tree groves, upland mustards, and wild oats and annual brome grasslands. Land cover types documented within the Study Area include developed/disturbed and ornamental landscaping. Brief descriptions of the vegetation communities present in the Study Area are provided below. A list of plant species observed during the March 23, 2023, survey is included in Attachment D.

Vegetation Communities

California Sagebrush Scrub

California sagebrush scrub (*Artemisia californica* Shrubland Alliance) is typically found along slopes that are steep and rarely flooded, or on low-gradient deposits along streams between 0 and 3,940 feet amsl. Soils are alluvial or colluvial derived and shallow. California sagebrush (*Artemisia*

californica) contributes to at least 60 percent relative cover in the shrub layer (Sawyer et al. 2009). This vegetation community is ranked G4S4 and is not classified as sensitive (CDFW 2023c).

California sagebrush scrub occurs in the central portion of the Study Area near the existing unpaved access road where sewer line replacement and road paving are proposed. This vegetation community is dominated by California sagebrush in the shrub layer, with black sage (*Salvia mellifera*), holly leaf cherry (*Prunus ilicifolia*), deer weed (*Acmispon glaber*), blue elderberry (*Sambucus nigra*), and California buckwheat (*Eriogonum fasciculatum*) present as subdominant. The herbaceous layer is dominated by Menzies' fiddleneck (*Amsinckia menziesii*), with red brome (*Bromus rubens*), ripgut brome (*Bromus diandrus*), common eucrypta (*Eucrypta chrysanthemifolia*), summer mustard (*Hirschfeldia incana*), bicolor lupine (*Lupinus bicolor*), common cryptantha (*Cryptantha intermedia*), and redstem filaree (*Erodium cicutarium*) present as subdominant.

Fremont Cottonwood Woodland

Fremont cottonwood woodland (*Populus fremontii* Woodland Alliance) is characterized by dominant Fremont cottonwood (*Populus fremontii*) in the tree canopy with willows (*Salix* spp.) and other riparian trees such as western sycamore (*Platanus racemosa*) present as codominant or subdominant. Fremont cottonwood accounts for approximately 10 to 80 percent absolute cover, and greater than 50 percent relative cover in the tree layer. The tree canopy ranges from continuous to open, the shrub layer intermittent to open, and the herbaceous layer is variable (Sawyer et al. 2009). This alliance can be found on floodplains, along low-gradient rivers, perennial or seasonally intermittent streams, springs, in canyons, alluvial fans, and in valleys with a dependable subsurface water supply that varies considerably during the year. Fremont cottonwood forests are designated as G4S3.2 by CDFW and are classified as a sensitive natural community (CDFW 2023c).

Fremont cottonwood woodland occurs along a northwest-facing slope in the southern portion of the Study Area (Attachment B, Figure 3a). No indicators of surface-level hydrology were observed in this area during the field survey. Therefore, the dominant Fremont cottonwood trees in this vegetation community are likely accessing dependable subsurface water resources. In the Study Area, the tree layer also includes arroyo willow (*Salix lasiolepis*), Peruvian pepper tree (*Schinus molle*), coast live oak (*Quercus agrifolia*), and Mexican fan palm (*Washingtonia robusta*). The sparse shrub layer includes California sagebrush, holly leaf cherry, and blue elderberry. The herbaceous layer is dominated by chilicothe (*Marah macrocarpa*), with summer mustard, ripgut brome, and red brome present as subdominant.

Holly Leaf Cherry Chaparral

Holly leaf cherry chaparral (*Prunus ilicifolia* Shrubland Alliance) is usually found on steep, north-facing slopes with soils derived from bedrock or colluvium at elevations between 164 and 4,265 feet amsl. Holly leaf cherry is dominant in the shrub layer, contributing more than 30 percent of relative cover (Sawyer et al. 2009). This association is not provided a specific ranking, but is classified as a sensitive natural community (CDFW 2023c).

Holly leaf cherry chaparral occurs in the central portion of the Study Area to the south and west of the unpaved access road where sewer line replacement and road paving are proposed. Holly leaf cherry is dominant in the open to continuous shrub layer, with California sagebrush, black sage, and blue elderberry present as subdominant. The tree layer includes scattered Peruvian pepper trees. The herbaceous layer is dominated by Menzies' fiddleneck, with various non-native herbaceous species (e.g., ripgut brome, red brome, summer mustard) present as subdominant.

Pepper Tree Groves

Pepper tree groves (*Schinus molle* Woodland Semi-Natural Alliance) is a semi-natural vegetation community dominated by Peruvian pepper tree, which contributes more than 80 percent relative cover in the tree layer. This semi-natural vegetation community typically occurs in coastal canyons, washes, and slopes, as well as riparian areas and roadsides between 600 and 980 feet amsl (Sawyer et al. 2009). This vegetation alliance is ranked GNASNA due to the predominance of non-native species, and is not classified as sensitive (CDFW 2023c).

Pepper tree groves occur in the southern and central portions of the Study Area adjacent to a paved roadway associated with the RVWTP, the unpaved access road where sewer line replacement and road paving are proposed, as well as in the northern portion of the Study Area (Attachment B, Figure 3a). This semi-natural vegetation community is dominated by Peruvian pepper tree, which is the sole contributor in the tree layer. The shrub layer includes scattered California sagebrush and holly leaf cherry, and the herbaceous layer includes ripgut brome, red brome, summer mustard, and redstem filaree.

Upland Mustards

Upland mustards (*Brassica nigra* Herbaceous Semi-Natural Alliance) is a semi-natural vegetation community that is typically found in fallow fields, grasslands, roadsides, levee slopes, disturbed coastal scrub, riparian areas, cleared roadsides, and waste places at elevations between 0 and 9,186 feet above mean sea level. Black mustard (*Brassica nigra*), summer mustard, wild radish (*Raphanus sativus*), or other mustards occur with non-native plants at over 80 percent cover in the herbaceous layer (Sawyer et al. 2009). This vegetation community is ranked GNASNA due to the dominance of non-native species and is not considered sensitive by the CDFW (CDFW 2023c).

The upland mustards semi-natural vegetation community occurs in the northern portion of the Study Area (Attachment B, Figure 3a). The tree and shrub layers are absent, and the herbaceous layer is dominated by summer mustard. Slender wild oats (*Avena barbata*), tocalote (*Centaurea melitensis*), and redstem filaree are subdominant in the herbaceous layer.

Wild Oats and Annual Brome Grasslands

Wild oats and annual brome grasslands (*Avena* spp. – *Bromus* spp. Herbaceous Semi-Natural Alliance) are generally found in open areas in valleys and foothills throughout coastal and interior California. This semi-natural vegetation community typically occurs on soils consisting of fine-textured loams or clays that are somewhat poorly drained. Non-native annual grasses and weedy annual and perennial forbs, primarily of Mediterranean origin, dominate this vegetation type, probably as a result of human disturbance. Scattered native grass and wildflower species, representing remnants of the original vegetation may also be common (Sawyer et al. 2009). This vegetation alliance is ranked GNASNA due to the predominance of non-native species, and is not classified as sensitive (CDFW 2023c).

Wild oats and annual brome grasslands occur in the eastern portion of the Study Area along a west-facing slope that abuts a paved road used to access the RVWTP (Attachment B, Figure 3a). This semi-natural vegetation community is co-dominated by slender wild oats, red brome, and ripgut brome in the dense herbaceous layer, with Menzies' fiddleneck, summer mustard, yellow sweetclover (*Melilotus indicus*), and redstem filaree present as subdominant. The tree layer is absent, and the shrub layer includes scattered California sagebrush and California buckwheat.

Land Cover Types

Ornamental Landscaping

Ornamental landscaping includes a variety of landscaped, usually non-native plant species. It is typically located adjacent to developed areas, is not a natural community defined in *A Manual of California Vegetation* (Sawyer et al. 2009) and is not classified as sensitive by CDFW (CDFW 2023c).

Ornamental landscaping occurs in the southern portion of the Study Area adjacent to developed facilities in the RVWTP, and in the northern portion of the Study Area adjacent to paved and gravel roads in Central Park (Attachment B, Figure 3a-b). Plant species occurring in this land cover type include ornamentally planted coast live oak, blue gum (*Eucalyptus globulus*), prickly melaleuca (*Melaleuca styphelioides*), glossy privet (*Ligustrum lucidum*), Peruvian pepper tree, Aleppo pine (*Pinus halepensis*), Canary Island pine (*Pinus canariensis*), queen palm (*Syagrus romanzoffiana*), Indian hawthorn (*Rhapiolepis indica*), red brome, and summer mustard.

Developed/Disturbed

The developed/disturbed land cover type includes buildings, other infrastructure, paved areas with little to no vegetation (e.g., fenced project site and paved roads), unpaved access roads, and disturbed road shoulders. Developed/disturbed areas are present throughout the Study Area, and include the RVWTP in the southern portion of the Study Area, the existing unpaved access road through the central portion of the Study Area where sewer line replacement and road paving are proposed, portions of Central Park in the northern portion of the Study Area, and paved roadways in the eastern portion of the Study Area (Attachment B, Figure 3a-b). The existing unpaved access road is routinely inspected and maintained by SCVWA. Maintenance generally includes accumulated sedimentation and vegetation removal. Scattered non-native herbaceous vegetation occur within this land cover type, including summer mustard, red brome, tocalote, and slender wild oats.

General Wildlife

A total of 11 wildlife species were observed during the field reconnaissance surveys, and include common species such as California scrub-jay (*Aphelocoma californica*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), and American crow (*Corvus brachyrhynchos*), among others (Attachment D). These species would be expected to use the Study Area for foraging, nesting, and/or shelter.

Sensitive Biological Resources

Based on review of aerial photographs and the field reconnaissance surveys, Rincon evaluated the potential presence of sensitive biological resources on and adjacent to the project site.

Special-Status Species

Special-status species are those plants and animals listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the FESA; those considered “Species of Concern” by the USFWS; those listed or candidates for listing as Rare, Threatened, or Endangered by the CDFW under the CESA; animals designated as “Fully Protected” by the CFGC; animals listed as “Species of Special Concern” (SSC) by the CDFW; and CDFW Special Plants, specifically those with California Rare Plant Ranks (CRPR) of 1B, 2B, 3, and 4 in the CNPS’s Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023).

Local, state, and federal agencies regulate special-status species and may require an assessment of their presence or potential presence to be conducted onsite prior to the approval of proposed development on a property. A list of special-status plant and wildlife species with potential to occur on site was developed based on a review of a 5-mile search of the CNDDB (CDFW 2023b) and the CNPS online Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023), as well as an official species list from the USFWS IPaC (USFWS 2023a; Attachment E). These search areas were determined based on the surrounding urban and residential land uses and significant change in habitat types outside of this area (e.g., mountain and desert habitats that are not relevant to the project site). Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB, species occurrence records from other sites in the vicinity of the Study Area, and previous reports for the project site. The potential for each special-status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the Study Area is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the Study Area is unsuitable or of very poor quality. The species is not likely to be found in the Study Area.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the Study Area is unsuitable. The species has a moderate probability of being found in the Study Area.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the Study Area is highly suitable. The species has a high probability of being found in the Study Area .
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) in the Study Area recently (within the last 5 years).

Queries of the CNDBB and the CNPS (within 5 miles of the Study Area) and USFWS IPaC contained records for 37 special-status plant species and 33 special-status wildlife species (Attachment E).

Special-Status Plant Species

Rincon evaluated 37 special-status plant species tracked by the CNDDB and CNPS within a 5-mile radius of the Study Area, as well as the USFWS IPaC, for their potential to occur (Attachment E). The assessment is based upon the presence of suitable habitat as identified during the reconnaissance survey and existing knowledge of species occurrences and distributions in the region. Of the 37 species evaluated, 7 have a moderate potential to occur within the Study Area, and include club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*; CRPR 4.3), late-flowered mariposa lily (*Calochortus fimbriatus*; CRPR 1B.3), Plummer's mariposa lily (*Calochortus plummerae*; CRPR 4.2), Peirson's morning glory (*Calystegia peirsonii*; CRPR 4.2), Parry's spineflower (*Chorizanthe parryi* var. *parryi*; CRPR 1B.1), Ojai navarretia (*Navarretia ojaiensis*; CRPR 1B.1), and Piute Mountains navarretia (*Navarretia setiloba*; CRPR 1B.1). Suitable chaparral (i.e., holly leaf cherry chaparral), scrub (i.e., California sagebrush scrub), and/or grassland (i.e., wild oats and annual brome grasslands) occur within the Study Area to support these species.

None of the remaining 30 special-status plant species have a moderate or high potential to occur within the Study Area based on incompatible habitat conditions (e.g., vegetation assemblage, soils, topography, hydrology, and prior disturbances), or the absence of readily identifiable species (e.g.,

perennial herbs, shrubs, and/or trees) based upon the field reconnaissance survey results. No special-status plant species were detected within the Study Area during the reconnaissance surveys.

Special-Status Wildlife Species

Rincon evaluated 33 special-status wildlife species tracked by the CNDDB and CNPS within a 5-mile radius of the Study Area, as well as the USFWS IPaC, for their potential to occur (Attachment E). The assessment is based on the presence of suitable habitat as identified during the survey and existing knowledge of species occurrences and distributions in the region. Of the 33 species evaluated, 2 have a moderate potential to occur within the Study Area: coastal whiptail (*Aspidoscelis tigris stejnegeri*, SSC) and coast horned lizard (*Phrynosoma blainvillii*, SSC). Suitable chaparral (i.e., holly leaf cherry chaparral), scrub (i.e., California sagebrush scrub), and grassland (i.e., wild oats and annual brome grasslands) occur within the Study Area to support these species.

The CNDDB documents multiple occurrences of coastal California gnatcatcher (*Polioptila californica californica*; Federally Threatened, SSC) within 5 miles of the Study Area. The coastal California gnatcatcher (CAGN) is an obligate, permanent resident of coastal sage scrub below 2,500 feet in elevation. While some elements of coastal sage scrub (i.e., California sagebrush scrub) occur within the Study Area, the patches of vegetation are small (generally less than one acre), patchy in distribution, and surrounded by development (i.e., the RVWTP to the south, Central Park to the north, transportation infrastructure to the east and west, and agricultural operations to the east). Additionally, the Study Area is located in the northern limits of the range of this species, where occurrences are less common (CDFW 2023b). Therefore, this species has a low potential to occur within the Study Area.

The remaining 30 species have a low potential to occur or are not expected to occur within the Study Area. These species are omitted from further discussion because there are limited habitat components meeting the species requirements and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality, the species were not observed during field surveys, and therefore the species are not likely to be found in the Study Area.

Nesting Birds

While common birds are not designated as special-status species, destruction of their eggs, nests, and nestlings is prohibited by federal and state law. Section 3503.5 of the CFGC specifically protects birds of prey, and their nests and eggs against take, possession, or destruction. Section 3503 of the CFGC also incorporates restrictions imposed by the federal MBTA with respect to migratory birds (which consists of most native bird species).

The majority of the Study Area (excluding the developed/disturbed land cover type, and upland mustards and wild oats and annual brome grasslands vegetation communities) contains suitable nesting habitat for several common avian species. In addition, the ornamental landscaping and Fremont cottonwood woodland within and adjacent to the Study Area could provide suitable nesting for raptors.

Sensitive Plant Communities

Plant communities are considered sensitive biological resources if they have limited distributions, have high wildlife value, include sensitive species, or are particularly susceptible to disturbance. CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in CNDDB. CNDDB vegetation alliances are ranked 1 through 5 based on NatureServe's (2023) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive, though there are some exceptions.

Two sensitive natural communities were observed within the Study Area: Fremont cottonwood woodland, which is ranked G4 and S3.2 indicating that it is somewhat threatened globally and threatened state-wide, and holly leaf cherry chaparral, an unranked sensitive community. No other sensitive natural communities occur within the Study Area.

Jurisdictional Waters and Wetlands

In accordance with Section 1602 of the CFGC, the CDFW has jurisdiction over lakes and streambeds (including adjacent riparian resources). CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake. Under Section 404 of the Clean Water Act (CWA), the USACE has authority to regulate activities that discharge dredge or fill material into wetlands or other "waters of the United States" through issuance of a Section 404 Permit. Finally, the Regional Water Quality Control Board (RWQCB) has jurisdiction over "waters of the state" pursuant to the Porter-Cologne Water Quality Control Act and has the responsibility for review of the project water quality certification per Section 401 of the federal CWA.

No jurisdictional or potentially jurisdictional features occur within the Study Area. As stated in the *Physical Characteristics* section above, the USGS NHD maps one reservoir feature in the southwestern portion of the Study Area, which aligns with an existing non-jurisdictional concrete-lined and developed water treatment structure associated with the RVWTP. No other potentially jurisdictional features occur within the Study Area.

Wildlife Movement

Wildlife corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network (Spencer et al. 2010).

The habitats in the linkage do not necessarily need to be the same as the habitats that are being linked. Rather, the linkage merely needs to contain sufficient cover and forage to allow temporary inhabitation by ground-dwelling species. Typically, habitat linkages are contiguous strips of natural areas, though dense plantings of landscape vegetation can be used by certain disturbance-tolerant species. Depending upon the species using a corridor, specific physical resources (e.g., rock outcroppings, vernal pools, or oak trees) may need to be in the habitat link at certain intervals to allow slower-moving species to traverse the link. For highly mobile or aerial species, habitat linkages may be discontinuous patches of suitable resources spaced sufficiently close together to permit travel along a route in a short period of time.

Wildlife movement corridors can be both large- and small-scale. No large-scale wildlife movement corridors occur within the Study Area. Naturally vegetated portions of the Study Area are located adjacent to undeveloped open space to the east and southwest of the Study Area. However, these areas are disjointed by existing development (e.g., transportation infrastructure, agricultural operations). Therefore, it is unlikely that the naturally vegetated areas within the Study Area contribute significantly to wildlife movement given their adjacency to existing development. In addition, the developed/disturbed land cover type in the Study Area offers little to no value to wildlife movement for similar reasons.

Resources Protected by Local Policies and Ordinances

Open Space Areas

Open space areas (as defined by the Santa Clarita Municipal Code) include the entirety of the Study Area, as this area is zoned by the City as "Open Space" (City of Santa Clarita 2016). Title 14 Section 10 mandates that any defacement, disfigurement, injury, or removal of plant material or harming, molesting, killing, or harassment of any wildlife within an open space is strictly prohibited without a written permit granted by the Santa Clarita City Manager.

City of Santa Clarita General Plan

Natural resources within the Santa Clarita limits are regulated according to the City's General Plan (City of Santa Clarita 2011), which includes policies regarding conservation of biological resources and ecosystems, as well as protection of sensitive habitat (including wildlife corridors) and endangered species. The following objectives and policies related to biological resources are relevant for the proposed project (based on its location and/or proposed activities):

Objective CO 3.1: In review of development plans and projects, encourage conservation of existing natural areas and restoration of damaged natural vegetation to provide for habitat and biodiversity.

Objective CO 3.2: Identify and protect areas which have exceptional biological resource value due to a specific type of vegetation, habitat, ecosystem, or location.

> *Policy CO 3.2.2: Ensure that development is located and designed to protect oak, and other significant indigenous woodlands.*
>
> *Policy CO 3.2.3: Ensure protection of any endangered or threatened species or habitat, in conformance with State and federal laws.*
>
> *Policy CO 3.2.4: Protect biological resources in the designated Significant Ecological Areas (SEAs) through the siting and design of development which is highly compatible with the SEA resources. Specific development standards shall be identified to control the types of land use, density, building location and size, roadways and other infrastructure, landscape, drainage, and other elements to assure the protection of the critical and important plant and animal habitats of each SEA. In general, the principle shall be to minimize the intrusion and impacts of development in these areas with sufficient controls to adequately protect the resources.*

Significant Ecological Areas

The City's General Plan and Municipal Code (Section 17.38.080) includes treatment of the Significant Ecological Areas (SEAs) Overlay Zone as among the habitat types within the City. SEAs are "defined as ecologically important land and water systems that are valuable as plant or animal communities, often important to the preservation of threatened and endangered species, and conversation of biological diversity in the County" (City of Santa Clarita 2011). The City of Santa Clarita's Municipal Code Section 17.38.080 requires a conformance review for development within the SEA Overlay Zone. The Study Area does not overlap with any SEAs designated by the City.

Protected Trees

Native trees are protected under the City's Parkway Trees Ordinance (City of Santa Clarita Municipal Code 13.76). Pursuant to the Ordinance, a tree permit must be obtained prior to damaging or removing any protected trees that are:

- "Exceptional specimen tree" means a tree considered an outstanding specimen of its species by reason of age, rarity, location, size, aesthetic quality, endemic status, or unique character, and so designated by resolution of the City Council.
- "Habitat tree" means a tree (or any group of trees) which has special importance as a wildlife habitat, and so designated by resolution of the City Council.
- "Historic tree" shall mean a living tree in association with some event or person of historical significance to the community or because of special due to size, condition or aesthetic qualities, and so designated by resolution of the City Council.
- "Indigenous tree" means a tree which occurs naturally in the City, and so designated by resolution of the City Council.

Additionally, the Ordinance defines a tree as a woody plant that has the potential of attaining a minimum height of 15 feet and has a canopy of foliage borne normally by a single trunk.

Multiple mature Fremont cottonwood, coast live oak, arroyo willow, and blue elderberry trees are located within the Study Area. These tree species may meet the qualifications to be considered as protected trees by the City's Parkway Trees Ordinance.

Habitat Conservation Plans

The project is not subject to an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

Impact Analysis and Recommended Actions

This section discusses the possible adverse impacts to biological resources that may occur from implementation of the project and recommends appropriate actions to avoid or minimize potential impacts.

Special-Status Species

As discussed above, 37 special-status plant species and 33 special-status wildlife species are known to occur or have potential to occur within 5 miles of the Study Area.

Special-Status Plant Species

The Study Area provides suitable chaparral (i.e., holly leaf cherry chaparral), scrub (i.e., California sagebrush scrub), and/or grassland (i.e., wild oats and annual brome grasslands) habitat to support the following special-status plant species: club-haired mariposa lily (CRPR 4.3), late-flowered mariposa lily (CRPR 1B.3), Plummer's mariposa lily (CRPR 4.2), Peirson's morning glory (CRPR 4.2), Parry's spineflower (CRPR 1B.1), Ojai navarretia (CRPR 1B.1), and Piute Mountains navarretia (CRPR 1B.1).

The project is anticipated to result in approximately 0.32 acre of temporary impact to potentially suitable special-status plant species habitat as a result of pipeline installation, including <0.01 acre to wild oats and annual brome grasslands, 0.29 acre to California sagebrush scrub, and 0.03 acre to holly leaf cherry chaparral (Attachment B, Figure 3a). The project is also expected to result in approximately 0.05 acre of permanent impact to potentially suitable special-status plant species habitat as a result of paving the existing dirt access road, including <0.01 acre to wild oats and annual brome grasslands and 0.05 acre to California sagebrush scrub.

While no special-status plant species were observed during the reconnaissance field surveys, the surveys did not coincide with the blooming period for the aforementioned species. If these species occur within the work areas, direct impacts (i.e., mortality of individuals) could occur during initial vegetation removal activities associated with the project. Therefore, Mitigation Measures (MM) BIO-1 (special-status plant surveys) and MM BIO-2 (special-status plant avoidance measures), are recommended to avoid direct impacts to special-status plant species. If special-status plant species are found within the project site and avoidance is infeasible, impacts to special-status plant species would be mitigated through MM BIO-3 (special-status plant mitigation and monitoring plan), which would include a minimum mitigation ratio of 1:1 (number of acres/individuals restored to number of acres/individuals impacted). With implementation of MM BIO-1 through BIO-3, impacts to special-status plant species would be reduced to a less-than-significant level.

BIO-1 Special-Status Plant Surveys

To avoid impacts to special-status plants, surveys for special-status plants shall be completed prior to any vegetation removal, grubbing, or other construction activity within this area. The surveys shall be floristic in nature, seasonally timed to coincide with the blooming period of the target species (club-haired mariposa lily, late-flowered mariposa lily, Plummer's mariposa lily, Peirson's morning glory, Parry's spineflower, Ojai navarretia, and Piute Mountains navarretia), and be conducted by a qualified biologist.

Special-status plant species identified on-site shall be mapped onto a site-specific aerial photograph and topographic map. Surveys should be conducted in accordance with the most current protocols established by the CDFW and USFWS. A report of the survey results shall be submitted to SCV Water for review and approval.

BIO-2 Special-Status Plant Avoidance Measures

If special-status plants are detected during special-status plant surveys, avoidance of the special-status plants shall occur where feasible and vegetation clearing within 50 feet of any identified rare plant will be conducted by hand, if practicable. Any rare plant occurrence shall have bright orange protective fencing installed at least 50 feet beyond its extent, or other distance as approved by a qualified biologist, to protect it from harm.

If avoidance is not feasible, SCV Water shall offset the proposed loss of individual plants at a minimum 1:1 ratio by on-site restoration (salvage, replanting, and propagation) as described in Mitigation Measure BIO-3 (Special-Status Plant Mitigation and Monitoring Plan) below. The scrub and grassland habitats in the Study Area would be a suitable location for on-site restoration. Compensation for impacts to these species may also be accomplished by preservation of on-site populations or off-site populations in the vicinity of the site at a minimum of a 1:1 ratio if present.

BIO-3 Special-Status Plant Mitigation and Monitoring Plan

If special-status plants are detected and would be impacted by project construction, a Special-Status Plant Mitigation and Monitoring Plan that provides for the replacement of the species impacted by the project shall be developed by a qualified restoration specialist.

The Special-Status Plant Mitigation and Monitoring Plan shall specify the following:

- A summary of impacts;
- The location of the mitigation site;
- Methods for harvesting seeds or salvaging and transplanting individuals to be impacted;

- Measures for propagating plants or transferring living plants from the salvage site to the mitigation site;
- Site preparation procedures for the mitigation site;
- A schedule and action plan to maintain and monitor the mitigation area;
- Criteria and performance standards by which to measure the success of the mitigation, including replacement of impacted plants at a minimum 1:1 ratio;
- Measures to exclude unauthorized entry into the mitigation areas; and
- Contingency measures such as replanting or weeding in the event that mitigation efforts are not successful.

The performance standards for the Special-Status Plant Mitigation and Monitoring Plan shall be at a minimum the following:

- Within five years after introducing the plants to the mitigation site, the number of established, reproductive plants should equal the number lost to project construction, and
- Restoration will be considered successful after the success criteria have been met for a period of at least 2 years without any maintenance or remediation activities other than invasive species control.

The Special-Status Plant Mitigation and Monitoring Plan shall be initiated prior to development of the project and implemented over a five-year period. It can also be combined with the Restoration Plan described under Mitigation Measure BIO-9.

Annual reports discussing the implementation, monitoring, and management of the Special-Status Plant Mitigation and Monitoring Plan shall be submitted to SCV Water. Five years after the start of the mitigation project, a final report shall be submitted, which should at a minimum discuss the implementation, monitoring, and management of the Special-Status Plant Mitigation and Monitoring Plan over the five-year period, and indicate whether the Special-Status Plant Mitigation and Monitoring Plan has been successful based on established performance standards. Should the success criteria be met before Year Five, the mitigation effort can be deemed complete.

Special-Status Wildlife Species

The Study Area provides suitable chaparral (i.e., holly leaf cherry chaparral), scrub (i.e., California sagebrush scrub), and grassland (i.e., wild oats and annual brome grasslands) habitat to support coastal whiptail (SSC) and coast horned lizard (SSC). The project includes vegetation removal and road paving within suitable habitat for these species. Direct impacts to coastal whiptail and coast horned lizard could occur through direct strikes to individuals if they occur within the project site during initial mobilization to the site and during vegetation removal activities. Additionally, indirect impacts to coastal whiptail and coast horned lizard could result from noise, vibrations, and dust, which could cause individuals to flush out of cover and become exposed to predators or vehicle strikes. Therefore, implementation of MM BIO-4 is recommended to ensure all construction personnel are trained in identifying special-status wildlife species, and MM BIO-5 is recommended to ensure adherence to general Best Management Practices (BMPs). Implementation of Mitigation Measures BIO-6 and BIO-7 would require implementation of pre-construction surveys for special status wildlife species and construction monitoring. MM BIO-7 would minimize impacts to special-status wildlife species through monitoring of initial ground-disturbing activities within suitable special-status wildlife species habitat. With implementation of MM BIO-4 through BIO-7, potential direct and indirect impacts to special-status

wildlife species would be reduced to a less-than-significant level, and the project would not be likely to adversely affect special-status wildlife species.

BIO-4 Worker Environmental Awareness Program

A qualified biologist shall conduct a pre-project environmental education program for all personnel working at the site, which should be focused on conditions and protocols necessary to avoid and minimize potential impacts to biological resources. Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a Worker Environmental Awareness Program (WEAP) training, conducted by a qualified biologist, to aid workers in recognizing special-status biological resources potentially occurring in the project area. This training shall include information about the special-status species with potential to occur in the project area. The specifics of this program shall include identification of special-status species and habitats, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. A fact sheet conveying this information shall be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees working at the project site shall sign a form provided by the trainer documenting they have attended the WEAP and understand the information presented to them. The crew foreman shall be responsible for ensuring crew members adhere to the guidelines and restrictions designed to avoid impacts to special-status species.

BIO-5 General Best Management Practices

General requirements which shall be followed by construction personnel are listed below.

- The contractor shall clearly delineate the construction limits and prohibit any construction-related traffic outside those boundaries.
- Project-related vehicles shall observe a 10-mile-per-hour speed limit within the unpaved limits of construction.
- All open trenches or excavations shall be fenced and/or sloped to prevent entrapment of wildlife species.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated during proposed project construction shall be disposed of in closed containers only and removed daily from the project site.
- No deliberate feeding of wildlife shall be allowed.
- No pets shall be allowed on the project site.
- No firearms shall be allowed on the project site.
- If vehicle or equipment maintenance is necessary, it shall be performed in the designated staging areas.
- If construction must occur at night (between dusk and dawn), all lighting shall be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties and to reduce impacts on local wildlife.
- During construction, heavy equipment shall be operated in accordance with standard BMPs. All equipment used on-site shall be properly maintained to avoid leaks of oil, fuel, or residues. Provisions shall be in place to remediate any accidental spills.
- While encounters with special-status species are not anticipated, any worker who inadvertently injures or kills a special-status species or finds one dead, injured, or entrapped shall immediately

report the incident to the construction foreman or biological monitor. The construction foreman or biological monitor should immediately notify SCV Water. SCV Water should follow up with written notification to USFWS and/or CDFW within five working days of the incident. All observations of state or federally listed species should be recorded on CNDDB field sheets and sent to CDFW by SCV Water or the biological monitor.

BIO-6 Pre-activity Survey

Prior to commencement of ground or vegetation disturbing activities at the project site, a qualified biologist shall conduct two surveys for special status wildlife species. The first survey shall be conducted no more than fourteen (14) days prior to commencement of project activities and the second survey shall be conducted no more than three (3) days prior to the commencement of project activities. The survey shall incorporate methods to detect the special status wildlife species that could potentially occur at the site. To the extent feasible, special status species shall be avoided. If avoidance is not feasible, the species shall be captured and transferred to an appropriate habitat and location on-site where it would not be harmed by project activities. The biologist shall hold the requisite permits for the capture and handling of the species, if applicable. Prior to commencement of the proposed activity, the methods and results of the surveys and, if a special status species is found, the measures to be employed to avoid impacts to the species should be presented in a letter report to SCV Water.

BIO-7 Qualified Biological Monitor

A qualified biological monitor familiar with special-status species with potential to occur in the project site shall be present during initial ground disturbance or vegetation removal activities within suitable habitat, including California sagebrush scrub, holly leaf cherry chaparral, and wild oats and annual brome grasslands. The biological monitor shall have the authority to temporarily stop work if one or more special-status species are observed; the monitor shall then relocate these individuals to suitable undisturbed habitat, outside the areas directly and indirectly affected by ground disturbance activities. The biologist shall hold the requisite incidental take permits or authorizations for the capture and handling of the species, if applicable.

The monitor shall recommend measures to ensure compliance with all avoidance and minimization measures and any conditions required by SCV Water. When the biological monitor is present on site, they shall be responsible for:

- Ensuring procedures for verifying compliance with environmental mitigation are followed;
- Lines of communication and reporting methods;
- Daily and weekly reporting of compliance;
- Construction crew WEAP training;
- Authority to stop work; and
- Action to be taken in the event of non-compliance.

Nesting Birds

Migratory or other common nesting birds, while not designated as special-status species, are protected by the CFGC and MBTA and have the potential to nest within the Study Area. Particularly, the California sagebrush scrub, Fremont cottonwood woodland, holly leaf cherry chaparral, and pepper tree groves vegetation communities and the ornamental landscaping land cover type have the potential to support nesting birds. Therefore, construction of the project has the potential to directly (by destroying a nest) or indirectly (through construction noise, dust, and other human disturbances that may cause a nest

to fail) impact nesting birds protected under the CFGC and MBTA. Implementation of MM BIO-8 would include a pre-construction nesting bird survey if construction occurs during the nesting bird season (typically February 1 to August 31). If active nests are identified, buffers would be implemented to avoid impacts to nesting birds. Implementation of MM BIO-8 would maintain compliance with CFGC 3503 and the MBTA.

BIO-8 Nesting Birds

Project-related activities should occur outside of the bird breeding season (February 1 to August 31) to the extent practicable. If construction must occur within the bird breeding season, then no more than seven days prior to initiation of ground disturbance and/or vegetation removal, a nesting bird pre-construction survey shall be conducted by a qualified biologist within the disturbance footprint plus a 100-foot buffer (300-feet for raptors), where feasible. If the proposed project is phased or construction activities stop for more than one week, a subsequent pre-construction nesting bird survey will be required prior to each phase of construction during the nesting season.

Pre-construction nesting bird surveys shall be conducted during the time of day when birds are active and shall factor in sufficient time to perform this survey adequately and completely. A report of the nesting bird survey results, if applicable, shall be submitted to SCV Water for review and approval prior to ground and/or vegetation disturbance activities.

If nests are found, their locations shall be flagged. An appropriate avoidance buffer ranging in size from 25 to 50 feet for passerines, and up to 300 feet for raptors depending upon the species and the proposed work activity, shall be determined and demarcated by a qualified biologist with bright orange construction fencing or other suitable flagging. Active nests shall be monitored at a minimum of once per week until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is completed, and all the young have fledged. If project activities must occur within the buffer, they shall be conducted at the discretion of the qualified biologist. The nesting bird buffer zones may also be extended at the discretion of the qualified biologist based on field observations of nesting bird behavior. If no nesting birds are observed during pre-construction surveys, no further actions would be necessary.

Sensitive Plant Communities

Two sensitive plant communities were documented within the Study Area: Fremont cottonwood woodland, which is located in the western portion of the Study Area along a north-facing slope to the north of the project site, and holly leaf cherry chaparral, which is located in the central portion of the Study Area to the south and west of the unpaved access road where sewer line replacement and road paving are proposed. The project may result in approximately 0.03 acre of temporary impact to holly leaf cherry chaparral during initial vegetation removal. Impacts to Fremont cottonwood woodland are not anticipated to occur as a result of the project. If the project cannot avoid the holly leaf cherry chaparral vegetation community, direct impacts (i.e., vegetation removal within this sensitive plant community) would occur. Therefore, implementation of habitat restoration in accordance with MM BIO-9 is warranted if sensitive plant communities cannot be avoided. With implementation of MM BIO-9, impacts to sensitive plant communities would be reduced to a less-than-significant level.

BIO-9 Sensitive Plant Community Restoration

Temporary impacts to sensitive plant communities shall be avoided to the extent feasible. Where avoidance is not feasible, mitigation for impacts to sensitive plant communities shall be accomplished through on-site restoration at a minimum ratio of 1:1. A Restoration Plan shall be prepared and

submitted for approval to SCV Water prior to initiating impacts. At minimum, the Restoration Plan shall include the following:

- A description of the purpose and goals of the restoration
- Identification of success criteria and performance standards
- Methods of site preparation
- Irrigation plan and schedule
- Best Management Practices (BMPs)
- Maintenance and monitoring program
- Adaptive management strategies
- Key stakeholders and responsible parties
- Funding
- Contingencies

Jurisdictional Waters and Wetlands

As discussed above, no jurisdictional features occur within the Study Area. As a result, no direct or indirect impacts to jurisdictional resources are expected, and no further actions are recommended.

Wildlife Movement

Wildlife movement and habitat fragmentation are important issues in assessing impacts to wildlife. Habitat fragmentation occurs when a proposed action results in a single, unified habitat area being divided into two or more areas in such a way that the division isolates the two new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or from one habitat type to another, as in the fragmentation of habitats within and around "checkerboard" residential development. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, unsuitable habitat, or open areas with little vegetative cover. Habitat fragmentation also can occur when a portion of one or more habitats is converted into another habitat, as when annual burning converts scrub habitats to grassland habitats.

The Study Area does not contain any large- or small-scale wildlife movement corridors. The naturally vegetated portions of the Study Area are disconnected from undeveloped open space to the east and southwest of the Study Area by existing development. Additionally, the proposed project activities would primarily occur within the existing developed/disturbed dirt access road and ornamental landscaped portions of the Study Area, which offer little to no value to wildlife movement. Therefore, the proposed project is not anticipated to have an incremental effect on localized wildlife movement or create habitat fragmentation in the region, nor is it anticipated to have significant impact on regional wildlife movement. In addition, adherence to MM BIO-5, which includes shielding and directing night-time lighting downward to reduce impacts on local wildlife, would further reduce impacts.

Resources Protected by Local Policies and Ordinances

Open Space Areas

The entirety of the Study Area is designated as open space by the City (City of Santa Clarita 2016). Certain activities in open space areas, including removal of vegetation or harassment of wildlife, are prohibited without a permit granted by the Santa Clarita City Manager. According to Government Code

Section 53091, building and zoning ordinances of a county or city shall not apply to the location or construction of facilities for the production, generation, storage, treatment, or transmission of water. However, SCV Water would voluntarily comply with the City's preservation of such resources during implementation of the proposed project.

Vegetation removal would occur within the wild oats and annual brome grasslands, California sagebrush scrub, pepper tree groves, holly leaf cherry chaparral, and upland mustards vegetation communities as well as the ornamental landscaping land cover type in order to install the sewer pipeline and pave the existing dirt roadway. Impacts to sensitive plant communities would be mitigated through implementation of MM BIO-9. Therefore, the project would not conflict with local policies regarding open space areas.

City of Santa Clarita General Plan

The City's General Plan contains objectives and policies for biological resources that are relevant to the proposed project given its location and/or proposed activities. As identified above, these objectives and policies focus on conservation of existing natural areas; restoration of damaged natural vegetation; oak trees and other indigenous woodlands, and endangered or threatened species and habitat; and protection of biological resources in SEAs and significant wildlife corridors.

The proposed project does not propose new development, but rather upgrades to existing water treatment and provision infrastructure. The Study Area does not overlap with any SEAs designated by the City. Additionally, in compliance with the objectives and policies outlined above, the project would not impact: (a) oak trees or other woodlands, as these resources are either not present within the Study Area (oak trees) or are on the edge of the Study Area where impacts will not occur (Fremont cottonwood woodland); (b) endangered or threatened species and habitat, as no federal or state listed species have moderate or high potential to occur within the Study Area; or (c) SEAs or wildlife movement and corridors, since the Study Area does not contain any SEAs or large-/small-scale wildlife movement corridors. Therefore, the project would not conflict with the Santa Clarita General Plan and no further actions are recommended.

Significant Ecological Areas

The Study Area does not overlap with any SEAs designated by the City. Therefore, the project would not conflict with the City's General Plan and Municipal Code regarding SEAs, and no further actions are recommended.

Protected Trees

Multiple mature Fremont cottonwood, coast live oak, arroyo willow, and blue elderberry trees are located within the Study Area. These tree species may meet the qualifications to be considered as protected trees by the City's Parkway Trees Ordinance. The project proposes to remove a total of four trees, including three Peruvian pepper trees and one glossy privet tree (Attachment B, Figure 3a). These are non-native trees that do not meet the criteria of a protected tree under the City's Parkway Trees Ordinance. Therefore, no impacts to protected trees are proposed and no further actions are recommended.

Habitat Conservation Plans

The project site is not located in an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur, and no further actions are recommended.

Limitations, Assumptions, and Use Reliance

This Biological Resources TM has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Biological surveys for the presence or absence of certain taxa were not conducted as part of this assessment and were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

Thank you for the opportunity to provide this Biological Resources Assessment. Please contact the undersigned with any questions.

Sincerely,
Rincon Consultants, Inc.

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Robin Murray
Supervising Biologist/ISA Certified Arborist

Steven J. Hongola
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Attachments

Attachment A References
Attachment B Figures
Attachment C Site Photographs
Attachment D Species Detected During Field Reconnaissance Survey
Attachment E Special-Status Species Potential to Occur

Attachment A

References

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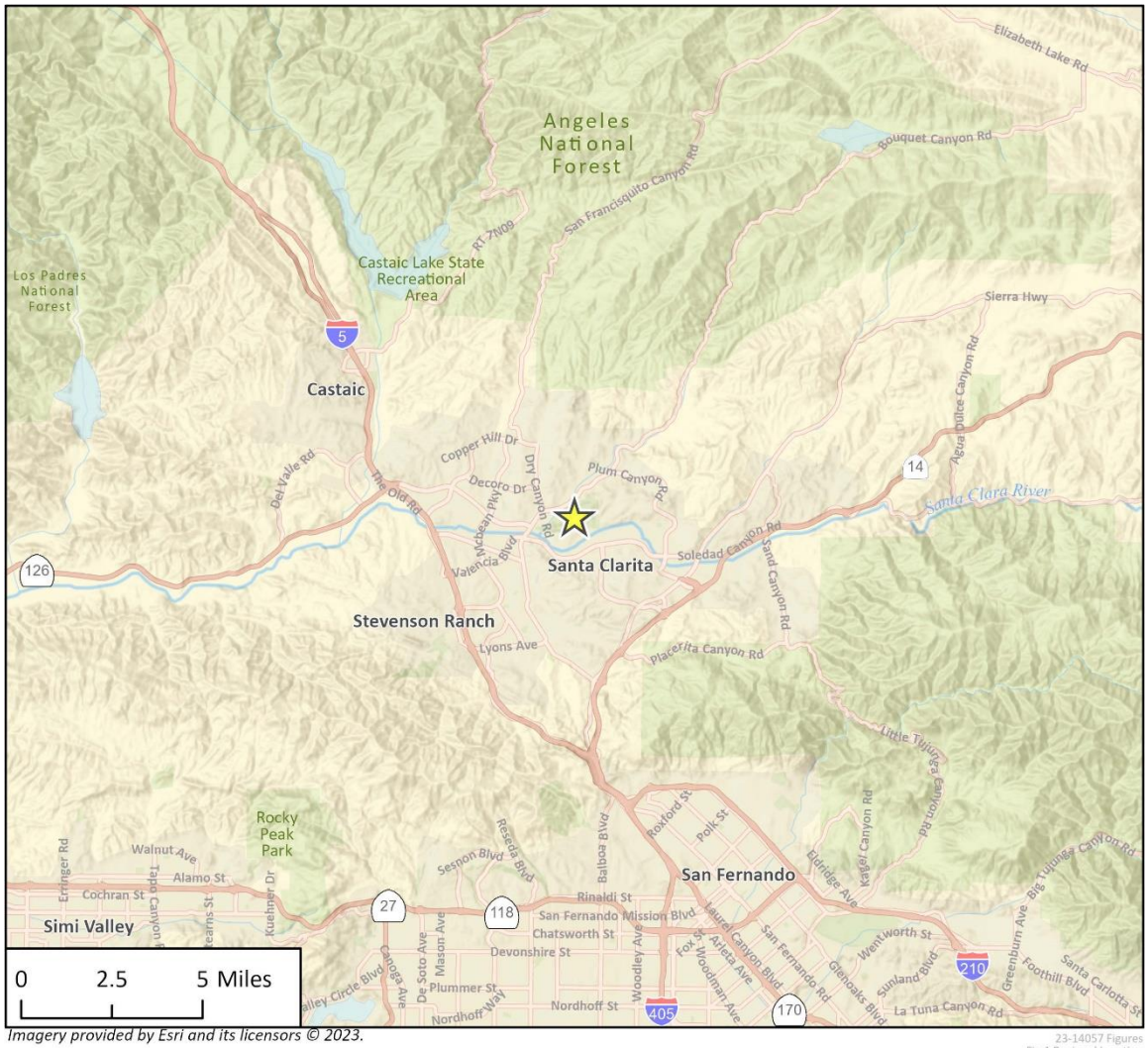
Attachment B

Figures

Figure 1 Regional Location



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23-14057 Figures
Fig 1 Regional Location

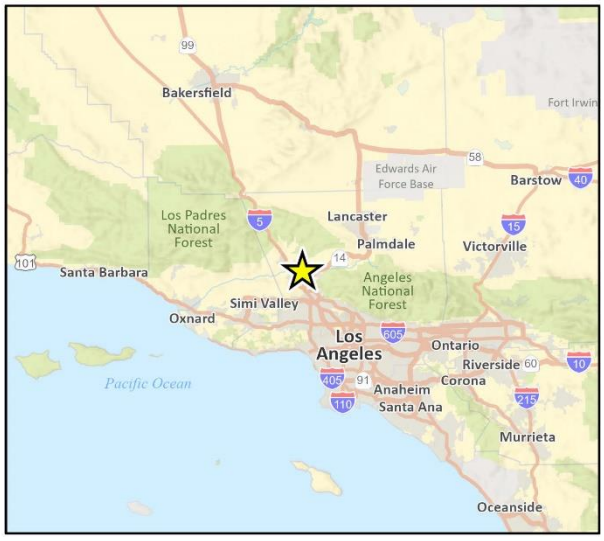
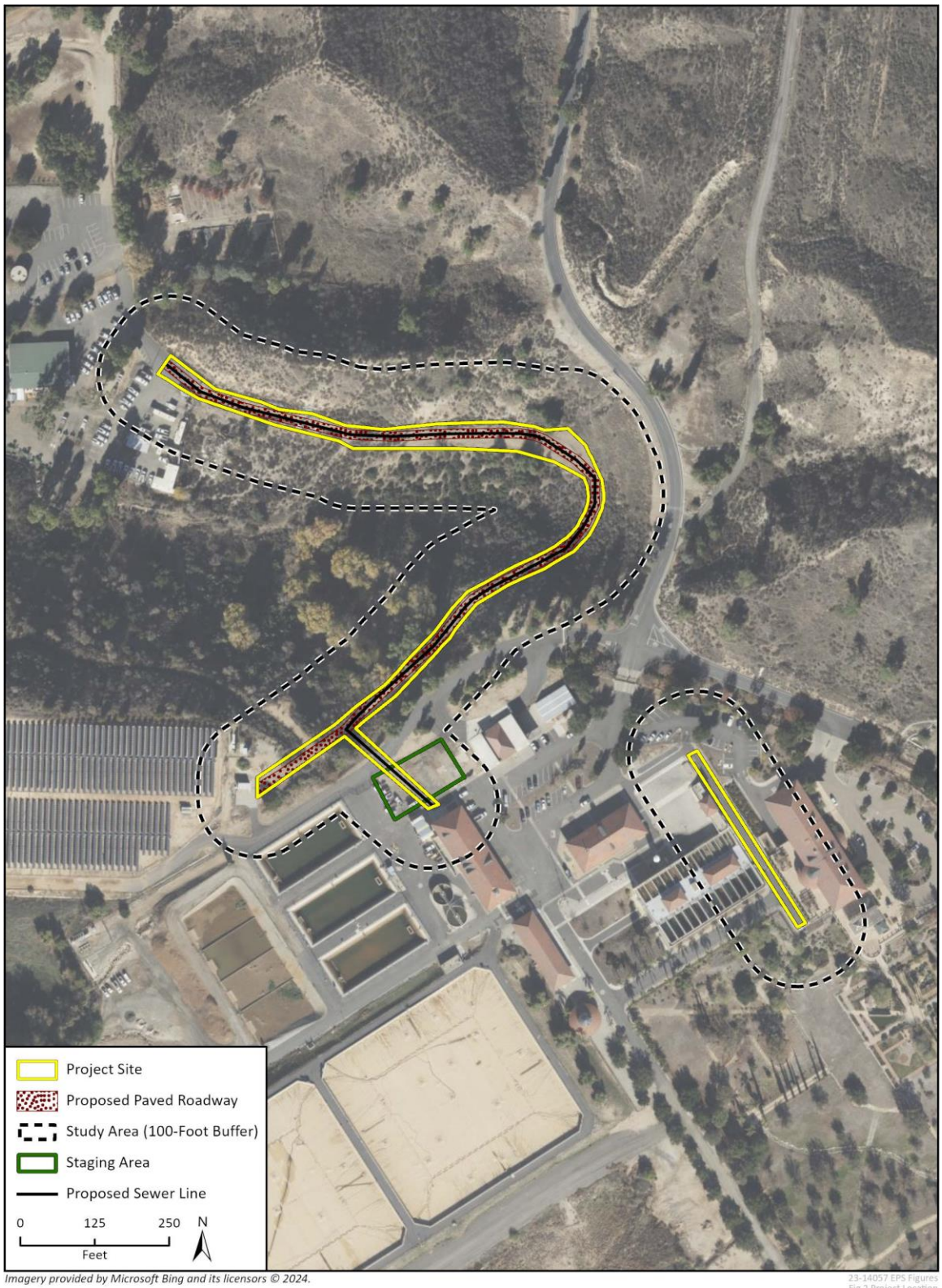


Figure 2 Project Location



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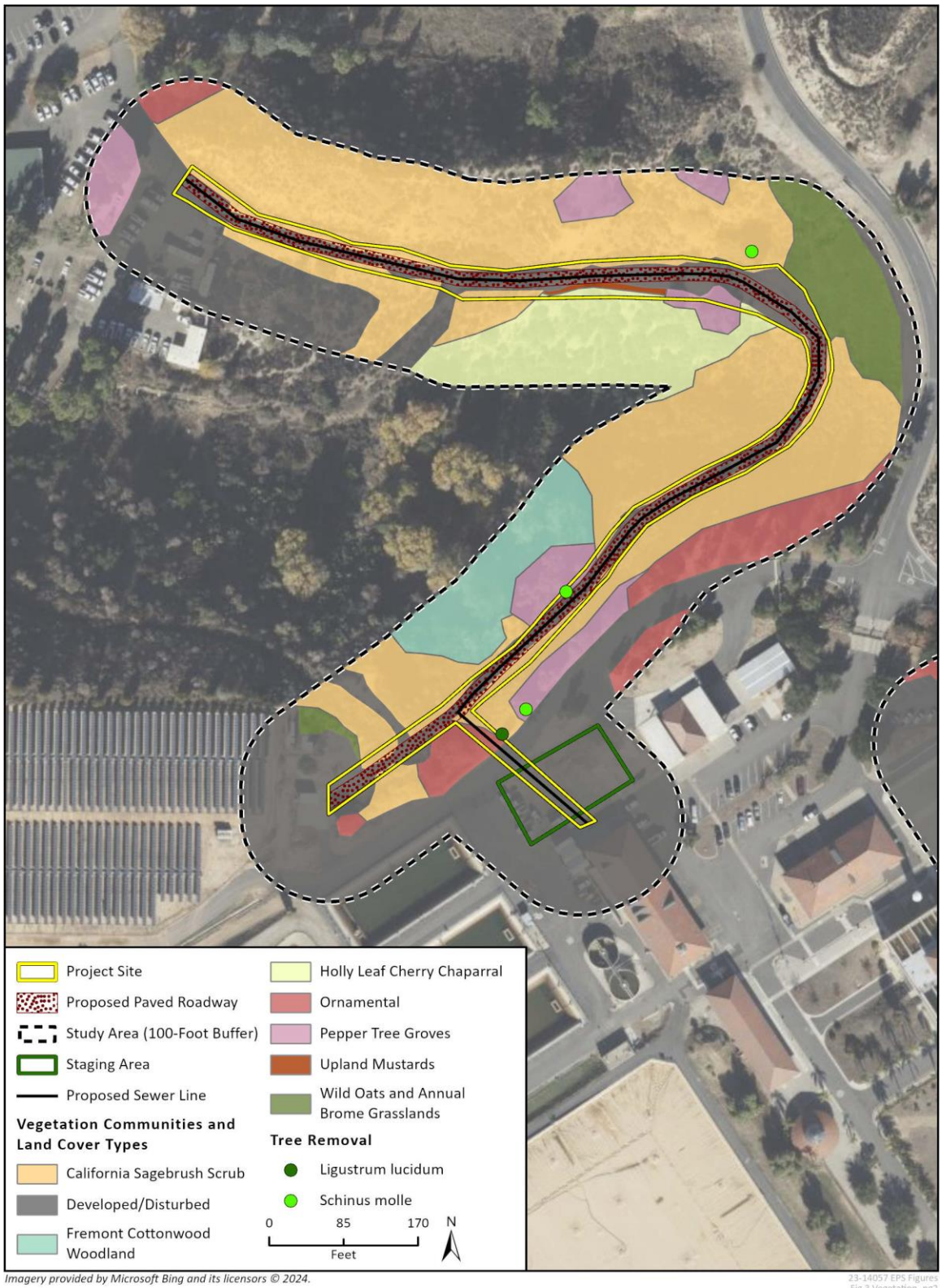
23-14057 EPS Figures
Fig 2 Project Location

Figure 3a Vegetation Communities and Land Covers - West



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23-14057 EPS Figures
Fig 3 Vegetation_pg2

Figure 3b Vegetation Communities and Land Covers - East

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23-14057 Figures
Fig 3 Vegetation_pg1

Attachment C

Site Photographs

Photograph 1. View of the project site in the southwestern portion of the Study Area, facing northeast. Note the developed/disturbed land cover type associated with the existing access road.

Photograph 2. View of the project site where the proposed sewer line crosses the ornamental lanscaping land cover type in the southwestern portion of the Study Area, facing southeast.

Photograph 3. View of the project site in the southwestern portion of the Study Area, facing northeast. Note the developed/disturbed land cover type associated with the existing access road, and the California sagebrush scrub vegetation community adjacent to the access road.

Photograph 4. View of the project site along the existing access road in the northern portion of the Study Area, facing north. Note the Fremont cottonwood woodland along the north-facing slope on the bottom of the photograph.

Photograph 5. View of the project site along the existing access road in the central portion of the Study Area, facing northwest. Note the California sagebrush scrub adjacent to the project site.

Photograph 6. View of the wild oats and annual brome grasslands in the central portion of the Study Area and east of the project site, facing north.

Photograph 7. View of the project site along the existing access road in the central portion of the Study Area, facing northwest. Note the California sagebrush scrub adjacent to the project site, and the ornamental landscaping land cover type on the left side of the photograph.

Photograph 8. View of the project site along the existing access road in the northern portion of the Study Area adjacent to Central Park, facing northwest.

Photograph 9. View of the southern portion of the project site within the RVWTP, facing south. This area consists of the developed/disturbed land cover type.

Photograph 10. View of ornamental vegetation in the southern portion of the Study Area, facing north.

Photograph 11. View of the holly leaf cherry chaparral vegetation community in the central portion of the Study Area, facing south.

Photograph 12. View of the central and southern portion of the Study Area, facing south.

Photograph 13. View of the central portion of the Study Area, facing west. Note the Fremont cottonwood woodland vegetation community along the north-facing slope on the left side of the photograph.

Photograph 14. View of existing water treatment facility associated with the RVWTP, facing east.

Attachment D

Species Detected During Field Reconnaissance Survey

Plant and Wildlife Species Detected in the Study Area on March 23, 2023, and January 4, 2024

Scientific Name	Common Name	Invasive Status	Native or Introduced
Plants			
Acmispon glaber	deerweed	–	Native
Adenostoma fasciculatum	chamise	–	Native
Amsinckia menziesii	Menzies' fiddleneck	–	Native
Artemisia californica	California sagebrush	–	Native
Avena barbata	slender wild oats	Cal-IPC Moderate	Introduced
Baccharis pilularis	coyote brush	–	Native
Brachychiton populneum	whiteflower kurrajong	–	Introduced
Brassica nigra	black mustard	Cal-IPC Moderate	Introduced
Bromus diandrus	ripgut brome	Cal-IPC Moderate	Introduced
Bromus rubens	red brome	Cal-IPC High	Introduced
Centaurea melitensis	tocalote	Cal-IPC Moderate	Introduced
Cercocarpus betuloides	birch leaf mountain mahogany	–	Native
Corethrogyne filaginifolia	common sandaster	–	Native
Cryptantha intermedia	common cryptantha	–	Native
Dipterostemon capitatum	blue dicks	–	Native
Eriogonum fasciculatum	California buckwheat	–	Native
Erodium cicutarium	redstem filaree	Cal-IPC Limited	Introduced
Eschscholzia californica	California poppy	–	Native
Eucalyptus globulus	blue gum eucalyptus	Cal-IPC Limited	Introduced
Eucrypta chrysanthemifolia	spotted eucrypta	–	Native
Festuca myuros	rattail fescue	Cal-IPC Moderate	Introduced
Hesperocyparis macrocarpa	Monterey cypress	–	Native
Hesperoyucca whipplei	chaparral yucca	–	Native
Hirschfeldia incana	summer mustard	Cal-IPC Moderate	Introduced
Ligustrum lucidum	glossy privet	–	Introduced
Lonicera subspicata var. *denudata*	southern honeysuckle	–	Native
Lupinus bicolor	bicolor lupine	–	Native
Malacothrix saxatilis	cliff aster	–	Native
Malva parviflora	cheeseweed	–	Introduced
Marah macrocarpa	chilicothe	–	Native
Melaleuca styphelioides	prickly melaleuca	–	Introduced
Melilotus indicus	yellow sweetclover	–	Introduced
Mirabilis laevis	wishbone bush	–	Native
Nerium oleander	oleander	–	Introduced
Nicotiana glauca	tree tobacco	Cal-IPC Moderate	Introduced
Olea europaea	European olive	Cal-IPC Limited	Introduced

Scientific Name	Common Name	Invasive Status	Native or Introduced
Opuntia basilaris var. *basilaris*	beavertail cactus	–	Native
Pinus canariensis	Canary Island pine	–	Introduced
Pinus halepensis	Aleppo pine	–	Introduced
Populus fremontii	Fremont cottonwood	–	Native
Prunus ilicifolia	holly leaf cherry	–	Native
Quercus agrifolia	coast live oak	–	Native
Quercus berberidifolia	scrub oak	–	Native
Rafinesquia californica	California chicory	–	Native
Rhapiolepis indica	Indian hawthorn	–	Introduced
Salix lasiolepis	arroyo willow	–	Native
Salvia columbariae	chia	–	Native
Salvia mellifera	black sage	–	Native
Sambucus nigra	blue elderberry	–	Native
Schinus molle	Peruvian pepper	Cal-IPC Limited	Introduced
Schismus spp.	schismus	Cal-IPC Limited	Introduced
Silybum marianum	milk thistle	Cal-IPC Limited	Introduced
Solanum xanti	chaparral nightshade	–	Native
Sonchus oleraceus	common sow thistle	–	Introduced
Syagrus romanzoffiana	queen palm	–	Introduced
Washingtonia robusta	Mexican fan palm	Cal-IPC Moderate	Introduced
Wildlife			
Birds			
Aphelocoma californica	California scrub-jay	–	Native
Buteo jamaicensis	red-tailed hawk	–	Native
Calypte anna	Anna's hummingbird	–	Native
Corvus brachyrhynchos	American crow	–	Native
Corvus corax	common raven	–	Native
Picoides nuttallii	Nuttall's woodpecker	–	Native
Sayornis nigricans	black phoebe	–	Native
Selasphorus sasin	Allen's hummingbird	–	Native
Setophaga coronata	yellow-rumped warbler	–	Native
Zenaida macroura	mourning dove	–	Native
Zonotrichia albicollis	white-throated sparrow	–	Native
Reptiles			
Sceloporus occidentalis	western fence lizard	–	Native

Source: Rincon Consultants biological resources reconnaissance field survey on March 23, 2023; Calflora 2023; California Invasive Plant Council (Cal-IPC) 2023, which rates introduced species according to their level of invasiveness.

Attachment E

Special-Status Species Potential to Occur

Special-Status Species Potential to Occur

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Plants and Lichens				
Arenaria paludicola marsh sandwort	FE/SCE G1/S1 1B.1	Perennial stoloniferous herb. Marshes and swamps. Openings, sandy. Elevations: 10-560ft. (3-170m.) Blooms May-Aug.	Not Expected	Marshes and swamps are not present in the Study Area.
Berberis nevinii Nevin's barberry	FE/SCE G1/S1 1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub, riparian scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 230-2705ft. (70-825m.) Blooms (Feb)Mar-Jun.	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a perennial species that would be identifiable during the reconnaissance field survey and was not observed in the Study Area.
Calochortus catalinae Catalina mariposa lily	None/None G3G4/S3S4 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. In heavy soils, open slopes, openings in brush. Elevations: 50-2295ft. (15-700m.) Blooms (Feb)Mar-Jun.	Low Potential	While suitable chaparral, scrub, and grassland habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period.
Calochortus clavatus var. *avius* Pleasant Valley mariposa-lily	None/None G4T2/S2 1B.2	Perennial bulbiferous herb. Lower montane coniferous forest. Josephine silt loam and volcanically derived soil; often in rocky areas. Elevations: 1000-5905ft. (305-1800m.) Blooms May-Jul.	Not Expected	Lower montane coniferous forest is not present in the Study Area.
Calochortus clavatus var. *clavatus* club-haired mariposa lily	None/None G4T3/S3 4.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Clay, Rocky, serpentinite (usually). Elevations: 100-4265ft. (30-1300m.) Blooms (Mar)May-Jun.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Calochortus clavatus var. *gracilis* slender mariposa-lily	None/None G4T2T3/S2S3 1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, valley and foothill grassland. Shaded foothill canyons; often on grassy slopes within other habitat. Elevations: 1050-3280ft. (320-1000m.) Blooms Mar-Jun(Nov).	Low Potential	While suitable chaparral, scrub, and grassland habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period.
Calochortus fimbriatus late-flowered mariposa-lily	None/None G3/S3 1B.3	Perennial bulbiferous herb. Chaparral, cismontane woodland, riparian woodland. Serpentinite (sometimes). Elevations: 900-6250ft. (275-1905m.) Blooms Jun-Aug.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.
Calochortus palmeri var. palmeri Palmer's mariposa lily	None/None G3T2/S2 1B.2	Perennial bulbiferous herb. Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. Elevations: 2330-7840ft. (710-2390m.) Blooms Apr-Jul.	Not Expected	Mesic areas are absent from the Study Area. Additionally, the Study Area is outside the known elevational range of the species.
Calochortus plummerae Plummer's mariposa-lily	None/None G4/S4 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Granitic, rocky. Elevations: 330-5580ft. (100-1700m.) Blooms May-Jul.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.
Calystegia peirsonii Peirson's morning-glory	None/None G4/S4 4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland. Often in disturbed areas or along roadsides or in grassy, open areas. Elevations: 100-4920ft. (30-1500m.) Blooms Apr-Jun.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.
Cercocarpus betuloides var. *blancheae* island mountain-mahogany	None/None G5T4/S4 4.3	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest. Elevations: 100-1970ft.	Not Expected	While suitable chaparral habitat is present in the Study Area, this is a perennial species that would be identifiable during the

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
		(30-600m.) Blooms Feb-May.		reconnaissance field survey, and was not observed in the Study Area.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	None/SCE G2T1/S1 1B.1	Annual herb. Coastal scrub, valley and foothill grassland. Sandy soils. Elevations: 490-4005ft. (150-1220m.) Blooms Apr-Jul.	Low Potential	While suitable scrub and grassland habitat are present in the Study Area, suitable sandy soils are absent from the Study Area.
Chorizanthe parryi var. *parryi* Parry's spineflower	None/None G3T2/S2 1B.1	Annual herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings, Rocky (sometimes), sandy (sometimes). Elevations: 900-4005ft. (275-1220m.) Blooms Apr-Jun.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.
Deinandra minthornii Santa Susana tarplant	None/SCR G2/S2 1B.2	Perennial deciduous shrub. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. Elevations: 920-2495ft. (280-760m.) Blooms Jul-Nov.	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Deinandra paniculata paniculate tarplant	None/None G4/S4 4.2	Annual herb. Coastal scrub, valley and foothill grassland, vernal pools. Usually in vernally mesic sites. Sometimes in vernal pools or on mima mounds near them. Elevations: 80-3085ft. (25-940m.) Blooms (Mar)Apr-Nov.	Not Expected	Vernally mesic coastal scrub or grassland habitat are absent from the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Dodecahema leptoceras slender-horned spineflower	FE/SCE G1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, coastal scrub. Flood deposited terraces and washes; associates include Encelia, Dalea, Lepidospartum, etc. Sandy soils. Elevations: 655-2495ft. (200-760m.) Blooms Apr-Jun.	Not Expected	Flood deposited terraces and washes are absent from the Study Area.
Dudleya densiflora San Gabriel Mountains dudleya	None/None G2/S2 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. In crevices and on decomposed granite on cliffs and canyon walls. Elevations: 800-2000ft. (244-610m.) Blooms Mar-Jul.	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. Elevations: 65-3135ft. (20-955m.) Blooms Mar-May.	Not Expected	While suitable chaparral, scrub, and grassland habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period.
Hordeum intercedens vernal barley	None/None G3G4/S3S4 3.2	Annual herb. Coastal dunes, coastal scrub, valley and foothill grassland, vernal pools. Vernal pools, dry, saline streambeds, alkaline flats. 5-. Elevations: 15-3280ft. (5-1000m.) Blooms Mar-Jun.	Not Expected	Vernal pools, streambeds, and alkaline flats are absent from the Study Area.
Horkelia cuneata var. *puberula* mesa horkelia	None/None G4T1/S1 1B.1	Perennial herb. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. Elevations: 230-2660ft. (70-810m.) Blooms Feb-Jul(Sep).	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Juglans californica Southern California black walnut	None/None G4/S4 4.2	Perennial deciduous tree. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Slopes, canyons, alluvial habitats. Elevations: 165-2955ft. (50-900m.) Blooms Mar-Aug.	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Perennial rhizomatous herb. Coastal dunes, marshes and swamps, meadows and seeps. Moist saline places. Elevations: 10-2955ft. (3-900m.) Blooms (Mar)May-Jun.	Not Expected	Coastal dunes, marshes, swamps, meadows, and seeps are absent from the Study Area.
Lepechinia fragrans fragrant pitcher sage	None/None G3/S3 4.2	Perennial shrub. Chaparral. Elevations: 65-4300ft. (20-1310m.) Blooms Mar-Oct.	Not Expected	While suitable chaparral habitat is present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Lepechinia rossii Ross' pitcher sage	None/None G1/S1 1B.2	Perennial shrub. Chaparral. Soil derived from fine-grained, reddish sedimentary rock. Elevations: 1000-2590ft. (305-790m.) Blooms May-Sep.	Not Expected	While suitable chaparral habitat is present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None G5T3/S3 4.3	Annual herb. Chaparral, coastal scrub. Dry soils, shrubland. 4-. Elevations: 5-2905ft. (1-885m.) Blooms Jan-Jul.	Low Potential	While suitable chaparral and scrub habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period.
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lily	None/None G4T4?/S4? 4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland. Yellow-pine forest or openings, oak canyons. Elevations: 100-5905ft. (30-1800m.) Blooms Mar-Jul(Aug).	Low Potential	While suitable chaparral and scrub habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Lupinus paynei Payne's bush lupine	None/None G1Q/S1 1B.1	Perennial shrub. Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. Elevations: 720-1380ft. (220-420m.) Blooms Mar-Apr(May-Jul).	Not Expected	While suitable scrub and grassland habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Malacothamnus davidsonii Davidson's bush-mallow	None/None G2/S2 1B.2	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy washes. Elevations: 605-3740ft. (185-1140m.) Blooms Jun-Jan.	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Nasturtium gambelii Gambel's water cress	FE/SCE G1/S1 1B.1	Perennial rhizomatous herb. Marshes and swamps. Freshwater and brackish marshes at the margins of lakes and along streams, in or just above the water level. Elevations: 15-1085ft. (5-330m.) Blooms Apr-Oct.	Not Expected	Marshes, swamps, and marshes are absent from the Study Area.
Navarretia fossalis spreading navarretia	FT/None G2/S2 1B.1	Annual herb. Chenopod scrub, marshes and swamps, playas, vernal pools. San Diego hardpan and San Diego claypan vernal pools; in swales and vernal pools, often surrouded by other habitat types. Elevations: 100-2150ft. (30-655m.) Blooms Apr-Jun.	Not Expected	Chenopod scrub, marshes, swamps, playas, and vernal pools are absent from the Study Area.
Navarretia ojaiensis Ojai navarretia	None/None G2/S2 1B.1	Annual herb. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Elevations: 900-2035ft. (275-620m.) Blooms May-Jul.	Moderate Potential	Suitable chaparral, scrub, and grassland habitat are present in the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Navarretia setiloba Piute Mountains navarretia	None/None G2/S2 1B.1	Annual herb. Cismontane woodland, pinyon and juniper woodland, valley and foothill grassland. Red clay soils, or on gravelly loam. Elevations: 935-6890ft. (285-2100m.) Blooms Apr-Jul.	Moderate Potential	Suitable grassland habitat is present in the Study Area.
Opuntia basilaris var. *brachyclada* short-joint beavertail	None/None G5T3/S3 1B.2	Perennial stem. Chaparral, joshua tree woodland, mojavean desert scrub, pinyon and juniper woodland. Sandy soil or coarse, granitic loam. Elevations: 1395-5905ft. (425-1800m.) Blooms Apr-Jun(Aug).	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Orcuttia californica California Orcutt grass	FE/SCE G1/S1 1B.1	Annual herb. Vernal pools. Elevations: 50-2165ft. (15-660m.) Blooms Apr-Aug.	Not Expected	Vernal pools are absent from the Study Area.
Pseudognaphalium leucocephalum white rabbit-tobacco	None/None G4/S2 2B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Sandy, gravelly sites. Elevations: 0-6890ft. (0-2100m.) Blooms (Jul)Aug-Nov(Dec).	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. Elevations: 50-2625ft. (15-800m.) Blooms Jan-Apr(May).	Not Expected	While suitable chaparral and scrub habitat are present in the Study Area, this species was not observed during the reconnaissance field survey, which was performed within the species' blooming period. Additionally, there are no CNDDB occurrences of this species in the last 25 years within five miles of the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Symphyotrichum greatae Greata's aster	None/None G2/S2 1B.3	Perennial rhizomatous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Mesic canyons. Elevations: 985-6595ft. (300-2010m.) Blooms Jun-Oct.	Not Expected	While suitable chaparral habitat is present in the Study Area, this is a conspicuous perennial species that would be identifiable during the reconnaissance field survey, and was not observed in the Study Area.
Invertebrates				
Bombus crotchii Crotch bumble bee	None/SCE G2/S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Not Expected	Density of food plant genera (i.e., Eschscholzia, Eriogonum) is low within the Study Area. Additionally, there are no CNDDB occurrences of this species in the last 25 years within five miles of the Study Area.
Branchinecta lynchi vernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Not Expected	Aquatic habitat is absent from the Study Area.
Danaus plexippus plexippus pop. 1 monarch - California overwintering population	FC/None G4T1T2/S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not Expected	Wind-protected eucalyptus, Monterey pine, and/or cypress trees are absent from the Study Area. Additionally, the eucalyptus trees within the Study Area are scattered and do not provide suitable roosting habitat.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Euphydryas editha quino quino checkerspot butterfly	FE/None G5T1T2/S1S2	Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	Not Expected	Food plants (i.e., *Plantago erecta*, *Plantago insularis*, and *Orthocarpus purpurescens*) are absent from the Study Area.
Streptocephalus woottoni Riverside fairy shrimp	FE/None G1G2/S1S2	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Not Expected	Aquatic habitat is absent from the Study Area.
Fish				
Catostomus santaanae Santa Ana sucker	FT/None G1/S1	Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae.	Not Expected	Aquatic habitat is absent from the Study Area.
Gasterosteus aculeatus williamsoni unarmored threespine stickleback	FE/SE G5T1/S1 FP	Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation.	Not Expected	Aquatic habitat is absent from the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Gila orcuttii arroyo chub	None/None G2/S2 SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave and San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Not Expected	Aquatic habitat is absent from the Study Area.
Amphibians				
Anaxyrus californicus arroyo toad	FE/None G2G3/S2 SSC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Not Expected	Aquatic habitat is absent from the Study Area. Additionally, there are no CNDDB occurrences of this species in the last 25 years within five miles of the Study Area.
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Aquatic habitat is absent from the Study Area. Additionally, there are no CNDDB occurrences of this species within five miles of the Study Area.
Spea hammondii western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	Vernal pools are absent from the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Reptiles				
Anniella spp. California legless lizard	None/None G3G4/S3S4 SSC	Contra Costa County south to San Diego, within a variety of open habitats. This element represents California records of Anniella not yet assigned to new species within the Anniella pulchra complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Low Potential	Potentially suitable chaparral, scrub, and grassland habitat occurs within the Study Area. However, moist and loose soils are generally absent from the Study Area.
Arizona elegans occidentalis California glossy snake	None/None G5T2/S2 SSC	Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils.	Low Potential	Moderately suitable scrub and grassland habitat occurs within the Study Area. However, all CNDDB occurrences within five miles of the Study Area are more than 50 years old.
Aspidoscelis tigris stejnegeri coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate Potential	Moderately suitable chaparral, scrub and grassland habitat occurs within the Study Area outside the project site. The closest CNDDB record is approximately 1.6 miles south of the Study Area on the south side of the Santa Clara River.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Aquatic habitat is absent from the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Phrynosoma blainvillii coast horned lizard	None/None G3G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Moderate Potential	Moderately suitable chaparral, scrub and grassland habitat occurs within the Study Area outside the project site. The closest CNDDB record is approximately 1.6 miles south of the Study Area on the south side of the Santa Clara River.
Birds				
Accipiter cooperii Cooper's hawk	None/None G5/S4 WL	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks.	Not Expected	Suitable habitat (i.e., open areas adjacent to riparian trees) is generally absent from the Study Area. Fremont cottonwood and arroyo willow trees occur in the Fremont cottonwood woodland vegetation community in the southwestern portion of the Study Area. However, this vegetation community is isolated, and only occupies a small portion of the Study Area. Therefore, nesting and foraging habitat is absent from the Study Area.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Low Potential	While the Study Area contains scrub and chaparral habitat, these areas contain dense vegetation, and are not located near steep, rocky hillsides.
Ammodramus savannarum grasshopper sparrow	None/None G5/S3 SSC	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Not Expected	Native grasslands with a mix of grasses, forbs, and scattered shrubs are absent from the Study Area. The grassland habitat within the Study Area (wild oats and annual brome grasslands) is dominated by non-native species, and is bisected by two roads.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Artemisiospiza belli belli Bell's sage sparrow	None/None G5T2T3/S3 WL	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart.	Low Potential	Chamise-dominated chaparral is absent from the Study Area. Scrub community present on site may provide some low-quality habitat.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	While scrub habitat is present in the Study Area, California ground squirrel and suitable burrows were not observed during the reconnaissance survey.
Buteo swainsoni Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected	Riparian habitat is absent from the Study Area. While trees are present in the Study Area that could support nesting, the Study Area habitat would not provide sufficient rodent numbers to support foraging, especially considering the adjacent developed areas.
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Not Expected	Riparian habitat associated with flood-bottoms of larger river systems is absent from the Study Area.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Gymnogyps californianus California condor	FE/SE G1/S1 FP	Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Not Expected	Vast expanses of open savannah, grassland, and foothill chaparral for foraging are absent from the Study Area. Canyons with rock-walls for nesting are also absent from the Study Area.
Elanus leucurus white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Not Expected	Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching are absent from the Study Area.
Empidonax traillii extimus southwestern willow flycatcher	FE/SE G5T2 / S1	Riparian woodlands in Southern California.	Not Expected	Riparian woodlands are absent from the Study Area.
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not Expected	Prairie, bald hills, mountain meadows, open coastal plains or fallow grain fields are absent from the Study Area.
Lanius ludovicianus loggerhead shrike	None/None G4/S4 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Low Potential	The scrub and habitat is present in the Study Area may provide suitable nesting habitat. However, open areas for foraging are generally absent, considering the proximity to developed areas.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Polioptila californica californica coastal California gnatcatcher	FT/None G4G5T3Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	Low Potential	The Study Area contains coastal sage scrub habitat within the California sagebrush scrub vegetation community. However, the project site is surrounded by development, including the RVWTP to the south, Central Park to the north, developed roadways to the west, and agricultural operations to the east. Additionally, the project site is located in the northern limits of the range of this species.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Not Expected	Riparian habitat is absent from the Study Area.
Mammals				
Euderma maculatum spotted bat	None/None G4/S3 SSC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Typically forages in open terrain; over water and along washes. Feeds almost entirely on moths. Roosts in rock crevices in cliffs or caves. Occasionally roosts in buildings.	Low Potential	Suitable roosting habitat (rock crevices in cliffs or caves) is absent from the Study Area. Use of the Study Area by this species would be for foraging only.
Eumops perotis californicus western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferiferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Low Potential	Suitable roosting habitat (rock crevices in cliffs and caves) is absent from the Study Area. While buildings associated with the RVWTP are present in the Study Area, they are frequently disturbed, consistently generate noise, and do not provide suitable roosting habitat. Use of the Study Area by this species would be for foraging only.

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Low Potential	Only marginally suitable habitat for this species is present in the Study Area given the adjacent development. Additionally, suitable burrows were not observed during the reconnaissance survey.

Regional Vicinity refers to within a 9-quad search radius of Study Area.

Status (Federal/State)

FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

CRPR (CNPS California Rare Plant Rank)

1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

CRPR Threat Code Extension

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

Additional notations may be provided as follows

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

Appendix C

Cultural Resources Assessment

CONFIDENTIAL APPENDIX

**To protect sensitive information about the location and nature of cultural resources, this appendix is not included in the public draft of this document.

Appendix D

Construction Noise Modeling Files

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/15/2023
Case Description: SCVWA RVWTP Construction Noise

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Demolition	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40	80.0		50.0	0.0
Drum Mixer	No	50		80.0	50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Compressor (air)	No	40	80.0		50.0	0.0
Crane	No	16	85.0		50.0	0.0
Mounted Impact Hammer (hoe ram)	Yes	20		90.3	50.0	0.0
Generator	No	50	82.0		50.0	0.0

Results

Equipment	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
	Calculated (dBA)					
	Noise Limit Exceedance (dBA)					

	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Backhoe					80.0	76.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Drum Mixer					80.0	77.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Compressor (air)					80.0	76.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Compressor (air)					80.0	76.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Crane					85.0	77.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Mounted Impact Hammer (hoe ram)					90.3	83.3		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
Generator					82.0	79.0		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	
			Total		90.3	87.1		N/A		N/A		N/A
	N/A	N/A		N/A		N/A		N/A	N/A		N/A	