STATE CLEARINGHOUSE NUMBER

IDYLLWILD WASTEWATER TREATMENT PLANT IMPROVEMENT PROJECT

Draft Initial Study with Proposed Mitigated Negative Declaration

MAY 2024

Dewberry

SUBMITTED BY
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SUBMITTED TO
Idyllwild Water District
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Initial Study

1) **Project Title**: Idyllwild Wastewater Treatment Plant Improvement Project
2) **Lead Agency Name and Address**:
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   25945 CA-243, Idyllwild, California 92549
3) **Contact Person and Phone Number**:
   Nathan Thomas
   SUSP Engineering
   916-553-4900
4) **Project Location**: 52335 Apela Drive, City of Idyllwild, Riverside County, California, Assessor's Parcel Number(s) 557-120-002 and a portion of 557-120-001.
5) **Project Sponsor's Name and Address**:
   SUSP Engineering
   1234 N Market Boulevard, Sacramento, California
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6) **General Plan Designation(s)**: Public Facilities (PF)
7) **Zoning Classification(s)**: Controlled Development Area Zone (W-2)

1. Introduction

The Idyllwild Water District (IWD) proposes to improve the Idyllwild Wastewater Treatment Plant (WWTP) (herein referred to as the "proposed project" or "project") that was constructed in 1966 and became operational in 1971. The improvements to the WWTP are needed to continue to adequately receive and treat wastewater from the residents and businesses of Idyllwild while conforming to current local (Riverside County), state and federal wastewater treatment regulations. The project includes upgrades to headworks, equalization, and secondary treatment facilities at the WWTP, installation of new controls and a plant wide Supervisory Control and Data Acquisition (SCADA) system.

The IWD is the lead agency under the California Environmental Quality Act (CEQA). The California Rural Water Association (CRWA) is providing technical assistance to the IWD under an agreement with their subsidiary SUSP Engineering. Previously under the Santa Ana Watershed Project Authority (SWAPA) Disadvantaged Community Involvement Program, CRWA performed a feasibly study and general preliminary engineering report supporting the project.

1.1 Circulation Information

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) was submitted to the State Clearinghouse on May 24, 2024, for a 30-day public review period that will end on Monday June 24, 2024. During the public review period, the Draft IS/MND will be available for review at the following locations:

- Idyllwild Water District 25945 CA-243, Idyllwild, California 92549
- Idyllwild Water District Website https://www.idyllwildwater.com/
- Max and Beatrice Krone Library 5200 Temecula Road #38 Idyllwild, California 92549

Comments can be submitted via email to Chris Graham (cgraham@Dewberry.com), subject line: Idyllwild WWTP Improvement Project – Public Comment. Comments can also be sent by mail to:

Idyllwild WWTP Improvement Project – Public Comment
ATT: Chris Graham
11060 White Rock Road
Suite 200
Rancho Cordova, California 95670
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Comments will be accepted until 5:00 PM on Monday June 23, 2024.

1.2 Summary of Findings

The Draft IS/MND prepared for the proposed project assesses the potential effects on the environment and the significance of those effects. Based on the result of this IS/MND, the proposed project would not have significant impacts on the environment once mitigation measures, best management practices, and standard project conditions are implemented. The IS/MND supports the following findings:

- The proposed project would have no impact on aesthetics, agriculture and forestry resources, energy, geology and soils (including paleontological resources), hydrology and water quality, land use and planning, mineral resources, population and housing, public services, recreation, utilities, and wildfire.
- The proposed project would have less than significant impacts on air quality, greenhouse gas emissions, hazards and hazardous materials, noise, and transportation.
- Once mitigation measures are implemented, the proposed project would have a less than significant impact on biological resources, cultural resources, and tribal cultural resources.
- No substantial evidence exists that the proposed project would have a significant and unavoidable or adverse effect on the environment.

1.3 Background

The WWTP was constructed in 1966 and became operational in 1971 after the construction of the collection system was completed. Currently, IWD provides water and sewer services to approximately one third of the community of Idyllwild, covering a service area of 2,520 acres through 1,650 water and 587 sewer connections. The remaining residences and businesses are on septic systems as there are no other regulated wastewater treatment operations of similar scale in the area. Due to the geographic constraints, there are currently no plans to incorporate the remaining parts of the service area into the collection system. The geographic distance also precludes the possibility of consolidating with neighboring systems.

The WWTP is an activated sludge plant operated in extended aeration mode for biological removal of nitrogen with a capacity of 0.25 Million Gallons per Day (MGD). The system operates under a National Pollutant Discharge Elimination System (NPDES) Permit No R8- 2015-0028 issued by the Santa Ana Regional Water Quality Control Board (RWQCB) on July 1, 2015.

The District's wastewater collection system is a gravity flow system and consists of approximately 63,000 feet of 4-, 8-, 10-, and 18-inch sewer lines and mains. Pipeline blockages are not uncommon within the collection system. Further, inflow and infiltration is also an issue due to the age of the system (50 years). IWD has instituted a program

to video survey parts of the collection system annually to identify potential leakage issues and fix them as identified. IWD is not a combined sewer system, which means that storm water runoff and sewage collection system are separated. The collection system is meant to collect only wastewater and deliver it to the treatment plant, although all of the storm flow cannot be excluded from the collection system, and the WWTP does see a surge in flows due to periods of heavy rainfall. As a result, inflow and infiltration is a concern at the WWTP resulting in much higher influent flows during rainfall events causing the capacity of treatment units to be exceeded. This results in inadequate retention times, insufficient treatment, and exceedance of permit discharge limits. The existing WWTP has not been upgraded since its construction in 1966, aside from replacement of individual equipment and a headworks modification in 2019. The WWTP is composed of the following main components: Headworks, Equalization Tank, Aeration Tank with Clarifier and Aerobic Digester, RAS/WAS Pumping System and Centrifugal Blowers, Spray Fields and Percolation Ponds, and Sludge Drying Beds. These existing components of the WWTP and the upgrades proposed as part of the project are further discussed below in Section 2.0 Project Description.

2. Project Description

2.1 Project Location

Regionally, the proposed project is located in unincorporated Riverside County within the community of Idyllwild, in the San Bernardino Mountains, approximately 30 miles east of Hemet (**Appendix A: Figure 1-1**). Specifically, the proposed project is located on Assessors' Parcels Number (APNs) 557-120-002 and a portion of 557-120-001, along Apela Drive and Temecula Road in the community of Idyllwild (**Appendix A: Figure 1-2**). The project site has an existing Riverside County land use designation of Public Facilities (PF) and is zoned as Controlled Development Areas (W-2).

The land use pattern in the community of Idyllwild/Pine Cove features small lot residential development and commercial uses, as well as large areas devoted to camps, conference centers, retreats, and higher education in music and the arts. Surrounding General Plan land use designations include Open Space-Conservation Habitat (OS-CH), Open Space-Water (OS-W), Estate Density Residential (EDR), Medium Density Residential (MDR), and Rural Mountainous (RM). Surrounding zoning designations include Watercourse, Watershed and Conservation Zone Areas (W-1), W-2, and rural residential (RR).

2.2 Existing Conditions

The project site is currently occupied by the existing Idyllwild WWTP which is approximately 34,800 square feet and includes a treatment capacity of 0.25 million gallons per day (MGD). The system is operated manually. The major components of the system include headworks, equalization tank, aeration tank with clarifier and aerobic digester, RAS/WAS pumping system and centrifugal blowers, spray fields and percolation ponds, and sludge drying beds. The project site is bounded by access roads to the east and the WWTP to the north, and supports a moderate-to-dense montane hardwood-conifer habitat.

The existing Idyllwild WWTP was constructed in 1966 and became operational in 1971, making it over 50 years old and has now exceeded its design life. The main issues with the existing WWTP that would be addressed by the proposed project include redundancy, permit exceedances, limited equalization capacity, and lack of supervisory control and data acquisition (SCADA) controls.

2.3 Purpose and Need and Project Objectives

The purpose of the project is to modernize the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community.

The project is needed because the existing WWTP is old and beyond its useful life and needs to be upgraded to meet current wastewater standards and processes.

The most urgent issue the WWTP faces is the aging infrastructure, lack of redundancy, and declining treatment efficiency at the existing WWTP. Lack of redundancy makes regular maintenance activities difficult to perform and limited to those that can occur within a 24-hour period. Although the flow can be diverted to the existing EQ (equalizing) basin for a brief period for minor repairs, capital maintenance and longer repairs cannot currently be accomplished. Furthermore, adequate removal of biological oxygen demand (BOD), total suspended solids (TSS), and nitrogen is occasionally not being achieved with the existing biological treatment system. Variations in BOD and TSS loading, as well as wet weather events, overload the single treatment unit, resulting in violations of permit regulations. The objectives of the proposed project are to improve the following:

- **Increase Redundancy:** The existing WWTP consists of a single process train with the headworks and the aeration basin. Without any redundancy, bypass, or excess equalization the treatment unit cannot be removed from service for maintenance and repair. As the WWTP ages, system components need to be repaired and replaced more frequently. The current EQ basin size of 113,000 gallons (equal to approximately one day of average daily flow (ADF)) does not allow sufficient time to make repairs or change out parts. Due to recent fluctuations in flows, Idyllwild Water District (IWD) is not confident that treatment can be paused even for 24 hours. Redundancy in treatment is essential for efficient operation and adequate maintenance.
- **Ensure that Permit Thresholds are Not Exceeded:** Generally, the WWTP produces quality effluent but there have been issues with treatment efficiency in the last eight years that have caused effluent samples to be outside permit limits. Weekly and monthly permit limits for BOD and TSS and corresponding removal efficiencies are exceeded periodically either during periods of higher flow (wet weather events) or excessive loading during the summer months. Tin was also reported above reporting limits in five of the 12 months in 2016. Total dissolved solids (TDS) was reported above reporting limits in October 2016, April 2017, and January and February 2019 indicating poor WWTP solids performance. The system needs to improve treatment efficiency for removal of BOD, solids, as well as nitrogen. Treatment efficiency can be improved by maintaining uniform loading in the aeration basins.
- **Improve the Lack of SCADA Controls:** Currently, IWD does not have a supervisory control and data acquisition (SCADA) system that would integrate all facilities under one system and allow modern monitoring and control of the treatment plant, as well as collect system data for future planning and troubleshooting. New instrumentation and controls fully integrated to a data recording computer with the capacity to send out data and alarms automatically would improve operations and help eliminate poor treatment outcomes.

2.4 Proposed Project

The proposed project would improve the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community. The proposed project consists of the following improvements:

- **Headworks to include new flume and splitter box:** The headworks includes a Parshall flume and ultrasonic level transducer installed to measure the amount of influent. The Parshall flume that records the influent flowrate at the plant is 26 inches deep and capable of measuring up to 1,001 gallons per minute (gpm) at 26-inch water depth. However, the ultrasonic level sensor is setup to read only up to 10-inches of water depth, which is about 340 gpm. The new headworks and splitter box will manage flows so the aeration basins receive equalized flow within the treatment capacity of 250,000 gallons per day (gpd) and includes a new Parshall flume to cover the full range of flows expected.
- **Additional equalization for heavy precipitation events/Two new secondary treatment bioreactors:** The WWTP currently has a single process train for secondary treatment without any redundancy. This means that the basin cannot be removed from service for maintenance or repair. Two new bioreactors operating in parallel and two equalization basins are planned. The existing treatment bioreactor will be repurposed to be a second equalization basin. The new facilities will allow for repairs and equipment replacement over the design life of the new plant. Additional equalization will buffer the plant for better performance when storm induced influent rate is high due to large storm events.
- **New sludge holding tank and new sludge handling system:** The active volume of the sludge tank is approximately 60,000 gallons, and at 3,800 gallons per day of production, the tank provides about 15 days of storage, following which the thickened sludge is pumped to the sludge drying beds and excess water is decanted to the anoxic tank. The tank would be improved with a sludge grinder pump with stainless streel lift out assemblies for ease of maintenance and repair. Additionally, the tank would be improved with coarse bubble diffusers for aeration and a high level alarm to alert operators of high sludge levels in the tank. No improvements are planned for the sludge drying beds.
- **New SCADA system to integrate controls for the entire plant site**: Currently, Idyllwild Water District does not have a supervisory control and data acquisition (SCADA) system to integrate all facilities under one system and allow monitoring and control of the treatment plant, as well as collect system data for future planning and troubleshooting. New instrumentation and controls fully integrated to a data recording computer with the capacity to send out data and alarms automatically would be installed to improve operations and help eliminate poor treatment outcomes. The SCADA system and controls will be located in a new electrical building at the site.

- **New blowers and associated controls in existing blower room**: Motorized control valves would be installed to control the flow of air to different WWTP tanks as needed. A standby blower unit would be installed as a backup. Blowers would be sized to fulfill aeration air requirements for the following processes: fine bubble diffusers in bioreactors, coarse bubble diffusers in EQ tanks, coarse bubble diffusers for sludge tank, and air required for operation of air lift pumps.
- **New generator and automatic transfer for standby power:** The WWTP includes an emergency Onan power generator installed in the late 1990s rated at 125 kW to run the entire plant in case of a grid failure or power shutoff. An automatic transfer switch is available to ensure a safe transfer from grid to generator during a power shutdown and to resume power from the grid. The generator is nearly 20 years old and does not meet air quality regulations set forth by South Coast Air Quality Management District (AQMD). As such, a new generator would be installed to replace the existing older generator. fuel tank would be installed to provide power to the new generator in the event of power outages. The new generator will be housed in the new electrical building.

The new bioreactors, sludge holding tank, and generator and controls building would be constructed in undeveloped areas on the project site; the remaining improvements would occur on the existing site of the WTTP. **Appendix A: Figure 1-3** depicts the project site plan.

2.4.1 Utility Relocation

Utility relocation would not be required for implementation of the proposed project.

2.4.2 Vegetation/Tree Removal

The portion of the parcel recently acquired for the proposed project is directly adjacent to the existing WWTP and is in a more natural state than the parcel occupied by the WWTP. Construction of the new bioreactors and new electrical building would require the removal of approximately 12,500 square feet of montane hardwood-conifer forest. The proposed project would be subject to the Riverside County Ordinance No. 559 regulating the removal of trees. The County ordinance prohibits the removal of any living native tree on any parcel or property greater than one-half acre in size, located in an area above 5,000 feet in elevation and within the unincorporated area of the County, without first obtaining a permit to do so.

2.4.3 Construction Activities

The proposed project would be constructed partly on the existing WWTP and partly on recently acquired land adjacent to the existing plant. The construction on the existing site would consist of excavation, installation of water facilities via trenching, precast concrete, and cast in place concrete as well as conduit and electric equipment. The site would be regraded as needed after the construction is completed. Part of the work

would entail repurposing existing tanks on the site and all of the work would be done in previously disturbed areas by moderate sized equipment due to the limited space to work in and the limited excavation needed there.

The installation of new components, specifically, the new bioreactors and new electrical building would occur on the recently acquired parcel (new portion of the site). On the newer portion of the site, larger tanks would be installed requiring larger equipment and more effort. The newer portion of the site would have some existing trees cleared and the affected ground grubbed. This would affect approximately one-third of the acquired land, approximately 12,500 square feet. The areas where the tanks are to be built would be excavated to the shallow bedrock on the site, typically about four (4) feet and the areas would be built up to subgrade with engineered fill. The tanks and other facilities may be constructed on bedrock directly if that is more efficient. Most of the construction would be cast in place concrete with a lesser amount of the same construction types as are employed on the existing site. Heavy excavation equipment and a large bulldozer with a ripper may be used to dislodge less than stable rock formations to achieve a solid base to build on. Soils at the site are acceptable for use as engineered fill and for regrading to finish the site. Additional soils may be imported as needed to complete subgrade work and backfilling. Some ancillary paving for the driveway and embankment armoring with riprap may be done to finish the site at the end of construction.

2.4.3.1 Construction Equipment

Table 2.4.3-1: Construction Equipment provides a description of the type of equipment likely to be used during the construction of the proposed project.

Table 2.4.3-1. Construction Equipment

EQUIPMENT	CONSTRUCTION PURPOSE
Hydraulic Hammer	Excavation
Hoe ram	Excavation
Jack Hammer	Demolition
Water Truck	Earthwork construction + dust control
Bulldozer / Loader	Earthwork construction + clearing and grubbing
Haul Truck	Earthwork construction + clearing and grubbing
Front-End Loader	Dirt or gravel manipulation
Grader	Ground grading and leveling
Dump Truck	Fill material delivery
Bobcat	Fill distribution
Excavator	Soil manipulation and placement of rock slope protection
Compaction Equipment	Earthwork
Roller / Compactor	Earthwork and asphalt concrete construction
Backhoe	Soil manipulation + drainage work
Concrete Truck and Pump	Placing concrete
Paver	Asphalt concrete construction
Truck with seed sprayer	Erosion control landscaping

Generators	Power Hand Tools
Chainsaw	Clearing trees
Log truck	Removing felled trees

2.4.3.2 Construction Schedule and Timing

Construction is expected to commence in April 2026 and take approximately 18 to 24 months to complete.

2.5 Permits and Approvals Needed

The following permits, reviews, and approvals, shown in **Table 2.5-1: Permits and Approval Needed,** are required for proposed project construction.

Table 2.5-1. Permits and Approvals Needed

AGENCY	PERMIT/APPROVAL	STATUS
State Water Resources Control Board	National Pollutant Discharge Elimination System (NPDES) Construction General Permit	Prepared after CEQA clearance and during final design.
Regional Water Quality Control Board, Santa Ana Region	Waste Discharge Requirements	Prepared after CEQA clearance and during final design.
Idyllwild Water District	Approval of CEQA IS/MND	Follows public circulation of the CEQA IS/MND.
South Coast Air Quality Management District	Rules and Regulations, Stationary Source Permit for Public and Private Waste Water Treatment Works, Authority to Construction and Permit to Operate	Required during final design prior to commencement of construction.
Riverside County	Building Permit, Tree Removal Permit	Required during final design prior to commencement of construction.
	Erosion Control Permit, Grading Permit	Required prior to commencement of construction.

3. Environmental Factors Potentially Affected

The proposed project could potentially affect the environmental factor(s) checked below. The following pages present a more detailed checklist and discussion of each environmental factor.

☐ 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

3.1 Determination: (To be completed by Lead Agency)

On the basis of this initial study:

- ☐ 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 in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the 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 "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An

ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

NAME (PRINT)	DATE
Curt SAUER	5/2/24
SIGNATURE	**FOR**
Curt Sauer	Idyllwild Water District

4. Environmental Analysis

This section of the IS/MND evaluates the potential effects on the physical environment due to implementation of the proposed project. This analysis has been prepared to determine whether any of the conditions in CEQA Guidelines Section 15162 would occur as a result of the proposed project.

The proposed project would result in negligible physical effects and would not cause significant impacts to the following resources. These resources are not discussed further in this IS/MND.

- Aesthetics: Idyllwild is located on a mountainous terrain with the Idyllwild Wastewater Treatment Plant (WWTP) at the lowest elevation within the service area (California Rural Water Association, 2021). The proposed project site is surrounded by many trees and thick ground vegetation which shields views of the WWTP from the adjacent roadways. Given the low visual profile of the existing treatment plant facility and the undeveloped nature of surrounding areas, the existing WWTP is barely visible from any developed areas in the vicinity of the existing facility.

  None of the proposed project upgrades or features would have a substantial adverse effect upon any scenic vistas nor would they degrade any existing scenic resources or the visual character or quality of its surroundings. The proposed project would not create any new sources of substantial light or glare which would affect day or nighttime views in the area. Therefore, the proposed project would have ***no impact*** regarding aesthetics.

- Agriculture and Forestry Resources: The project site and surrounding parcels are not zoned for or have a designated land use of agriculture or forestry resources. The proposed project area and surrounding land is not mapped by the Farmland Mapping and Monitoring Program (FMMP). There are no lands operating under Williamson Act contracts within or adjacent to the proposed project site. The County General Plan does not identify commercially significant timberlands within or adjacent to the proposed project boundaries. Therefore, the proposed project would have ***no impact*** on agriculture and forestry resources.

- Energy: The proposed project would not result in capacity increases for vehicles, increase average daily travel or vehicle miles traveled. Operations of the proposed project would not result in new energy demands over time and would be similar to existing conditions upon completion of construction. More so, the upgrades to existing equipment such as the RAS/WAS pumping system and centrifugal blowers would result in increased energy efficiency of these operations. During construction, BMPs would be implemented to reduce impacts to energy use, such as limiting idling time for construction equipment and require equipment to meet current standards. The proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Therefore, the proposed project would have ***no impact*** to energy.

- Geology and Soils: The nearest faults to the proposed project area are the Hot

Springs, Clark and South Fork Faults. The Hot Springs Fault is a late quaternary fault and is located approximately two miles southwest of the proposed project area. The Clark Fault is a Halocene fault and is located approximately six miles southwest of the proposed project area. The South Fork Fault is also a Halocene fault and is located approximately five miles south of the proposed project area (California Rural Water Association, 2021). The proposed project site is not within an Alquist-Priolo Fault-Rupture Zone and is not on a known fault; therefore, fault rupture would not occur within the project site (California Geological Survey, 2022). The soil types present at the project site, Wind River-Oak Glen Family and Morical-Wind River Family are not considered hydric soils (California Geological Survey, 2022). The proposed project would comply with federal, state, and local rules, regulations and requirements and implement best management practices (BMPs) pertaining to erosion control prevention. Therefore, the proposed project would have ***no impact*** to geology and soils.

- Hydrology and Water Quality: The proposed project would comply with federal, state, and County requirements and would implement BMPs pertaining to stormwater runoff and erosion control prevention through the development of a Stormwater Pollution Prevention Plan as part of the National Pollutant Discharge Elimination System permit. The tree removal required for implementation of the proposed project would be negligible in changing surface drainage patterns due to the limited size of the project area and because the project area is in a developed area with compacted and disturbed soils. The proposed project would not alter the course of a water body, nor would it alter groundwater recharge, discharge, or flow conditions. Therefore, the proposed project would have ***no impact*** regarding hydrology and water quality.
- Land Use and Planning: The proposed project would upgrade the Idyllwild Wastewater Treatment Plant (WWTP) to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community, as well as meet current wastewater treatment standards and processes. The proposed project would be consistent with existing and future land use designations and zoning classifications in the project area. The proposed project would not divide an existing community. Thus, the proposed project would have ***no impact*** regarding land use and planning.
- Mineral Resources: According to the Riverside County General Plan Multipurpose Open Space Element and the California Geological Survey (CGS), the project site is not within a mineral resource area (MRA) designated area (Riverside County, 2015). The closest MRA, MRZ-3 (significance of mineral deposits undetermined), is located approximately 16 miles west of the proposed project site. Although the County of Riverside has extensive deposits of clay, limestone, iron, sand, and aggregates, there are no known current mineral resources, mineral extraction areas, mineral extraction facilities, or mineral recovery sites within, or adjacent to, the project site. Therefore, the proposed project would have ***no impact*** to mineral resources.
- Population and Housing: The proposed project would upgrade the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for

the Idyllwild community, as well as meet current wastewater treatment standards and processes. The proposed project would not change the land use patterns surrounding the project site and is being improved to support planned growth. The proposed project would not increase the capacity of roadways, nor would it displace people or housing units. Therefore, the proposed project would have ***no impact*** on population and housing.

- Public Services, Recreation and Utilities: The construction and/or operation of the proposed project would not increase the need for additional public services or other utilities in the area. The proposed project would upgrade the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community, as well as meet current wastewater treatment standards and processes. As such, the proposed project would not require additional needs from the County, including but not limited to, police, fire, other utilities, parks, and/or recreation facilities. Construction workers are anticipated to come from surrounding areas, and thus would not relocate to the proposed project vicinity. The proposed project would not increase population and would not result in an increased demand for public services, recreation facilities, or utilities. Therefore, the proposed project would have ***no impact*** on these resources.

4.1 Air Quality

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

Issues	Determination
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less Than Significant Impact
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less Than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less Than Significant Impact
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less Than Significant Impact

4.1.1 Setting

The proposed project is located in the town of Idyllwild, an unincorporated community located in the San Jacinto Mountains, about 45 miles west of Palm Springs in Riverside County. Together with Pine Cove and Fern Valley, it is a part of the Idyllwild/Pine Cove Census Designated Place and covers an area of 13.73 square miles. Riverside County is located within three air basins, including the South Coast Air Basin, Salton Sea Air Basin, and the Mojave Desert Air Basin. Western Riverside County, where the proposed project site is located, is within the South Coast Air Basin (SCAB) (County of Riverside, 2018). The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties. Air quality conditions in the SCAB are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air quality districts are public health agencies whose mission is to improve the health and quality of life for all residents through effective air quality management strategies.

The federal Clean Air Act (CAA) requires the U.S. Environmental Protection Agency (US EPA) to set National Ambient Air Quality Standards (NAAQS) for major pollutants that could be detrimental to the environment and human health. The California Ambient Air Quality Standards (CAAQS) are the California equivalent of the NAAQS. An air basin is in “attainment” (compliance) when the levels of the pollutant in that air basin are below NAAQS and CAAQS thresholds. **Table 4.1.1-1: NAAQS** provides information on the NAAQS and **Table 4.1.1-2: CAAQS** provides information on the CAAQS.

Table 4.1.1-1: NAAQS

POLLUTANT		STANDARD TYPE	AVERAGING TIME	CONCENTRATION THRESHOLD	FORM
Carbon monoxide (CO)		Primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Lead (Pb)		Primary and secondary	Rolling 3-month average	0.15 µg/m^3	Not to be exceeded
Nitrogen dioxide (NO_2)		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and secondary	1 year	53 ppb	Annual mean
Ozone (O_3)		Primary and secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
Particulate matter (PM)	$PM_{2.5}$	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
		Primary and secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and secondary	24 hours	150 µg/m^3	Not to be exceeded more than once per year on average over 3 years
Sulfur dioxide (SO_2)		Primary	1 hour	75 ppb	99th percentile of 1 hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Source: U.S. EPA, 2023

Table 4.1.1-2: CAAQS

POLLUTANT	AVERAGING TIME	CONCENTRATION THRESHOLD
Carbon monoxide (CO)	8 hours	0.09 ppm
	1 hour	0.070 ppm
Lead (Pb)	1.5	0.15 µg/m^3
Nitrogen dioxide (NO_2)	1 hour	0.18 ppm
	Annual arithmetic mean	0.030 ppm
Ozone (O_3)	8 hours	0.09 ppm

POLLUTANT		AVERAGING TIME	CONCENTRATION THRESHOLD
		1 hour	0.070 ppm
Particulate matter (PM)	$PM_{2.5}$	Annual arithmetic mean	12.0 µg/m^3
	PM_{10}	24 hours	50 µg/m^3
		Annual arithmetic mean	20 µg/m^3
Sulfur dioxide (SO_2)		1 hour	0.25 ppm
		24 hours	0.04 ppm
Visibility reducing particles		9 hours	Extinction of 0.23 per kilometer
Sulfates		24 hours	25 µg/m3
Hydrogen sulfide		1 hour	0.03 ppm
Vinyl chloride		24 hours	0.01 ppm

Source: CARB, 2016

According to the Air Quality Management Plan (AQMP) adopted by the SCAQMD for the air basin, the worst air quality problem in the nation occurs in the SCAB (County of Riverside, 2018). With very light average wind speeds, the basin atmosphere has limited capability to disperse air contaminants horizontally. In addition, the vertical dispersion of air pollutants in the SCAB is hampered by the presence of a temperature inversion in the layers of the atmosphere near the earth's surface. The proposed project site is located in an area that is currently in federal and state non-attainment for ozone, $PM_{2.5}$, and PM_{10} (California Air Resources Board [CARB], 2020).

South Coast AQMD is in the process of developing an "Air Quality Analysis Guidance Handbook" to replace the CEQA Air Quality Handbook approved by the South Coast AQMD Governing Board in 1993. While the new Handbook is being prepared, the South Coast AQMD provides supplemental information, such as the South Coast AQMD Air Quality Significance Thresholds and Localized Significance Thresholds for conducting air quality analysis.

4.1.2 Discussion

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

The proposed project would upgrade the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community, as well as meet current wastewater treatment standards and processes. Operations of the proposed project would not increase automobile capacity or create other permanent new sources of air quality emissions. Operations would be similar to existing conditions upon construction completion.

The primary source of air pollution would occur as a result of construction activities (i.e., grading) and construction vehicle emissions. The proposed project would comply with the South Coast Air Quality Management District's air quality guidelines and would

implement construction best management practices (BMPs), as described in detail under Impact Section b, below. The proposed project would not conflict with or obstruct implementation of the South Coast AQMD Air Quality Significance Thresholds, nor state goals or regulations during construction or operation. This impact is considered ***less than significant***. No mitigation measures are required.

b) Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project is non-attainment under an applicable federal or state ambient air quality standard?

As stated above, the proposed project is in an area of federal and state non-attainment for ozone, $PM_{2.5}$, and PM_{10} (CARB, 2022). Operations of the proposed project would not increase automobile capacity or create other permanent new sources of emissions. Thus, operations of the proposed project would not result in new sources of emissions of criteria pollutants over time, including $PM_{2.5}$, PM_{10}, and ozone and would not create any additional long-term air quality emissions beyond what currently exists. The primary source of air pollution for the proposed project would occur as a result of construction activities and construction vehicle emissions. The proposed project would contribute temporary incremental increases in emissions; however, the construction emissions would not exceed the SCAQMD thresholds.

Construction emissions were modelled using the California Emissions Estimator Model (CalEEMod). For the purpose of this analysis, it was assumed that construction would last 24 months, the project area would be a total of 1.73 acres, and the maximum area disturbed per day would be less than 1 acre per day. It was also assumed that all on-road equipment used for the proposed project would be year 2010 or newer models, and all construction equipment would meet California Air Resources Board (CARB) Tier 4 requirements for off-road equipment (See **Appendix C** for the CalEEMod results). Estimated criteria air pollutant emissions generated by the proposed project's construction and applicable SCAQMD significance thresholds are provided below in **Table 4.1.2-1: Construction Emissions Estimations**. The proposed project would not exceed the SCAQMD significance thresholds during construction as shown below in **Table 4.1.2-1**.

Table 4.1.2-1: Construction Emissions Estimations

CONSTRUCTION YEAR	POLLUTANT (MPOUNDS PER DAY)			
	NO_X	PM_{10}	$PM_{2.5}$	CO
2025	7.10	0.34	0.32	8.70
2026	6.61	0.31	0.28	8.67
2027	6.26	0.28	0.26	8.68

CONSTRUCTION YEAR	POLLUTANT (MPOUNDS PER DAY)			
	NO_X	PM_{10}	$PM_{2.5}$	CO
SCAQMD Significance Thresholds	100	150	55	550
Exceed SCAQMD Thresholds?	***No***	***No***	***No***	***No***

Source: Dewberry, 2024

Air quality impacts related to construction would be temporary, lasting approximately 24 months, and would cease upon construction completion. The following BMPs would be implemented to further minimize construction emissions.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeper is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.
- Provide current certificate (s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1].
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

With implementation of the above referenced BMPs, the proposed project would not result in Appendix Ca cumulatively considerable net increase of criteria pollutants during construction. Impacts would be ***less than significant,*** and no mitigation measures are required.

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

Sensitive receptors in the proposed project vicinity include facilities associated with the Idyllwild Arts Amphitheater, located approximately 230 feet from the site. Sensitive receptors would be exposed to temporary construction emissions. As discussed above, under Impact Discussion b, the proposed project would not exceed the South Coast AQMD thresholds for emissions during construction (refer to **Table 4.1.2-1**). The sensitive receptors in the vicinity of the project site would experience a brief exposure period, of no more than 24 months. Project construction would not exceed the two-year exposure assumed for health risk analysis for small construction projects and the three-year exposure period assumed for PM_{10} and CO hotspot analysis (Caltrans, 2022). In addition, the proposed project would implement BMPs, as described in Impact Discussion b, during construction of the proposed project, thus lowering exposure of sensitive receptors to pollutants. Therefore, with construction emissions less than SCAQMD thresholds and the implementation of construction BMPs, impacts from construction activities would be ***less than significant***. No mitigation measures are required.

Sensitive receptors would not experience a permanent increase in air pollutant emissions as a result of project operation because the new facility is not an expansion of capacity. Operations would be similar to existing conditions and would not result in new sources of emissions of criteria pollutants over time, including $PM_{2.5}$, PM_{10}, and ozone. The proposed project would not exceed air quality emissions thresholds during operation; therefore, impacts to sensitive receptors would be ***less than significant***. No mitigation measures are required.

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

The proposed project would not create any long-term air quality emissions or odors beyond what is being generated under existing conditions. Operations would be similar to existing conditions upon construction completion.

Project-related odor emissions would be predominately limited to the construction period. Odors would be generated from vehicles and/or equipment exhaust emissions during construction and may be unpleasant in the immediate areas. Such odors would be temporary and would cease at the end of each workday and would rapidly dissipate.

Overall, implementation of the proposed project would not generate other emissions, such as odors, that would adversely affect a substantial number of people during construction and operation. Impacts would be ***less than significant,*** and no mitigation measures are required.

4.1.3 References

California Air Resources Control Board (CARB). 2016. Ambient Air Quality Standards. Online: https://ww2.arb.ca.gov/resources/documents/ambient-air-quality-standards-0. Accessed: July 5, 2023.

California Air Resources Control Board (CARB). 2022. Maps of State and Federal Area Designations. Online: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed: November 16, 2023.

California Department of Transportation (Caltrans). 2022. SER Vol 1 Chapter 11 Air Quality. Online: https://dot.ca.gov/programs/environmental-analysis/standard-environmental-reference-ser/volume-1-guidance-for-compliance/ch-11-air-quality. Accessed: January 8, 2024.

California Emissions Estimator Model, California Air Pollution Control Officers Association. Online: https://caleemod.com/. Accessed: January 22, 2024. **Appendix B.**

United States Environmental Protection Agency (U.S. EPA). 2023. National Ambient Air Quality Standards Table (NAAQS). Online: https://www.epa.gov/criteria-air-pollutants/naaqs-table. Accessed: July 5, 2023.

4.2 Biological Resources

Would the project:

Issues	Determination
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, U.S. Fish and Wildlife Service, or NOAA Fisheries?	Less Than Significant with Mitigation Incorporated
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	No Impact
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	No Impact
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact

An evaluation of biological resources was conducted to determine whether any special-status species or sensitive habitat occurs within the proposed project area, totaling approximate 1.7 acres. The evaluation consisted of a background research (i.e., literature search, database queries) and a field survey. Prior to conducting the field survey, the following background research was conducted:

- Review of the USGS 7.5-minute topographic quadrangle for Idyllwild, CA (USGS 2023);
- Review of color aerial photography for vegetative, topographic, and hydrologic signatures;
- Review of the California Natural Diversity Database (CNDDB) Rarefind 5 online program (2023);

- Review of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (online edition online edition, v9.5) (2023);

A field survey was conducted within the proposed project area on December 15, 2023, by Dewberry biologist Jeff Bray to determine the habitats present and to assess potential impacts from the proposed project.

4.2.1 Setting

Topography in the proposed project area is generally flat within the limits of the WWTP and slopes moderately to the west in the rest of the proposed project area. The elevation in the proposed project area ranges from approximately 5,030 to 5,070 feet above mean sea level. The topography in surrounding areas is characterized by steep, mountainous terrain.

4.2.1.1 Vegetation Communities and Land Uses

Vegetation communities in the review area were classified in accordance with a Manual of California Vegetation Online version (2023), as appropriate. The proposed project area includes substantial developed area, consisting of the WWTP and the paved access road. Vegetation communities are dominated by Jeffrey pine forest and woodland alliance; a small area of California rose briar patch is associated with an intermittent stream.

Vegetation communities and land uses area shown on Figure 4.2-1 and summarized in Table 4.2.1-1.

Table 4.2.1-1: Vegetation Communities and Land Uses in the Project Area

VEGETATION COMMUNITY / LAND USES	ACRES
Jeffrey Pine Forest and Woodland	0.816
California rose briar patch	0.074
Riverine – Intermittent Stream	0.007
Developed	0.835
TOTAL	**1.732**

Source: Dewberry, 2023.

4.2.1.1.1 Jeffrey Pine Forest and Woodland

The Jeffrey pine forest and woodland alliance is characterized by Jeffrey pine (*Pinus jeffreyi*) as the dominant or codominant tree species with white fir (Abies concolor), incense cedar (*Calocedrus decurrens*), black oak (*Quercus kelloggi*), and interior live oak (*Q. wislizenii*), and Sierra juniper (Juniperus grandes), among other tree species. The canopy is generally of variable density, the shrub layer is sparse to intermittent, and the herbaceous layer is variable (often grass). This alliance occurs on raised stream benches, all slopes and aspects, ridges, and plateaus. Soils are commonly infertile and shallow. In the proposed project area, this alliance occurs all around the WWTP, except

along the intermittent drainage. Jeffrey pine is the dominant trees species; incense cedar, black oak, and interior live oak also occur intermittently. The understory is open to sparse, consisting of saplings of the tree species, mazanita (*Arctostaphylus* sp.), coffeeberry (*Frangula californica*), and Himalayan blackberry (*Rubus armeniacus*). The herbaceous layer consists of predominantly grasses.

4.2.1.1.2 California Rose Briar Patch

The California rose briar patch alliance is characterized by California rose (*Rosa californica*) as is dominant or co-dominant in the shrub canopy with associated species including, but not limited to, California sage (*Artemisia californica*), coyote brush (*Baccharis pilularis*), arroyo willow (*Salix lasiolepis*), and snowberry (*Symphoricarpos mollis*). This alliance occurs in creek bottoms, stream terraces, and bordering sloughs and channels. Soils typically are mixed alluvium. In the proposed project area, this alliance is located along the intermittent stream (see Section 4.2.1.1.3) and is dominated by California rose; other species present include soft rush (Juncus effusus) Himalayan blackberry, and two arroyo willows.

4.2.1.1.3 Riverine – Intermittent Stream

An intermittent stream flows east to west along the north/northwest boundary of the proposed project area. The intermittent stream is a first degree tributary to Strawberry Creek, which flows into Dry Creek and then into the South Fork San Jacinto River. The active channel averages 1-2 feet wide, with a loamy sand substrate, and was not flowing during the December 15, 2023 site visit.

4.2.1.1.4 Developed

Developed areas include the existing WWTP facility (buildings, equipment, etc.) and the paved access road.

4.2.1.2 Special-Status Wildlife Species

Review of the CNDDB (2023) identified 13 special-status wildlife species in the Idyllwild quadrangle that could potentially occur in the proposed project area. Based on review of the habitat requirements for these species and the findings from the field survey, it was determined that the vegetation communities in the proposed project area do not provide suitable habitat for these special-status wildlife species, and they are not expected to occur.

The vegetation communities in the proposed project area could support nesting birds. Various bird species could utilize the Jeffrey pine forest and woodland and potentially the California rose briar patch communities as nesting habitat. The typical nesting season extends from February 1 to August 31.

4.2.1.3 Special-Status Plant Species

Review of the CNPS (2023) and CNDDB (2023) identified 36 special-status plant species in the Idyllwild quadrangle that could potentially occur in the proposed project area (see **Appendix C**). Based on review of the habitat requirements for these species and the findings from the field survey, it was determined that 23 of the 36 plant species identified could potentially occur in the Jeffrey pine forest and woodland community in the proposed project area; none of these species are formally listed under California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA). The CNDDB does not contain records for any of these species in the proposed project area, but based on the presence of suitable habitat, these species could potentially occur.

4.2.1.4 Aquatic Resources

Aquatic resources in the proposed project area are limited to the intermittent stream and associated vegetation, including some areas vegetated with soft rush that appear to be wetlands. The intermittent drainage would likely be regulated by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW).

4.2.1.5 Movement Corridors

Wildlife movement corridors link areas of suitable wildlife habitat that may otherwise be separated by rugged terrain, changes in vegetation, and/or areas of human disturbance or urban development. Topography and other natural factors, in combination with urbanization, can fragment or separate large open-space areas. The fragmentation of natural habitat creates isolated “islands” of habitat that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity. Movement corridors mitigate the effects of this fragmentation by allowing animals to move between remaining habitats, which in turn allows depleted populations to be replenished and promotes genetic exchange between separate populations.

The proposed project area is not located within an established movement corridor. Further, the proposed project area is located west of and adjacent to the Idyllwild Arts Academy and a rural residential subdivision, substantially reducing its value for wildlife movement.

4.2.2 Discussion

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, U.S. Fish and Wildlife Service, or NOAA Fisheries?

This section discusses potential impacts to special-status species, and is limited to the construction of the two new secondary treatment bioreactors and the electrical building.

These two components would be constructed in the Jeffrey pine forest and woodland community; all other components would be constructed within the developed area of the existing WWTP.

4.2.2.1 Special-Status Wildlife Species

Impacts to special-status wildlife species could include direct harm if they were to become trapped in the construction area, encounter construction personnel and/or equipment, or be inhibited from movement through the construction area. The proposed project area does not support suitable habitat for special-status wildlife species. Consequently, the proposed project would not have a substantial adverse effect on special-status wildlife species and no impact would occur.

The project will not directly impact nesting birds as all trees within the impact area will be removed during the non-nesting season (September 1- January 31). If any birds are nesting adjacent to the construction area when construction begins, they could be indirectly impacted from the noise and other disturbance created by the construction activities. However, this is unlikely since the Jeffrey pine and other trees in the construction area are very tall trees, and nests, if present, would be located well above the construction activities. Implementation of **Mitigation Measure BIO-1** would reduce these potential impacts to less than significant levels. Impacts in this regard would be ***less than significant with mitigation incorporated***.

MITIGATION MEASURES

BIO-1: Nesting Birds

- If construction, grading or other project-related activities in the undeveloped portions of the site (i.e., not within the existing WWTP) are scheduled during the nesting season (February 1 to August 31), a preconstruction nesting survey shall be conducted by a qualified biologist within 14 days from the beginning of construction. The preconstruction surveys shall include suitable nesting habitat within 100 feet of the construction.

  If the preconstruction survey does not identify any active nests within areas potentially affected by construction activities, no further mitigation would be required.

  If the preconstruction survey identifies an active nest, a qualified biologist shall establish an appropriate no-work buffer around the active nest(s). The buffer shall be delineated using high visibility fencing. The size of the no-work buffer shall be determined by a qualified biologist based on the species, nest location relative to construction activities, and the nature of the proposed activities. Project activities shall be avoided within the no-work buffer until the nest is deemed no longer active by a qualified biologist.

4.2.2.2 Special-Status Plant Species

As discussed above, it was determined that 23 special-status plant species could potentially occur in the Jeffrey pine forest and woodland community in the proposed project area. If present in the work area, special-status plant species could be directly impacted during construction activities. Implementation of **Mitigation Measure BIO-2** would reduce these impacts to less than significant levels. Impacts in this regard would be ***less than significant with mitigation incorporated***.

MITIGATION MEASURES

BIO-2: Special-Status Plants

- A qualified biologist or botanist shall conduct focused surveys for special-status plants during the normal blooming period for the target species. The surveys shall be conducted within the construction area and prior to any ground disturbing activities. The results of the survey shall be documented in a concise memorandum. If the survey results are negative, work can proceed without additional measures.

- If special-status plant species are identified within the construction area, a salvage and relocation plan shall be prepared to avoid and minimize direct impacts to special-status plants. The plan shall identify the methods of salvage (e.g., seed collection, individual transplants) and the relocation area(s), with onsite relocation areas being preferable. The plan shall also include provisions for long-term protections, monitoring, and management requirements that ensure the salvaged/relocated species are self-sustaining for a minimum of 5 years at a minimum 1:1 compensation-to-impact ratio.

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, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

The proposed improvements to the WWTP would not impact the intermittent drainage or associated vegetation, as the proposed improvements are located within the existing WWTP developed area and on the opposite side of the proposed project area as the intermittent drainage. The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community and ***no impact*** would occur.

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?

The proposed improvements to the WWTP would not impact the intermittent drainage or any associated potential wetlands vegetation, as the proposed improvements are located within the existing WWTP developed area and on the opposite side of the proposed project area as the intermittent drainage. The proposed project would not have a substantial adverse effect on state or federally protected wetlands and ***no impact*** would occur. No mitigation measures are required.

d) Would the proposed 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?

The proposed project area is not located within any known movement corridors and the undeveloped lands in the proposed project area do not provide valuable movement areas for wildlife due to the proximity of the existing WWTP. The proposed project would not substantially remove, degrade, or otherwise interfere with the structure or function of a wildlife movement corridor and ***no impact*** would occur. No mitigation measures are required.

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

Riverside County Ordinance No. 559 Regulating the Removal of Trees prohibits the removal of any living native tree on any parcel or property greater than one-half acre in size, located in an area above 5,000 feet in elevation and within the unincorporated area of the County of Riverside, without first obtaining a permit to do so, unless exempt by provisions listed in Section 4 of the ordinance. The proposed project would be exempt under Section 4.C: Any activities conducted by a public utility, subject to the jurisdiction of the Public Utilities Commission or any other constituted public agency, where, to construct and maintain safe operations of facilities under their jurisdiction, trees are removed, pruned, topped, or braced. The proposed project would not conflict with any local policies or ordinances protecting biological resources and ***no impact*** would occur. No mitigation measures are required.

f) Would the proposed 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 proposed project area is within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area. The District is not a party to the MSHCP but,

as a regional utility provider, could potentially seek coverage as a Participation Special Entity. However, participation in the MSHCP is voluntary, and since the project would not impact special status species (as discussed above), the MSHCP is not applicable to the project. The proposed project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan and ***no impact*** would occur. No mitigation measures are required.

4.2.3 References

California Natural Diversity Database (CNDDB), Rarefind 5 online program (2023), Website: CNDDB Maps and Data (ca.gov), Accessed January 18, 2024.

California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (online edition online edition, v9.5) (2023), Website: California Native Plant Society (cnps.org), Accessed January 18, 2024.

Riverside County Ordinance No. 559, Amended 8/27/1997, An Ordinance of the County of Riverside Amending Ordinance No. 559 Regulating the Removal of Trees, Online: Microsoft Word - 559.7.doc (rivcocob.org), Accessed January 22, 2024.

Riverside County Planning Department, Western Riverside County Multiple Species Habitat Conservation Plan, Website: WR-MSHCP | Planning Department Riverside County (rctlma.org), Accessed January 20, 2024.

4.3 Cultural Resources

Would the project:

Issues	Determination
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §15064.5?	No Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Less Than Significant with Mitigation Incorporated
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	Less Than Significant with Mitigation Incorporated

Information in this section is summarized from the Cultural Resource Services report for the Idyllwild Wastewater Treatment Plant (WWTP) Improvement Project (Duke Cultural Resources Management, LLC [DUKE CRM], 2024). This study was prepared in compliance with CEQA and the National Historic Preservation Act (NHPA) of 1966. Some information from this study is considered confidential under the California Public Resources Code (PRC) and the Code of Federal Regulations (CFR) in compliance to the Freedom of Information Act and the California Public Records Act in order to protect the integrity of tribal cultural resources, and thus, would not be available to the public (7 PRC 21082.3 and 36 CFR 800.11).

4.3.1 Setting

A cultural resource is a broad term that includes prehistoric, historic, and traditional cultural properties that reflect the physical evidence of past human activity across the landscape. Cultural resources, along with prehistoric and historic human remains and associated grave goods, must be considered under various federal, State, and local regulations, including the CEQA and NHPA. Cultural resources that are listed on, or eligible for inclusion in, the National Register of Historic Places (NRHP) are also considered eligible for listing in the California Register of Historical Resources (CRHR).

4.3.1.1 Record Searches and Field Survey

On December 12, 2023, a records search was conducted at the Eastern Information Center (EIC). The EIC is part of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. The records search included a review of all recorded cultural resources and reports within a 1/2-mile radius of the project site. Review of the EIC data indicates that one (1) cultural resource has been previously identified within the project area. This resource, P-33-014267, is the campus of the Idyllwild Music School. An additional 15 cultural resources have been recorded within the ½-mile search radius. A total of 17 cultural resource reports cover areas within ½-mile of the project area. One (1) of these reports covers the project area, RIV-09044, and identifies P-33-014267 within the project area.

In addition, the California Built Environmental Resources Directory (BERD) was reviewed. The BERD includes the NRHP, CRHR, California Historic Landmarks (CHL), and California Points of Historic Interest (CPHI). The BERD did not identify any cultural resources within the project area.

A site visit was completed on January 5, 2024, and no cultural resources were observed. A boulder outcrop was observed near the southeast corner of the project area. The majority of the boulders are outside of the project site boundary, and no milling features were observed on the boulders within the project site boundary. The surfaces of the boulders were partially or totally obscured by moss.

4.3.1.2 Cultural Setting

4.3.1.2.1 Prehistoric Context

In the history of the Americas, the term “prehistoric period” refers to the time prior to the arrival of non-Indians, when native lifeways and traditions remained intact and viable. It is widely acknowledged that human occupation in what is now the State of California began 8,000-12,000 years ago. In attempting to describe and understand the cultural processes that occurred in the ensuing years, archaeologists have developed a number of chronological frameworks that endeavor to correlate the technological and cultural changes that are observable in archaeological records to distinct time periods. Unfortunately, none of these chronological frameworks have been widely accepted, and none has been developed specifically for the San Jacinto Mountain area, the nearest ones being for the Colorado Desert and Peninsular Ranges area and for the Mojave Desert (CRM TECH, 2012).

The development of an overall chronological framework for the region is hindered by the lack of distinct stratigraphic layers of cultural sequences that could be dated by absolute dating methods to provide concrete dates. Since results from archaeological investigations in this region have yet to be synthesized into an overall chronological framework, most archaeologists tend to follow a chronology adapted from a scheme developed by William J. Wallace in 1955 and modified by others (CRM TECH, 2012). Although the beginning and ending dates of the different horizons or periods may vary, the general framework of prehistory in this region under this chronology consists of the following four periods:

- Early Hunting Stage (ca. 10000 B.C. – 6000 B.C.), which was characterized by human reliance on big game animals, as evidenced by large, archaic-style projectile points and the relative lack of plant-processing artifacts;
- Millingstone Horizon (ca. 6000 B.C. – 1000 A.D.), when plant foods and small game animals came to the forefront of subsistence strategy, and from which a large number of millingstones, especially well-made, deep-basin metates, were left;
- Late Prehistoric Period (ca. 1000-1500 A.D.), during which a more complex social organization, a more diversified subsistence base-as evidenced by smaller

projectile points, expedient millingstones and, later, pottery-and regional cultures and tribal territories began to develop;
- Protohistoric Period (ca. 1500-1700s A.D.), which ushered in long-distance contact with Europeans, and thereby led to the Historic Period.

4.3.1.2.2 Ethnohistoric Context

The San Jacinto Mountains are situated within the traditional territory of the Cahuilla people, which once extended from present-day Riverside eastward well into the Colorado Desert beyond the Salton Sink. A Takic-speaking people of hunters and gatherers, the Cahuilla are divided by modern anthropologists into three groups based on the geographic domains of their homeland: the Pass Cahuilla of the San Gorgonio Pass-Palm Springs area, the Mountain Cahuilla of the San Jacinto and Santa Rosa Mountains and the Cahuilla Valley, and the Desert Cahuilla of the Coachella Valley. The Idyllwild area, thus, is considered a part of the Mountain Cahuilla homeland.

The Cahuilla people did not have a single name that referred to an all-inclusive tribal affiliation. Instead, membership was in terms of lineages or clans. Each lineage or clan belonged to one of two main divisions of the people, known as moieties. Members of clans in one moiety had to marry into clans from the other moiety. Individual clans had villages, or central places, and territories they called their own, for purposes of hunting game, gathering food, or utilizing other necessary resources. They interacted with other clans through trade, intermarriage, and ceremonies.

Population data prior to European contact are almost impossible to obtain, but estimates range from 3,600 to as high as 10,000 persons. During the 19th century, however, the Cahuilla population was decimated because of European diseases, most notably smallpox, for which the Native peoples had no immunity. Today, Native Americans of Mountain Cahuilla heritage are mostly affiliated with one of the three reservations in the project vicinity, Santa Rosa, Cahuilla, and Ramona.

4.3.1.2.3 Historic Context

Situated far away from Alta California's coastal regions, where most of the colonization activities took place during the Spanish and Mexican Periods (1769-1848), the San Jacinto Mountains received only passing interest from European colonizers before the American takeover. The name of the mountain range was derived from a nearby mission rancho that was established at least by 1821 in the San Jacinto Valley. In 1772, Captain Pedro Fages, the Spanish military comandante of Alta California, and a small force of soldiers under his command became the first Europeans to approach the San Jacinto Mountains. Throughout the Spanish and Mexican Periods, however, this high mountain country remained the domain of the Cahuilla people, and there is no evidence that the Europeans extensively explored it.

After the American annexation of Alta California in 1848, with the influx of immigrants from the eastern United States to the fertile but arid plains and valleys of southern California, the San Jacinto Mountains were increasingly recognized as a valuable

deposit of natural resources to be exploited. In the 1860s, shepherds and cattlemen began to penetrate into the mountain range and graze their herds on its lush meadows. Between the 1870s and the early 20th century, the lumber industry thrived at the expense of its rich forest. During the 1880s land boom in southern California, the Lake Hemet reservoir was constructed in the mountains to divert water to the colony of Hemet in the San Jacinto Valley. As in other mountain ranges in California, gold mining also left its mark in the annals of 19th century development in the San Jacinto Mountains. During the 1890s, the largest mining camp in the San Jacinto's, Kenworthy, sprang up but produced little mineral wealth before its demise.

Strawberry Valley, in which the community of Idyllwild is situated, received the first homesteaders at least by 1871. Within the next few years, "Sulphur Springs" Thompson was known to have settled in nearby Fern Valley. During the early 1870s, the valley was a favorite grazing ground for shepherds, followed by cattlemen in the 1880s. Beginning in 1889, Strawberry Valley gained increasing popularity as a summer resort among "flatlanders" in southern California. One of the earliest tourist camps in the valley, Camp Idyllwilde, eventually bestowed its name on the community that gradually grew at that location, albeit with a slightly different spelling.

The effort to create a full-fledge community dates to 1913, when George B. Hannahs subdivided part of his land holdings into 2.5-acre lots. In 1919, Idyllwild, Inc., offered half-acre home lots in what is now the central portion of Idyllwild for sale at $350, ushering a real estate boom that lasted through the 1920s. About a mile to the northeast, the Idyllwild Mountain Park Company developed the community of Fern Valley, intended primarily for summer homes. Despite a brief rivalry, with the area entering a second "golden age" in growth, by the early 1950s the distinction between the two communities diminished to such a degree that both are recognized as Idyllwild. Since then, the twin mountain community has steadily grown with tourism continuing to play a crucial role in the local economy.

4.3.2 Discussion

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

Review of the EIC data indicated that one (1) cultural resource has been previously identified within the project area. This resource, P-33-014267, is the campus of the Idyllwild Arts Academy high school. The Idyllwild Arts Academy was originally built as a satellite campus of the University of Southern California (USC) during the late 1940s and early 1950s and is considered a historic-period site (CRM TECH, 2012). However, the vast majority of the structures associated with the original USC Campus have been demolished and replaced by more recent, modern structures constructed over the past 40 years. The few USC Campus-related structures that still remain on the campus property have been remodeled extensively with modern facades and interiors, rebuilt with modern electrical and plumbing fixtures, and do not retain any of their original

historic integrity. Cultural resource P-33-014267 or historical elements associated with the Idyllwild Arts Academy is located within or adjacent to the project site.

The segment of Apela Drive traversing the campus that is the closest to the project site is completely modern in appearance, the result of fresh construction in recent years. Implementation of the proposed project thus would not cause a substantial adverse change to a historical resource pursuant to §15064.5. ***No impact*** would occur, and no mitigation measures are required.

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

The project area includes substantial developed and previously disturbed area, consisting of the WWTP and the paved access road. The project area is considered low in sensitivity for subsurface deposits of intact, potentially significant archaeological remains (CRM TECH, 2012). No cultural/archaeological resources were observed during the January 5, 2024, site visit. Nonetheless, there remains a chance that construction activities associated with the proposed project could result in accidentally discovering archaeological resources. If such resources are discovered during ground-disturbing activities, **Mitigation Measure CUL-1** would be implemented. With **Mitigation Measure CUL-1** implemented, impacts to previously undiscovered archaeological resources that may be discovered during construction activities would be ***less than significant.***

MITIGATION MEASURES

CUL-1: If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. Depending on the nature of the find, a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric or historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no work radius as appropriate, using professional judgment. The following notifications shall apply, as necessary:

- If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead agency. If the find is determined to be eligible for inclusion in the National Register or California Register, the lead agency shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the site either: 1) is not eligible for

the National Register or California Register; or 2) that the treatment measures have been completed to its satisfaction.

- If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Diego County Coroner (in accordance with § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented.
- If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.

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

No formal cemeteries or human remains were identified during the field investigation and no burial sites are likely to be encountered during construction activities. However, in the event of an unanticipated discovery of human remains, **Mitigation Measure CUL-1** would be implemented. With **Mitigation Measure CUL-1** implemented, impacts to previously unknown human remains that may be discovered during construction activities would be ***less than significant***.

4.3.3 References

Duke Cultural Resources Management (CRM). 2024. Cultural Resource Services for the Idyllwild Wastewater Treatment Plan, City of Idyllwild, County of Riverside, California. Prepared: January 2024.

4.4 Greenhouse Gas Emissions

Would the project:

Issues	Determination
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less Than Significant Impact
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less Than Significant Impact

4.4.1 Setting

Human activities generate greenhouse gasses (GHGs) consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), various hydrofluorocarbons (HFCs), halocarbons, and ozone (O_3). CO_2 is the most abundant GHG; while it is naturally occurring and a necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human generated CO_2 that is the main driver of climate change. The transportation sector generates the largest share of greenhouse gas emissions in the United States.

These GHGs trap solar radiation and the earth's own radiation, preventing it from passing through the earth's atmosphere and into space, resulting in the "Greenhouse effect." GHGs are vital to life on earth since they help keep our planet a suitable temperature; however, increasing GHG concentrations are causing an increase in average global temperatures. In general, CH_4 has 21 times the warming potential of CO_2, and N_2O has 310 times the warming potential of CO_2. CO_2 equivalent (CO_2e) represents CO_2 plus the additional warming potential from CH_4 and N_2O. The common unit of measurement for CO_2e is metric tons ($MTCO_2e$). As the average temperature of the earth increases, climate patterns may be affected, including changes in precipitation patterns and storm intensity, accumulation of snowpack, and intensity and duration of spring snowmelt, as well as intensity in low precipitation and droughts. Human-made GHG emissions occur primarily though the combustion of fuels, mainly associated with transportation, residential energy, and agriculture.

California's primary legislation for reducing GHG emissions is the California Global Warming Solutions Act (AB 32), which set a goal for the state to reduce GHG emissions to 80 percent of 1990 emission levels by 2050. The California Air Resources Board (CARB), among other state agencies, has enacted regulations to achieve these targets. In 2008, CARB adopted a Climate Change Scoping Plan, which contained strategies to achieve reduction of approximately 21.7 percent from the State's projected 2020 CO_2e emission levels under a business-as-usual scenario (CARB, 2008). In December 2022,

CARB finalized the 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill (AB) 1279 (CARB, 2022).

The proposed project is located within the SCAB. Air quality conditions in the SCAB are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In December 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. The GHG significance thresholds from stationary and industrial projects is less than 10,000 metric tons of Carbon Dioxide equivalent ($MTCO_2e$) per year, including construction emissions.

The proposed project is located in an area that is currently in federal and state non-attainment for ozone, $PM_{2.5}$, and PM_{10} (CARB, 2022).

4.4.2 Discussion

a) Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction activities, such as site preparation, site grading, on-site heavy-duty construction vehicles, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew would produce combustion emissions from various sources. During proposed project construction, GHGs would be emitted through the operation of construction equipment, worker vehicles, and from supply-vendor vehicles, each of which typically uses fossil-based fuels to operate. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

Construction emissions were modelled using the California Emissions Estimator Model (CalEEMod). For the purpose of this analysis, it was assumed that construction would last 24 months, the project area would be a total of 1.73 acres, and the maximum area disturbed per day would be less than 1 acre per day. It was also assumed that all on-road equipment used for the proposed project would be year 2010 or newer models, and all construction equipment would meet California Air Resources Board (CARB) Tier 4 requirements for off-road equipment (See **Appendix B** for the CalEEMod results). **Table 4.4.2-1 Maximum Estimated Construction GHG Emissions** shows the estimated construction GHG emissions that would occur with implementation of the proposed project do not exceed the SCAQMD's Thresholds for GHG.

Table 4.4.2-1: Maximum Estimated Construction GHG Emissions

POLLUTANT	ANNUAL CO_{2E} (TONS/YEAR)	ANNUAL CO_{2E} ($MTCO_{2E}$/YEAR)
CO_2	159	144.24
N_2O	<0.005	<0.005
CH_4	0.01	0.01
Total GHG Emissions	**159.015**	**144.255**
Thresholds of Significance per SCAQMD	--	10,000
Exceed Threshold?	--	***No***

Source: Dewberry, January 2024

The estimated GHG emissions resulting from the project's construction would be a maximum of approximately 159.015 tons of CO_2e per day, totaling approximately 144.255 $MTCO_2e$ per year for the 24-month construction period. The proposed project would not exceed SCAQMD's GHG significance thresholds, 10,000 MT/yr CO_2e for industrial facilities. In addition, the proposed project would not exceed SCAQMD significance thresholds for criteria pollutants (see **Section 4.1 Air Quality** for construction emissions estimations).

The proposed project would not result in capacity increases for vehicles, increase average daily trips (ADTs) or vehicle miles traveled (VMT); therefore, operations of the proposed project would not result in new energy demands (that generate GHGs) over time and would be similar to existing conditions upon completion of construction. The proposed project would not create new demand for energy, induce changes in the surrounding land uses, or create other permanent sources of GHG emissions. Therefore, GHG impacts associated with the proposed project operations would be ***less than significant***, and no mitigation measures are required.

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

As discussed above, the proposed project's construction activity would generate an estimated maximum of approximately 159.015 tons of CO_2e per day, totaling approximately 144.255 $MTCO_2e$ per year for the 24-month construction period. The construction emissions would cease upon construction completion. Operations would be similar to existing conditions upon construction completion and the proposed project would not create new sources of GHG emissions beyond what currently exists. Thus, no long-term impacts to GHG emissions would occur as a result of the proposed project. The proposed project would implement BMPs and comply with local and state policies, rules, and regulations for GHG emissions (see **Section 4.1 Air Quality** for construction BMPs). Thus, the proposed project would not conflict with any identified plans adopted for the reduction of GHG emissions. Impacts would be ***less than significant***.

4.4.3 References

California Air Resources Board (CARB). 2008. Climate Change Scoping Plan – a Framework for Change. Online: https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/document/adopted_scoping_plan.pdf. Accessed: July 6, 2023.

California Air Resources Control Board (CARB). 2022. Maps of State and Federal Area Designations. Online: https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed: November 16, 2023.

California Air Resources Board (CARB). 2022. 2022 Scoping Plan for Achieving Carbon Neutrality. Online: https://ww2.arb.ca.gov/sites/default/files/2023-04/2022-sp.pdf. Accessed: August 21, 2023.

4.5 Hazards and Hazardous Materials

Would the project:

Issues	Determination
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less Than Significant Impact
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less Than Significant Impact
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	Less Than Significant Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	No Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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?	No Impact
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less Than Significant Impact

4.5.1 Setting

The hazards and hazardous materials analysis was performed in general conformance with the scope and limitations of the American Society for Testing Materials (ASTM) Practice E 1527-21. The hazards and hazardous materials analysis identifies Recognized Environmental Conditions (RECs) that may adversely affect the project site. RECs are defined by the ASTM Practice E 1527-05 as: the presence or likely presence of any hazardous substances or petroleum products in, on, or at the property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment. A database report was obtained from Environmental Database Resources, Inc. consisting of information compiled from various government records, such as Geotracker, National Priorities List, and EnviroStor, for information regarding

the proposed project area. Based on the results of the records review, no potential RECs have been found in the proposed project area.

4.5.2 Discussion

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

The proposed project would modernize the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community. The proposed project would include replacement of the existing biological reactors, improving the controls and redundancy of the plant, and improving the equalization capacity. The new bioreactors and electrical building would be constructed in undeveloped areas on the project site; the remainder of the upgrades would be additions or modifications to existing on-site equipment. The proposed project would not be an expansion of treatment capacity of the existing WWTP.

Construction of the proposed project would potentially require the use of various types of quantities of hazardous materials. Hazardous materials that are typically used during construction include, but are not limited to, hydraulic oil, diesel fuel, grease, lubricants, solvents, and adhesives. Although equipment used during construction activities could contain various hazardous materials, these materials would be used in accordance with the manufacturer's specifications and all applicable regulations. Minor fuel or oil spills could occur during construction activities. The release, even if accidental, of hazardous materials into the environment is regulated through existing federal, State, and local laws. These regulations require emergency response from local agencies to contain hazardous materials in the event of an accidental release.

The use of and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws, including California Division of Occupational Safety and Health Administration (CalOSHA) requirements. The preparation and implementation of standard construction BMPs, including a Stormwater Pollution Prevention Plan (SWPPP), compliance with vehicle manufacturer's specifications, and compliance with applicable regulations would result in impacts that are ***less than significant***. No mitigation measures would be required.

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?

Operations of the proposed project would be similar to existing conditions. The potential for release of hazardous materials into the environment upon completion of the

proposed project would be similar to existing conditions and impacts would be ***less than significant***.

The proposed project has the potential to use a variety of hazardous materials during construction activities. These materials would be stored, handled, and transported per federal, State, and local regulatory requirements. Implementation of construction BMPs, compliance with vehicle manufacturer's specifications, and compliance with applicable regulations would result in impacts that are ***less than significant***. No mitigation measures would be required.,

c) Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The nearest school to the project site is the Idyllwild Arts Academy, which is located approximately 300 feet east of the project site. Although the proposed project is within 0.25 mile from the nearest school, the proposed project would not introduce new permanent health or safety hazards to persons who would attend or would be employed at the school site. The WWTP already exists, and the potential risk or presence of hazardous materials, substances, or waste would continue to be similar to existing conditions upon completion of the proposed project. The emission or handling of hazardous materials, substances, or waste during construction would be temporary and cease upon construction completion. Furthermore, the use of and handling of hazardous materials during construction activities would occur in accordance with applicable federal, state, and local laws, including CalOSHA requirements. Impacts would be ***less than significant*** and no mitigation measures are required.

d) Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

The proposed project is not included in the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (DTSC, 2023). There are no Envirostor sites within 2 miles of the proposed project area (Envirostor, 2023). There are two GeoTracker sites within 2 miles of the proposed project area, one Cleanup Program Site and one LUST cleanup site. Both statuses are completed-case closed. ***No impacts*** would occur, and no mitigation measures are required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two nautical 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 project site is not located within an airport land use plan or within two miles of a public airport or public use airport. ***No impacts*** would occur, and no mitigation measures are required.

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

The proposed project would modernize the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community. Operations would be similar to existing conditions upon construction completion. The proposed project would not increase capacity along any roads in the proposed project area and would not increase traffic or congestion. The proposed project would not impair an adopted emergency response plan or emergency evacuation plan in the long term, as operations of the WWTP would be similar to existing conditions. Therefore, the proposed project would have ***no impact*** to emergency response plans or emergency evacuation plans upon completion of construction.

During the proposed project construction, no detours or temporary lane closures would be necessary. No impacts to circulation or traffic are expected during proposed project construction and access for emergency vehicles, trucks, and other roadway users would be maintained throughout the construction period. The proposed project would not impair an adopted emergency response plan or emergency evacuation plan. There would be ***no impact*** and no mitigation measures are required.

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 would modernize the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community. The proposed project is not capacity increasing and would not result in new additional structures, nor would it increase the number of people within the proposed project area once construction is complete. Therefore, proposed project operations would not expose people or structures to a significant risk from wildland fires, beyond what currently exists. Operational impacts would be ***less than significant***, and no mitigation measures are required.

During construction, workers would be present on site; however, this increase in workers would be temporary in nature. The closest fire station to the project site is Idyllwild Fire Protection District (IFPD) Station 621, located at 54160 Maranatha Drive, approximately 2.5 miles northeast of the project site (Riverside County, 2021). Idyllwild Volunteer Fire Company Station 621 is a non-profit organization dedicated to protecting the mountain community of Idyllwild and to provide professional Fire and EMS assistance through volunteer participants (Idyllwild Fire, 2023). The proposed project would be coordinated with the IFPD, as well as the County's Sheriff Office and

other law enforcement or emergency service providers within the proposed project area. Proposed project coordination with the County and the implementation of BMPs (e.g., installation of fire extinguishers, installation of no smoking signs, education on construction equipment usage and reducing spark potential) would reduce the potential for construction activities to result in the commencement of a wildfire. Impacts would be ***less than significant***, and no mitigation measures are required.

4.5.3 References

Department of Toxic Substances Control (DTSC). 2023. Hazardous Waste and Substances Site List. Online: https://www.envirostor.dtsc.ca.gov/public/search.asp?cmd=search&reporttype=CORTESE&site_type=CSITES,OPEN,FUDS,CLOSE&status=ACT,BKLG,COM&reporttitle=HAZARDOUS+WASTE+AND+SUBSTANCES+SITE+LIST. Accessed: December 13, 2023.

Envirostor. 2023. Online: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Idyllwild-Pine+Cove. Accessed: December 13, 2023.

Geotracker. 2023. Online: https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Idyllwild-Pine+Cove#. Accessed: December 13, 2023.

Idyllwild Fire, 2023. Idyllwild Volunteer Fire Company 621. Online: https://idyllwildfire.com/volunteer-company-621.html. Accessed: December 8, 2023.

Riverside County. 2021. Riverside County Fire Stations. Online: https://www.rvcfire.org/resources/fire-stations. Accessed: December 6, 2023.

4.6 Noise

Would the project result in:

Issues	Determination
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?	Less Than Significant Impact
b) Generation of excessive groundborne vibration or groundborne noise levels?	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 nautical miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	No Impact

4.6.1 Setting

Noise is defined as a loud, unexpected, or annoying sound. A logarithmic scale is used to describe sound pressure level, in terms of decibels (dB). The decibel scale alone does not adequately characterize how humans perceive noise. An “A-weighted” sound level (expressed in units of dBA) can be computed by weighting sound levels of individual frequency bands by sensitivity of average human hearing to those frequencies. **Table 4.6.1-1: Typical Noise Levels** describes typical A-weighted noise levels for different activities. It is widely accepted that, in typical noise environments, people can detect changes in sound level at 3 dBA or greater. A 5-dBA change is generally perceived as distinctly noticeable.

Table 4.6.1-1: Typical Noise Levels

COMMON OUTDOOR ACTIVITY	NOISE LEVEL (DBA)	COMMON INDOOR ACTIVITY
Jet flyover at 1,000 feet	110	Rock band
Gas lawnmower at three feet	100	
Diesel truck at 50 feet at 50 mph	90	Food blender at three feet
Noisy urban area, daytime	80	Garbage disposal at three feet
Gas lawnmower, 100 feet Commercial area	70	Vacuum cleaner at ten feet Normal speech at three feet
Heavy traffic at 300 feet; Rural daytime areas	60	Large business office
Quiet urban daytime	50	Dishwasher next room
Quiet urban nighttime Quiet suburban nighttime	40	Theater, large conference room (background)
Quiet rural nighttime	30	Library Bedroom at night, concert hall (background)
	20	Broadcast/recording studio

Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans, 2013

Noise in our daily environment fluctuates over time. The maximum sound level for a given noise source is abbreviated "L_{max}." The average sound level over a period of time (usually one hour) is called the equivalent continuous sound level and is abbreviated "L_{eq}." To characterize sound levels occurring over a 24-hour period, penalties are often applied to nighttime sound levels. When a 5-db penalty is applied to levels occurring between 7 p.m. to 10 p.m. and a 10-dB penalty is applied to levels occurring between a 10 p.m. and 7 a.m., the energy average of the A-weighted sound levels is called the Community Noise Exposure Level (CNEL).

In general, a 3-dBA change in community noise levels is noticeable, while 1-2 dBA changes generally are not perceived. As shown in **Table 4.6.1-1**, quiet suburban areas typically have noise levels in the range of 40 to 50 dBA, while those along arterial streets are in the 50 to 60+ dBA range. Normal human conversational levels are in the 60-65 dBA range and ambient noise levels greater than that can interrupt conversations.

The Riverside County General Plan Noise Element includes the following policies to protect noise-sensitive land uses from noise emitted by outside sources and prevent new projects from generating adverse noise levels on adjacent properties.

- *N 1.3* Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:
    - Schools.
    - Hospitals.
    - Rest Homes.
    - Long Term Care Facilities.
    - Mental Care Facilities.
    - Residential Uses.
    - Libraries.
    - Passive Recreation Uses.
    - Places of Worship.
- *N 1.4* Determine if existing land uses will present noise compatibility issues with proposed project by undertaking site surveys.
- *N 1.5* Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

- *N 1.6* Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.
- *N 1.7* Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problems.
- *N 1.8* Limit the maximum permitted noise levels that cross property lines and impact adjacent land uses, except when dealing with noise emissions from wind turbines.

The Riverside County Code of Ordinances (Section 9.52.020(H)(I)) exempts construction projects generating noise when located one-quarter of a mile or more from an inhabited dwelling and when located within one-quarter of a mile from an inhabited dwelling as long as construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. and 7:00 a.m. during the months of October through May.

Existing Conditions

The proposed project is located in the town of Idyllwild, an unincorporated community located in the San Jacinto Mountains, about 45 miles west of Palm Springs in Riverside County. Together with Pine Cove and Fern Valley, it is a part of the Idyllwild/Pine Cove Census Designated Place and covers an area of 13.73 square miles. The proposed project site is located in a mountainous, rural-residential area. The project site has a Public Facilities land use designation pursuant to the Riverside County General Plan (Riverside County, 2021). The Public Facilities land use designation provides for the development of various public, quasi-public, and private uses with similar characteristics, such as governmental facilities, utility facilities including public and private electric generating stations and corridors, landfills, airports, educational facilities, and maintenance yards. Surrounding land use designations include Open Space-Conservation Habitat (OS-CH), Open Space-Water (OS-W), Estate Density Residential (EDR), Medium Density Residential (MDR), and Rural Mountainous (RM). The County Zoning designations within and adjacent to the proposed project site includes Watercourse, Watershed, and Conservation Areas (W-1) and Controlled Development Areas (W-2).

Ambient noise level measurements were not taken at the project site; however, small town or wooded and lightly used residential areas (rural areas) during daytime hours have typical noise levels ranging between 50 and 60 L_{dn}.

Sensitive Receptors

According to 23 Code of Federal Regulations (CFR) 772, sensitive receptors are defined as discrete or representative location of a noise sensitive area(s) within a project area that are considered more sensitive to ambient noise levels than others because of the amount of noise exposure (in terms of both exposure duration and

insulation from noise) and the types of activities typically involved. Within the context of addressing construction-related noise impacts, sensitive receptors include, but are not limited to, the following land use categories: residences, schools, libraries, churches, hospitals, and nursing homes. The Idyllwild Arts Amphitheater is the closest sensitive receptor to the proposed project, approximately 230 feet to the south.

4.6.2 Discussion

a) 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?

The proposed project would upgrade the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community, as well as meet current wastewater treatment standards and processes. The proposed project would not increase vehicle capacity on surrounding roadways nor would it generate land use changes in the surrounding environment. For these reasons, the project operation would not permanently increase ambient noise levels in the proposed project area. Sensitive receptors and adjacent land uses would not be exposed to a permanent change in noise levels as a result of the project operation.

The primary source of noise generated by the proposed project would result from construction activities. Noise from construction activities is anticipated to temporarily increase ambient noise levels in the vicinity of the project site. Noise at the construction site would intermittently dominate the noise environment with varying levels of intensity. The degree of construction noise impacts would vary for different areas along the proposed project corridor, and for different construction activities. Noise from construction activities generally attenuate at a rate of 6 dBA per doubling distance.

Construction activities associated with the proposed project are anticipated to last approximately 24 months. During construction, various types of construction equipment will be used, sometimes simultaneously, to improve the existing components at the WWTP, remove trees, and construct the new bioreactors, new sludge holding tank and electrical building. Construction contractors working on the WWTP are anticipated to use (but not be limited to) hydraulic jackhammers, front end loaders, excavators, and chainsaws during the construction period, all of which would be the loudest construction equipment to be used. Front end loaders typically generate a maximum noise level of 80 dBA L_{max} during use and hydraulic jackhammers, excavators and chainsaws typically generate maximum noise level of 85 dBA L_{max} during use from a distance of 50 feet. If all these pieces of construction equipment operated simultaneously as measured from 50-feet, the construction equipment would generate a combined noise level of 90.2 dBA L_{max}. As stated above, the Idyllwild Arts Amphitheater is approximately 230 feet from

where construction activity could occur on the project site. If all four pieces of construction equipment are operating simultaneously, based on the distance to the Idyllwild Arts Amphitheater, the facility could be exposed to maximum temporary noise levels of 76.9 dBA L_{max}.

Construction operations are anticipated during daylight hours only and would adhere to the Riverside County Ordinance (Section 9.52.020(H)(I)) which exempts construction activity located one-quarter of a mile or more from an inhabited dwelling and when located within one-quarter of a mile from an inhabited dwelling as long as construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September and 6:00 p.m. and 7:00 a.m. during the months of October through May, respectively. Any increase in ambient noise level in the vicinity of the proposed project would be temporary and would cease upon construction completion. Construction activities for the proposed project would comply with federal, state, and local policies related to construction-generated noise, including County noise regulations. The proposed project would also include implementation of best management practices (BMPs) and the project measures discussed below. With implementation of the project measures outlined below, substantial temporary ambient noise levels at nearby sensitive receptors would be minimized. As such, construction noise impacts generated by the proposed project would be ***less than significant*** and no mitigation measures are required.

PROJECT MEASURES

NO-1: The following control measures shall be implemented during construction:

- Use newer equipment with improved muffling and ensure that all equipment items have the manufacturers' recommended noise abatement measures, such as mufflers, engine enclosures, and engine vibration isolators intact and operational. Newer equipment will generally be quieter in operation than older equipment. All construction equipment should be inspected at periodic intervals to ensure proper maintenance and presence of noise control devices (e.g., mufflers and shrouding, etc.).
- Utilize construction methods or equipment that provides the lowest level of noise and ground vibration impact.
- Turn off idling equipment.

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

Equipment associated with high vibration levels (pile drivers) would not be used for project construction. Construction equipment that would be used onsite, specifically the hydraulic jackhammers, front end loader, and excavator, would generate groundborne vibration (chainsaw usage does not generate groundborne vibrations). Front end

loaders and excavators which would generate groundborne vibration (VdB) levels of 90 VdB (0.031 inches per second) at 50 feet from construction areas (Caltrans, 2013) are the types of construction equipment that would be used on site that generate the highest level of groundborne vibrations. The closest sensitive receptor to the proposed project is located approximately 230 feet to the southeast; and therefore, would be exposed to construction vibration levels equating to 70 VdB (or 0.003 peak particle velocity (PPV) inches per second). According to the Federal Transit Authority, institutional land uses with primarily daytime use (such as the Idyllwild Arts Amphitheater) can be exposed to infrequent events (less than 70 events per day) from construction vibration levels of equating to 83 VdB, before damage due to such a use occurs (FTA, 2018). Thus, construction generated vibration would not exceed damage criteria for nearby sensitive receptors. Impacts would be ***less than significant,*** and no mitigation measures are required.

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 nautical 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 airports to the proposed project site is the Banning Municipal Airport, a city-owned airport located a mile southeast of Banning, in Riverside County, approximately 28 miles northwest of the proposed project area. The project site is not located within an airport land use compatibility plan (ALUC). (Riverside County, 2021). As such, implementation of the proposed project would not expose people residing or working in the project area to excessive airport/airstrip noise levels. ***No impacts*** would occur, and mitigation measures are not required.

4.6.3 References

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. Online: https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf. Accessed: November 11, 2023.

Federal Transit Administration (FTA). 2018.

Riverside County. 2021. County of Riverside General Plan: Land Use Element. Online: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-Ch03-Land-20Use-FINAL-209-28-21.pdf. Accessed: November 12, 2023.

United States Environmental Protection Agency (U.S. EPA). 1971. Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances. Online: https://nepis.epa.gov/Exe/ZyNET.exe/9101NN3I.txt?ZyActionD=ZyDocument&Client=EPA&Index=Prior%20to%201976&Docs=&Query=&Time=&EndTime=&Sear

chMethod=1&TocRestrict=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&UseQField=&IntQFieldOp=0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5CZYFILES%5CINDEX%20DATA%5C70THRU75%5CTXT%5C00000024%5C9101NN3I.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&Display=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results%20page&MaximumPages=1&ZyEntry=2. Accessed: January 19, 2024.

4.7 Transportation

Would the project:

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

4.7.1 Setting

The proposed project is located in the town of Idyllwild, an unincorporated community in western Riverside County. Together with Pine Cove and Fern Valley, it is part of the Idyllwild/Pine Cove Census Designated Place and covers an area of 13.73 square miles. Roadways adjacent and in the vicinity of the project site includes Apela Drive, Temecula Road, Cahuilla Drive, and Luisana Drive. The County of Riverside Transportation Department provides an interactive map that has been developed to determine classifications of roads within the County. Apela Drive is classified as a paved surface-county maintained road, and Temecula Road, Cahuilla Drive, and Luisana Drive are classified as non-county roads (County of Riverside Transportation Department, 2021). A private roadway currently exists off of Apela Drive that provides access to the Idyllwild WWTP.

4.7.2 Discussion

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

The proposed project would modernize the Idyllwild WWTP to meet existing and future discharge requirements efficiently and consistently for the Idyllwild community. The proposed project includes replacement of the existing biological reactors, improving the controls and redundancy of the plant, and improving the equalization basin. The new bioreactors and electrical building would be constructed in undeveloped areas on the project site; the remainder of the upgrades would be additions or modifications to existing equipment. The proposed land acquisition is to the south of the existing plant adjacent to the existing plant access road. The proposed project does not involve the construction of new roadways or any improvements to existing roadways. As the

proposed project would not affect existing roadways, it would not result in a conflict with a program plan, ordinance, or policy addressing the circulation system in the area. Therefore, the proposed project would have no long-term impacts.

There are no temporary lane closures or detours anticipated for implementation of the proposed project. A private roadway currently exists off of Apela Drive that leads directly to the Idyllwild WWTP, in which construction workers would use to access the proposed project site. In addition, this private roadway would be used for proposed project activities such as construction equipment movement, and the hauling of construction material and debris to and from the project site. Construction equipment and staging areas would be confined to the project site. Access for vehicles, pedestrians, and bicyclists along roads adjacent and in the vicinity of the project area would be maintained throughout the construction period and there would be no conflict with adjacent land uses.

The proposed project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. ***No impact*** would occur, and no mitigation measures are required.

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

The proposed project would modernize the Idyllwild WWTP. The proposed project would not increase capacity along any road, nor would it increase traffic and congestion. Therefore, the proposed project would not increase vehicle miles traveled (VMT) on the surrounding roadways.

Access for vehicles, pedestrians, and bicyclists along roads within the proposed project area would be maintained throughout the construction period. Access to all adjacent properties would be maintained throughout the construction period as well. In addition, no detours would be required during construction for vehicular traffic. Because the roadways would maintain existing capacity and no detours would be necessary during construction, the project construction activities would not result in an increase in VMT. Construction personnel would be required to commute to the proposed project site; however, it is assumed that construction personnel would come from the surrounding areas. In addition, by nature, construction personnel commute to various construction sites for their job. Therefore, it is not anticipated that the proposed project would increase VMT because of construction personnel trips to the project site.

CEQA Guidelines Section 15064.3 (b) provides criteria for analyzing transportation impacts. As stated in Section 15063.3 (b)(2), transportation projects that reduce, or have no impact on VMT should be presumed to cause a less than significant impact. The proposed project would have no lasting impact on traffic circulation within the area. Operations of the proposed project would be similar to existing conditions upon completion of construction. The proposed project would not increase or decrease future vehicle capacity or create long-term changes to traffic patterns or VMT. Upon the

completion of proposed project construction, no changes in traffic patterns, VMT or average daily traffic (ADT) would result from the proposed project. Impacts would be ***less than significant,*** and no mitigation measures would be required.

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

The proposed project would modernize the Idyllwild WWTP. The proposed project does not involve the construction of new roadways or any improvements to existing roadways and does not include design features such as sharp curves or dangerous intersections, or any incompatible uses that would increase hazards along roadways above existing conditions.

As discussed above, access to adjacent roads and properties would be maintained throughout the construction period. Construction equipment would be confined within the proposed project site and staging areas would not conflict with other vehicles moving along adjacent roadways. Road closures, lane-closures, or detours would not be required during project construction as off-site improvements are not a component of the proposed project. There would be minimal impacts to circulation because of construction-related workforce traffic (employee travel to and from the site), heavy equipment delivery, and material deliveries necessary for project development, but circulation would return to existing conditions upon the completion of the proposed project construction. Implementation of the proposed project would not substantially increase hazards due to geometric features or incompatible uses. ***No impact*** would occur and no mitigation measures are required.

d) Would the project result in inadequate emergency access?

The proposed project would modernize the Idyllwild WWTP. Access to adjacent roads and properties would be maintained during construction and no detour or temporary lane closures would be required. Access to the project site would also be maintained during project construction and once construction operation commences. Furthermore, local law enforcement, fire departments, and emergency service providers would be notified of the construction period of the proposed project by the City of Idyllwild. Thus, implementation of the proposed project would not result in inadequate emergency access. ***No impact*** would occur, and no mitigation measures are required.

4.7.3 References

County of Riverside Transportation Department. 2021. County of Riverside Online Road Book. Online: https://trans.rctlma.org/county-maintained-road-book. Accessed: December 1, 2023.

4.8 Tribal Cultural Resources

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

Issues	Determination
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), or	Less Than Significant with Mitigation Incorporated
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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	Less Than Significant with Mitigation Incorporated

Information in this section is summarized from the *Cultural Resource Services* report for the Idyllwild Wastewater Treatment Plant (WWTP) Improvement Project (Duke Cultural Resources Management, LLC [DUKE CRM], 2024). This study was prepared in compliance with CEQA and the National Preservation Act (NHPA) of 1966. Some information from this study is considered confidential under the California Public Resources Code (PRC) and the Code of Federal Regulations (CFR) in compliance to the Freedom of Information Act and the California Public Records Act in order to protect the integrity of tribal cultural resources, and thus, would not be available to the public (7 PRC 21082.3 and 36 CFR 800.11). Information in this section is also based on AB 52 Letters that were sent out to Tribal representatives that have interest in the project.

4.8.1 Setting

A tribal cultural resource (TCR) is defined as a site, feature, place, cultural landscape, or sacred place or object that has cultural value to California Native American tribes. To be considered a TCR, the resource must be included in or determined eligible for inclusion in the CRHR or is in included in a local register of historical resources. Pursuant to Public Resource Code (PRC) §2107, a TCR is defined as either:

1) A site, feature, place, cultural landscape, sacred place, or object that has cultural value to California Native American Tribes that is included or determined to be eligible for inclusion in the California Register of Historical Resources (California Register) or a local register of historical resources.

2) A resource determined by the lead agency to be significant and is supported by substantial evidence.
3) A geographically defined cultural landscape that meets the criteria set forth in PRC §21074.
4) A historical resource described in PRC §21084.1, a unique archeological resource or "nonunique archaeological resource" described in PRC §21083.2 (g) and (h).

The CEQA Guidelines state that California Native American tribes traditionally and culturally affiliated with a geographic area may have expertise concerning their TCRs. Lead agencies shall consult with these tribes who respond in writing and requests the consultation within 30 days of receipt of the formal notification of the project (PRC §21080.3.1). Traditionally and culturally affiliated tribes of a project area may suggest mitigation measures, including, but not limited to, those recommended in §21084.3.

4.8.1.1 Assembly Bill (AB) 52 Consultation

Assembly Bill 52 (AB 52) went into effect on July 1, 2015, and established a consultation process with all California Native American Tribes on the Native American Heritage Commission (NAHC) List for federal and non-federal tribes (13.5 PRC §§ 21073, 21074, 21083.3, 21084). Once the tribe is notified of a project, the tribe has 30 days to request a consultation. The consultation process ends when either the parties agree to mitigation measures or avoid a significant effect on tribal cultural resources or a party, acting in good faith and after reasonable effect, concludes that mutual agreement cannot be reached.

On January 29, 2024, a Sacred Land File (SLF) and Tribal Consultation List Request was submitted to the NAHC. On February 22, 2024, the NAHC responded that the SLF search was negative and provided a Tribal Consultation List for the project region. Each of the tribes listed were sent an AB 52 Notification letter on March 13, 2024. All letters were sent via certified return receipt, and 2 Return Receipts were received back. Responses were given from the Cahuilla Band of Indians and the Rincon Band of Luiseno Indians.

4.8.1.1.1 The Cahuilla Band of Indians

The Cahuilla Band of Indians responded via email on March 21, 2024 indicating that the project is directly within Cahuilla traditional land use. In their response they requested the commencement of formal AB-52 consultation. IWD met with the Cahuilla Band of Indians representative (Lorrie Gregory) on April 22, 2024 to discuss the project. At the meeting, IWD and Cahuilla agreed on tribal monitoring during earth moving activities of original ground (natural/non-fill soils) through the duration of construction activities. Cahuilla officially closed consultation on April 30, 2024 with a request for a follow up in early June to coordinate an informal visit to the project area.

4.8.1.1.2 The Rincon Band of Luiseno Indians

The Rincon Band of Luiseno Indians responded via email on April 21, 2024 indicating that the project is not located within their Area of Historic Interest (AHI) and that they had no further information to provide. No concerns or requests for consultation resulted from this outreach.

4.8.1.2 Record Searches and Field Survey

On December 12, 2023, a records search was conducted at the Eastern Information Center (EIC). The EIC is part of the California Historical Resources Information System (CHRIS) and is located at the University of California, Riverside. The records search included a review of all recorded cultural resources and reports within a 1/2 -mile radius of the project site. Review of the EIC data indicates that one (1) cultural resource has been previously identified within the project area. This resource, P-33-014267, is the campus of the Idyllwild Music School. An additional 15 cultural resources (six of which are pre-contact age) have been recorded within the ½-mile search radius (.

In addition, the California Built Environmental Resources Directory (BERD) was examined. The BERD includes the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), California Historic Landmarks (CHL), and California Points of Historic Interest (CPHI). The BERD did not identify any cultural resources within the project area.

A site visit was completed on January 5, 2024, and no cultural resources were observed onsite. A boulder outcrop was observed near the southeast corner of the project site. The majority of the boulders are outside of the project site boundary, and no milling features were observed on the boulders within the project site boundary. The surfaces of the majority of the boulders were partially or totally obscured by moss.

4.8.2 Discussion

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)?

Review of the EIC data indicated that one built environment cultural resource has been previously identified within the project area. This resource, P-33-014267, is the campus of the Idyllwild Arts Academy high school.

There were also an additional 15 cultural resources that were identified within a 1/2 -mile of the project, of which six were pre-contact age. A SLF and Tribal Consultation List Request was submitted to the NAHC on January 29, 2024. A site visit was completed on January 5, 2024, and no pre-contact cultural resources were observed. On February 22, 2024, the NAHC responded that the SLF search was negative and provided a Tribal Consultation List for the project region. Each of these tribes were sent an AB-52 Notification letter on March 13, 2024. As described above, two Native American Tribes responded, with the Cahuilla Band of Indians requesting formal

consultation with IWD due to the potential sensitivity of the project area. IWD and Cahuilla met and agreed on monitoring during project construction activities associated with native (non-fill) soil. The Cahuilla officially closed AB-52 consultation with agreement to include monitoring mitigation during project construction ground disturbing activities associated with original ground (natural/non-fill soils). Implementation of **Mitigation Measure TCR-1** would reduce potential impacts to tribal cultural resources during construction. If tribal cultural resources are discovered during ground-disturbing activities, **Mitigation Measure CUL-1** would be implemented. With the implementation of **Mitigation Measure TCR-1** and **Mitigation Measure CUL-1**, impacts would be ***less than significant with mitigation incorporated***.

Impacts regarding cultural resources can be found in Section 4.3, Cultural Resources, of this IS/MND.

MITIGATION MEASURES

Implement **Mitigation Measure CUL-1**, as described in Section 4.3, Cultural Resources, of this document and **Mitigation Measure TCR-1**, described below.

TCR-1: A member of the Cahuilla Band of Indians shall be present, as a monitor during all earthmoving activities on original ground (natural/non-fill soils) during project construction activities. If artifacts are found during such activities, implementation of **Mitigation Measure CUL-1** shall occur to ensure that such resources are protected as applicable.

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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

As mentioned above, a SLF and Tribal Consultation List Request was submitted to the NAHC on January 29, 2024. On February 22, 2024, the NAHC responded that the SLF search was negative and provided a Tribal Consultation List for the project region. Each of these tribes were sent an AB-52 Notification letter on March 13, 2024. As described above, two Native American Tribes responded, with the Cahuilla Band of Indians requesting formal consultation with IWD. IWD and Cahuilla met and agreed on monitoring during project construction activities associated with native (non-fill) soil. The Cahuilla officially closed AB-52 consultation with agreement to include **Mitigation Measure TRC-1** implemented as part of the project.

In the event that any human remains, or any associated funerary objects are encountered during construction, all work would cease within the vicinity of the discovery, as identified in **Mitigation Measure CUL-1**, as described in Section 4.3, Cultural Resources. In accordance with CEQA (Section 1064.5) and the California

Health and Safety Code (Section 7050.5), the county coroner would be contacted immediately. If the human remains are determined to be Native American, the coroner would notify the Native American Heritage Commission, who would notify and appoint a Most Likely Descendent (MLD). The MLD would work with a qualified archaeologist to decide the proper treatment of the human remains and any associated funerary objects. Thus, with implementation of **Mitigation Measures CUL-1** and **TRC-1**, impacts would be ***less than significant with mitigation incorporated***.

MITIGATION MEASURES

Implement **Mitigation Measure TRC-1**, identified above, and **Mitigation Measure CUL-1**, as described in Section 4.3, Cultural Resources, of this document.

4.8.3 References

Duke Cultural Resources Management (CRM). 2024. Cultural Resource Services for the Idyllwild Wastewater Treatment Plan, City of Idyllwild, County of Riverside, California. Prepared: January 2024.

4.9 Wildfire

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

Issues	Determination
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less Than Significant Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	Less Than Significant Impact
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less Than Significant Impact
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	Less Than Significant Impact

4.9.1 Setting

The proposed project is located in the town of Idyllwild, an unincorporated community located in the San Jacinto Mountains, about 45 miles west of Palm Springs in Riverside County. Together with Pine Cove and Fern Valley, it is a part of the Idyllwild/Pine Cove Census Designated Place and covers an area of 13.73 square miles. According to the Riverside Extended Mountain Area Plan (REMAP), which includes the proposed project site, the rural and mountainous nature of the plan area as well as the local flora, much of REMAP is subject to wildfire susceptibility at very high and high levels (Riverside County, 2021a). This threat is present in both natural environments and built communities.

According to the Riverside County General Plan Safety Element, fire protection in unincorporated Riverside County is provided by the Riverside County Fire Department and California Department of Forestry and Fire Protection (CAL FIRE) (Riverside County, 2021b). Riverside County contracts with CAL FIRE to provide fire protection and rescue services in the unincorporated areas of the county. The Riverside County Fire Department and CAL FIRE participate in a Cooperative Fire Response Agreement, where fire agencies have agreed to automatically support each other on incidents using the closest available resource. The Idyllwild Fire Protection District also provides firefighting rescue, emergency medical services, and ambulance transport services for the unincorporated communities of Idyllwild and Fern Valley (Riverside County, 2021b). The closest fire station to the project site is the Idyllwild Volunteer Fire Company

(Idyllwild Fire Protection District) station 621, located at 54160 Maranatha Drive, approximately 2.5 miles northeast of the project site.

According to the CAL FIRE, Fire Hazard Severity Zones Map, the project site is located in a Very High Severity Zone in State Responsibility Area (SRA) (CAL FIRE, 2023). Topography in the project area is generally flat within the limits of the project site and slopes moderately to the west in the rest of the project area. The topography in surrounding areas is characterized by steep, mountainous terrain. The project area includes substantial developed area, consisting of the WWTP and the paved access road, and also includes tree cover. Vegetation within the project area consists primarily of mixed native and invasive grasses, manzanita, blackberry vines, and coniferous trees.

a) Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

Operations would be similar to existing conditions upon construction completion. The proposed project would not increase capacity along any of the adjacent roadways or induce changes in the surrounding land uses that could increase traffic and congestion. Operation of the proposed project would not require temporary lane closures of serving roads nor require road detours. Thus, operation of the proposed project would not substantially impair local emergency response plans or emergency evacuation plans.

A private roadway currently exists off of Apela Drive and provides access to the Idyllwild WWTP, which construction workers would use to access the project site. In addition, this private roadway would be used for proposed project activities such as construction equipment movement, and the hauling of construction material and debris to and from the project site. Access along roads adjacent and in the vicinity of the project area would be maintained throughout the construction period and there would be no conflict with adjacent land uses.

Construction equipment would be confined within the project site and staging areas would not conflict with other vehicles moving along adjacent roadways. Road closures, lane-closures, or detours would not be required during project construction as off-site improvements are not a component of the proposed project. There would be minimal impacts to circulation as a result of construction-related workforce traffic (employee travel to and from the site), heavy equipment delivery, and material deliveries necessary for project development, but circulation would return to existing conditions upon the construction completion. Furthermore, local law enforcement, fire departments, and emergency service providers would be notified of the construction period of the proposed project by the construction contractor. Thus, the proposed project would not impair an adopted emergency response plan or emergency evacuation plan during operation and construction. Impacts would be ***less than significant,*** and no mitigation measures are required.

b) 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?

The proposed project site's slope, prevailing winds, or other factors that exacerbate wildfire risks and expose the project site and surrounding areas to pollutant concentrations from a wildfire or the uncontrolled spread of wildfire would be similar to existing conditions upon completion of construction.

Construction activities involving vehicles, heavy machinery, and personnel smoking at the proposed project site could result in the ignition of a fire. During construction, heavy equipment and passenger vehicles driving on vegetated areas prior to clearing and grading could increase the risk of fire. For example, heated mufflers and the use of chainsaws could potentially cause sparks or improper disposal of cigarettes could ignite surrounding vegetation. The new diesel generator and fuel would be housed in the existing structure that houses the existing generator. Proposed project coordination with the County would reduce the potential for construction activities and project components to exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations (e.g., fuels and hazardous materials would not be stored on site, inspect and maintain vehicles and equipment to prevent the dripping of oil or other fluids). Impacts would be ***less than significant***, and no mitigation is required.

c) 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?

The proposed project site already includes existing utilities, including overhead electrical and underground water and gas lines. The proposed project would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment beyond what already exists. The proposed project does not require relocating existing utilities within the project site. Existing utilities would remain in service throughout the duration of construction activities. Impacts in this regard would be ***less than significant*** and no mitigation measures are required.

d) Would the project expose people or structures to significant risks, including downslope or downstream flooding or

landslides, as a result of runoff, post-fire slope instability, or drainage changes?

The proposed project would modernize the Idyllwild WWTP to meet existing and future discharge requirements for the community. Operations would be similar to existing conditions upon construction completion. The proposed project would not increase stormwater runoff or result in drainage pattern changes, that would ultimately expose people or structures to significant risks as a result of runoff, post-fire instability, or drainage change.

The new bioreactors and electrical building would be constructed in undeveloped areas on the project site; the remainder of the upgrades would be additions or modifications to existing equipment. Since the project area is already developed, with the existing WWTP and the paved access road, and consists of relatively flat topography, any increase in impervious surface as a result of the proposed project would be negligible in association with drainage changes. In addition, the tree removal required for implementation of the proposed project would be negligible in changing surface drainage patterns due to the limited size of the project area and because the project area is in a developed area with compacted and disturbed soils. During construction, workers would be present on site; however, this increase in workers would be temporary in nature. The risks associated with runoff, slope instability, and drainage changes within the proposed project site during construction would be similar to existing conditions. Thus, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope stability, or drainage changes, above and beyond existing conditions. Impacts would be ***less than significant*** and no mitigation measures are required.

4.9.2 References

California Department of Forestry and Fire Protection (CAL FIRE). 2022. Fire Hazard Severity Zone Viewer. Online: https://egis.fire.ca.gov/FHSZ/. Accessed: January 20, 2024.

Riverside Extended Mountain Area Plan (REMAP). 2021a. Online: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-GPA-2022-Compiled-REMAP-4-2022-rev.pdf. Accessed: January 20, 2024.

Riverside County General Plan – Safety Element. 2021b. Online: https://planning.rctlma.org/sites/g/files/aldnop416/files/migrated/Portals-14-genplan-2021-elements-Ch06-Safety-092821.pdf. Accessed: January 20, 2024.

4.10 Mandatory Findings of Significance

Issues	Determination
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?	Less Than Significant with Mitigation Incorporated
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)?	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?	Less Than Significant with Mitigation Incorporated

4.10.1 Setting

Per CEQA regulations and guidelines, the Lead Agency must summarize the findings of significance from earlier sections and must consider potential cumulatively considerable effects for environmental impact reports (EIRs) and in the discussion section below. Even though this environmental document is an IS/MND and not an EIR, the potential for cumulatively considerable effects are analyzed below.

4.10.2 Discussion

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?

The information in Section 4.2, *Biological Resources*, of this IS/MND analyzes the potential effects of the proposed project on biological resources, including habitats, special-status plant species, and special-status wildlife species. The project was

determined to not have suitable habitat for special-status wildlife species and therefore project implementation would have no impact on such biological resources. The Jeffery pine forest and woodland community located on and around the project site has the potential to be occupied by 23 special-status plant species. However, implementation of **Mitigation Measure BIO-2** requiring a focused special-status plant survey during normal blooming periods for the target species prior to commencement of construction activities would reduce impacts to a less than significant level. The project will not directly impact nesting birds as all trees within the impact area will be removed during the non-nesting bird season (September 1-January 31). However, noise and other disturbance caused by construction activities could indirectly impact nearby nesting birds. Implementation of **Mitigation Measure BIO-1** would require a nesting bird survey prior to commencement of construction activities occurring between February 1 to August 31 and installation of a buffer if nests are discovered, thereby reducing impacts to nesting birds to a level that is less than significant. The information in Section 4.3, Cultural Resources, and Section 4.8, Tribal Cultural Resources, of this IS/MND analyze possible proposed project effects on cultural and tribal cultural resources including the possibility of human remains. Section 4.4, Cultural Resources, and Section 4.14, Tribal Cultural Resources, determined that impacts would be less than significant with the incorporation of mitigation measures (**Mitigation Measure CUL-1**).

MITIGATION MEASURES

Implementation of **Mitigation Measures BIO-1** and **BIO-2**, and **CUL-1**, as described in the IS/MND sections above.

b) Does the project have impacts that are individually limited, but cumulatively considerable?

This IS/MND identified impacts in the areas of biological resources, cultural resources, and tribal cultural resources that individually are limited and require mitigation to ensure that the impacts would be reduced to a less than significant level both incrementally and cumulatively. Each resource within this IS/MND evaluates the proposed project impacts and mitigates the impacts to less than significant. The proposed project approval is conditioned upon implementation of these mitigation measures and BMPs that avoid incremental effects. Therefore, with mitigation incorporation, cumulative impacts are less than significant.

MITIGATION MEASURES

Refer to **Mitigation Measures BIO-1** and **BIO-2**, and **CUL-1**, as described in the IS/MND sections above.

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

The new bioreactors and electrical building would be constructed in undeveloped areas on the project site; the remainder of the upgrades would be additions or modifications to existing equipment. The proposed project would be designed to current federal, State, and local structural standards and building codes. The proposed project would not cause substantial adverse effects on human beings. This IS/MND has identified potential impacts in the areas of biological resources, cultural resources and tribal cultural resources that individually are limited and require mitigation to ensure that the impacts would be reduced to a less than significant level both incrementally and cumulatively. Each resource within this IS/MND evaluates the proposed project impacts and mitigates the impacts to less than significant levels. The proposed project approval is conditioned upon implementation of these mitigation measures and BMPs that avoid incremental effects. Therefore, with mitigation incorporation, cumulative impacts are less than significant.

MITIGATION MEASURES

Refer to **Mitigation Measures BIO-1** and **BIO-2**, and **CUL-1**, as described in the IS/MND sections above.

5. List of Preparers and Reviewers

This Draft IS/MND was prepared by Dewberry in cooperation with the other members of the environmental study team. Dewberry was responsible for project management and Draft IS/MND preparation. The Draft IS/MND technical team and other environmental study team members provided technical expertise, as presented below.

Idyllwild Water District (CEQA Lead Agency)

Interim General Manager	**Curt Sauer**

SUSP Engineering

Senior Engineer, Resource Development Unit	**Nathan Thomas**

Duke Cultural Resource Management

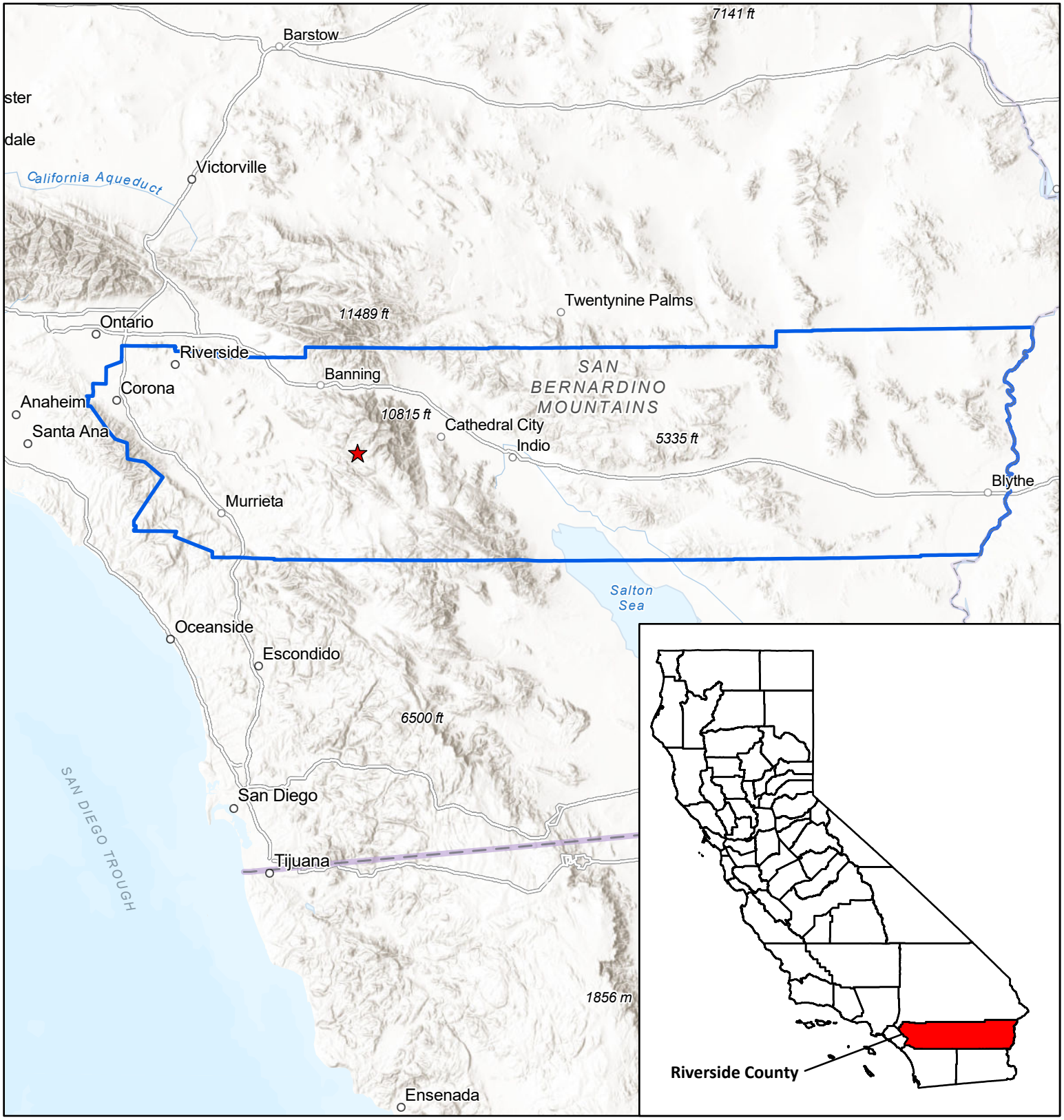
Archaeologist/Field Director	**Alex Bulato**

Dewberry

Environmental Project Manager	**Christa Redd**
Senior Environmental Scientist	**Chris Graham**
Senior Biologist/Environmental Scientist	**Jeff Bray**
Environmental Scientist	**Gianna Gammello**
Graphics/GIS Specialist	**Isabella Ciraulo**

Appendix A: Figures

Regional Location



Idyllwild WWTP Improvement Project

Figure 1-1

Legend

- Project Location
- Riverside County

Dewberry

0 26 Miles

N

Author: I. Ciraulo
Last updated on Thursday, December 28, 2023

Path: \\dewberry.dewberryroot.local\Offices\RanchoCordova\Projects\50128599 - On Call Environmental - CRWA\50128601 - Task Order 2 DEI-IWD 01 Idyllwild CEQA\400 Project Design Files\460 Environ\07 GIS\APRX\ISMND_Idyllwild\ISMND_Idyllwild.aprx

Project Location

Idyllwild WWTP Improvement Project

Figure 1-2

Legend

Project Area (1.73 acres)

0 60 Feet

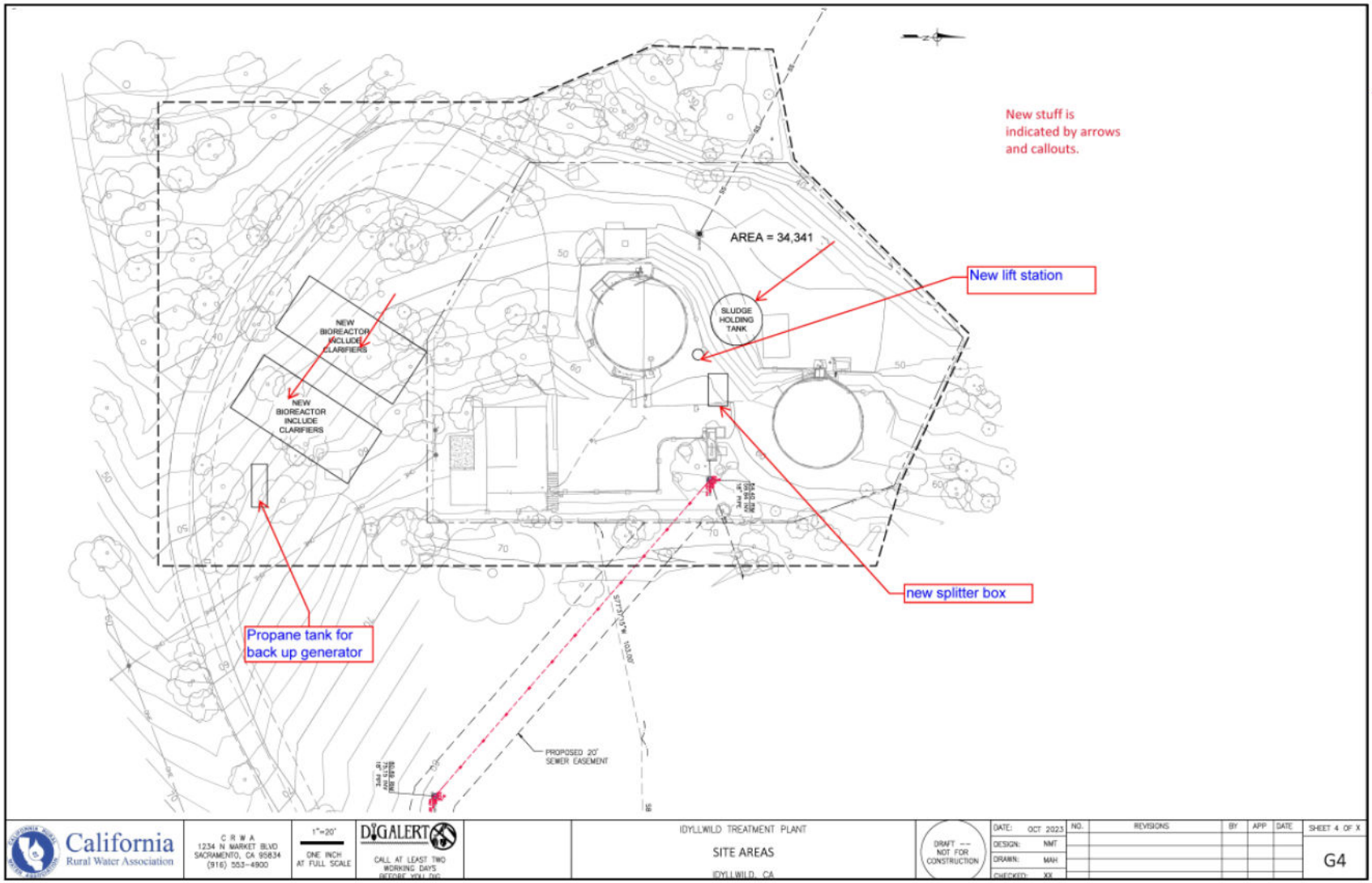
N

Dewberry

Author: I. Ciraulo
Last updated on Thursday, December 28, 2023

Path: \\dewberry.dewberryroot.local\Offices\RanchoCordova\Projects\50128599 - On Call Environmental - CRWA\50128601 - Task Order 2 DEI-IWD 01 Idyllwild CEQA\400 Project Design Files\460 Environ\07 GIS\APRX\ISMND_Idyllwild\ISMND_Idyllwild.aprx

Project Site Plan



Idyllwild Improvement Project

Figure 1-3

Author: A. Piazzoni
Last updated on Monday, January 29, 2024

Dewberry

Path: U:\50128599 - On Call Environmental - CRWA\50128601 - Task Order 2 DEI-IWD 01 Idyllwild CEQA\400 Project Design Files\460 Environ\07 GIS\APRX\Fig1_Fig2\Fig1_Fig2.aprx

Appendix B: Summary of Impacts, Mitigation Measures, and Level of Significance

APPENDIX B.

Summary of Best Management Practices (BMPs)

BEST MANAGEMENT PRACTICES (BMPS) TEXT
• Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil poles, graded areas, unpaved parking areas, staging areas, and access roads. • Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered. • Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeper is prohibited. • Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). • All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used. • Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. • Provide current certificate (s) of compliance for CARB's In-Use Off-Road Diesel- Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. • Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated. • Use and installation, as applicable, of soil erosion and stormwater runoff control measures, such as but not limited to: chemical stabilization, compost blankets, dust watering during construction, installation of geotextiles, matting and netting on susceptible soil areas, mulching, riprap installation, wind fences, construction track-out controls, fiber rolls, storm drain inlet protection, installation of straw or hay bales. • A Stormwater Pollution Prevention Plan (SWPPP) should be prepared and implemented to address all construction-related activities, equipment, and hazardous materials that have the potential to impact water quality. The SWPPP shall be prepared according to the requirements stated in the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activities (Construction General Permit, Order No. 2022-0057-DWQ, NPDES No. CAS000002), or subsequent permit in effect at the time of construction.

BEST MANAGEMENT PRACTICES (BMPS) TEXT
• An area cleared of vegetation should be designated a smoking area for construction crew. • Fire extinguishers should be located on the project site during project construction activities. • Spark arrestors shall be installed on construction equipment that generate sparks during use. Construction equipment that generates sparks should not be used on days when wind speed is greater than 15 miles per hour (mph). • The construction contractor shall develop and implement a toxic materials control and spill response plan to regulate the use of hazardous materials, such as petroleum-based products used as fuel and lubricants for equipment and other potentially toxic materials associated with project construction. • Fuels and hazardous materials shall not be stored on site or if they are stored on site shall be in a secure area that is not susceptible to release.

Summary of Impacts, Mitigation Measures, and Level of Significance After Mitigation

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
AESTHETICS			
Have a substantial adverse effect on a scenic vista?	No Impact.	None required.	No Impact.
Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
In non-urbanized, areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	No Impact.	None required.	No Impact.
Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area?	No Impact.	None required.	No Impact.
AGRICULTURE AND FORESTRY RESOURCES			
Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Conflict with existing zoning for agricultural use, or a Williamson Act contract?	No Impact.	None required.	No Impact.
Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	No Impact.	None required.	No Impact.
Result in the loss of forest land or conversion of forest land to non-forest use?	No Impact.	None required.	No Impact.
Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	No Impact.	None required.	No Impact.
AIR QUALITY			
Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant	None required.	Less than Significant.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	Less than Significant	None required.	Less than Significant.
Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant	None required.	Less than Significant.
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	Less than Significant	None required.	Less than Significant.
BIOLOGICAL RESOURCES			
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 Game or U.S. Fish and Wildlife Service?	Potentially Significant Impact.	**BIO-1: Nesting Birds:** If construction, grading or other project-related activities in the undeveloped portions of the site (i.e., not within the existing WWTP) are scheduled during the nesting season (February 1 to August 31), a preconstruction nesting survey shall be conducted by a qualified biologist within 14 days from the beginning of construction. The preconstruction surveys shall be included suitable nesting habitat within 100 feet of the construction. If the preconstruction survey does not identify any active nests within areas potentially affected by construction activities, no further mitigation would be required.	Less than Significant with Mitigation Incorporated.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		If the preconstruction survey identifies an active nest, a qualified biologist shall establish an appropriate no-work buffer around the active nest(s). The buffer shall be delineated using high visibility fencing. The size of the no-work buffer shall be determined by a qualified biologist based on the species, nest location relative to construction activities, and the nature of the proposed activities. Project activities shall be avoided within the no-work buffer until the nest is deemed no longer active by a qualified biologist. **BIO-2: Special-Status Plants** • A qualified biologist or botanist shall conduct focused surveys for special-status plants during the normal blooming period for the target species. The surveys shall be conducted within the construction area and prior to any ground disturbing activities. The results of the survey shall be documented in a concise memorandum. If the survey results are negative, work can proceed without additional measures. • If special-status plant species are identified within the construction area, a salvage and relocation plan shall be prepared to avoid and minimize direct impacts to special-statue plants. The plan shall identify the methods of salvage (e.g., seed collection, individual transplants) and the relocation area(s), with onsite relocation areas being preferable. The plan shall also include provisions for long-term protections, monitoring, and management requirements	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		that ensure the salvaged/relocated species are self-sustaining for a minimum of 5 years at a minimum 1:1 compensation-to-impact ratio.	
Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	No Impact.	None required.	No Impact.
Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	No Impact.	None required.	No Impact.
Conflict with any local policies or ordinances protecting biological resources, sch as a tree preservation policy or ordinance?	No Impact.	None required.	No Impact.
Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	No Impact.	None required.	No Impact.
CULTURAL RESOURCES			
Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	No Impact.	None. Required.	No Impact.
Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	Potentially Significant.	**CUL-1:** If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. Depending on the nature of the find, a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric or historic archaeology, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no work radius as	Less than Significant with Mitigation Incorporated.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		appropriate, using professional judgment. The following notifications shall apply, as necessary: • If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required. • If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the lead agency. If the find is determined to be eligible for inclusion in the National Register or California Register, the lead agency shall consult on a finding of eligibility and implement appropriate treatment measures. Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the site either: 1) is not eligible for the National Register or California Register; or 2) that the treatment measures have been completed to its satisfaction. • If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641). The archaeologist shall notify the San Diego County Coroner (in accordance with § 7050.5 of the Health and Safety Code). The provisions of § 7050.5 of the California Health and Safety Code, § 5097.98 of the California PRC, and AB 2641 will be implemented. • If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the Native American Heritage Commission (NAHC), which then will designate a Native American Most Likely Descendant (MLD) for the project (§ 5097.98 of the PRC). The designated	

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
		MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC can mediate (§ 5097.94 of the PRC). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (§ 5097.98 of the PRC). This will also include either recording the site with the NAHC or the appropriate information center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work may not resume within the no-work radius until the lead agencies, through consultation as appropriate, determine that the treatment measures have been completed to their satisfaction.	
Disturb any human remains, including those interred outside of formal cemeteries?	Potentially Significant.	Implementation of Mitigation Measure CUL-1.	Less than Significant Impact with Mitigation Incorporated.
ENERGY			
Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
energy resources, during project construction or operation?			
Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	No Impact.	None required.	No Impact.
GEOLOGY AND SOILS			
Directly or indirectly cause potential substantial adverse effect, including the risk of loss, injury, or death involving: i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	No Impact.	None required.	No Impact.
ii. Strong seismic ground shaking?			
iii. Seismic-related ground failure, including liquefaction?	No Impact.	None required.	No Impact.
iv. Landslides?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Result in substantial soil erosion or the loss of topsoil?	No Impact.	None required.	No Impact.
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?	No Impact.	None required.	No Impact.
Be located on expansive soil, as defined in Table 18-1-Bof the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	No Impact.	None required.	No Impact.
Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	No Impact.	None required.	No Impact.
Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	No Impact.	None required.	No Impact.
GREENHOUSE GAS EMISSIONS			

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant	None required.	Less than Significant.
Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant	None required.	Less than Significant.
HAZARDS AND HAZARDOUS MATERIALS			
Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	Less than Significant	None required.	Less than Significant.
Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	Less than Significant	None required.	Less than Significant.
Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	No Impact.	None required.	No Impact.
Be located on a site which is included on a list of hazardous materials sites compiled pursuant	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			
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?	No Impact.	None required.	No Impact.
Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	No Impact.	None required.	No Impact.
Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	Less than Significant	None required.	Less than Significant.
HYDROLOGY AND WATER QUALITY			
Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Substantially decrease ground water supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	No Impact.	None required.	No Impact.
Substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would: i. Result in substantial erosion or siltation on- or off-site?	No Impact.	None required.	No Impact.
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	No Impact.	b) None required.	No Impact.
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
substantial additional sources of polluted runoff?			
iv. Impede or redirect flood flows?	No Impact.	None required.	No Impact.
In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	No Impact.	None required.	No Impact.
Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	No Impact.	None required.	No Impact.
LAND USE AND PLANNING			
Physically divide an established community?	No Impact.	None required.	No Impact.
Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	No Impact.	None required.	No Impact.
MINERAL RESOURCES			

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	No Impact.	None required.	No Impact.
Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	No Impact.	None required.	No Impact.
NOISE			
Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	Less than Significant	None required.	Less than Significant.
Generate excessive groundborne vibration or groundborne noise levels?	Less than Significant	None required.	Less than Significant.
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, in an area within two miles of a public airport or public use airport, would the project	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
expose people residing or working in the area to excessive noise levels?			
POPULATION AND HOUSING			
Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	No Impact.	None required.	No Impact.
Displace substantial numbers of existing people or housing units, necessitating the construction of replacement housing elsewhere?	No Impact.	None required.	No Impact.
PUBLIC SERVICES			
Result in substantial adverse physical impacts associated with the provision of, 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 following public services:	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
i. Fire protection?			
ii. Police protection?	No Impact.	None required.	No Impact.
iii. Schools?	No Impact.	None required.	No Impact.
iv. Parks?	No Impact.	None required.	No Impact.
v. Other public facilities?	No Impact.	None required.	No Impact.
RECREATION			
Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	No Impact.	None required.	No Impact.
Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	No Impact.	None required.	No Impact.
TRANSPORTATION			

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	No Impact.	None required.	No Impact.
Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	Less than Significant	None required.	Less than Significant.
Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	No Impact.	None required.	No Impact.
Result in inadequate emergency access?	No Impact.	None required.	No Impact.
TRIBAL CULTURAL RESOURCES			
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resource Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a	Potentially Significant.	Implementation of Mitigation Measure CUL-1. TCR-1: A member of the Cahuilla Band of Indians shall be present, as a monitor during all earthmoving activities of native (non-fill) soils during project construction activities. If artifacts are found during such activities, implementation of Mitigation Measure CUL-1 shall occur to ensure that such resources are protected as applicable.	Less than Significant with Mitigation Incorporated.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
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, the lead agency shall consider the significance of the resources to a California Native American tribe.	Potentially Significant.	Implementation of Mitigation Measures CUL-1 and TRC-1.	Less than Significant with Mitigation Incorporated.
UTILITIES AND SERVICE SYSTEMS			

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
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?	No Impact.	None required.	No Impact.
Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	No Impact.	None required.	No Impact.
Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	No Impact.	None required.	No Impact.
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?	No Impact.	None required.	No Impact.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	No Impact.	None required.	No Impact.
WILDFIRE			
Substantially impair an adopted emergency response plan or emergency evacuation plan?	Less than Significant.	None required.	Less than Significant.
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 wildfire?	Less than Significant.	None required.	Less than Significant.
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	Less than Significant.	None required.	Less than Significant.
Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result	Less than Significant.	None required.	Less than Significant.

POTENTIAL IMPACT	LEVEL OR SIGNIFICANCE BEFORE MITIGATION	MITIGATION MEASURES	LEVEL OF SIGNIFICANCE AFTER MITIGATION
of run-off, post0fire slope instability, or drainage changes?			
MANDATORY FINDINGS OF SIGNIFICANCE			
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?	Potentially Significant Impact.	Implementation of Mitigation Measures BIO-1, BIO-2, and CUL-1.	Less than Significant with Mitigation Incorporated.
Have impacts that are individually limited, but cumulatively considerable?	Potentially Significant Impact.	Implementation of Mitigation Measures BIO-1, BIO-2, and CUL-1.	Less than Significant with Mitigation Incorporated.
Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	Potentially Significant Impact.	Implementation of Mitigation Measures BIO-1, BIO-2, and CUL-1.	Less than Significant with Mitigation Incorporated.

Appendix C: CalEEMod Air Quality/Greenhouse Gas Output

Idyllwild WWTP Replacement Project Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Idyllwild WWTP Replacement Project
Construction Start Date	4/1/2025
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	3.30
Precipitation (days)	18.6
Location	33.73266, -116.748505
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5636
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

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

General Light Industry	1.73	1000sqft	1.73	0.00	0.00	0.00	—	WWTP

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-1-A	Use Electric or Hybrid Powered Equipment
Construction	C-1-B	Use Cleaner-Fuel Equipment
Construction	C-2*	Limit Heavy-Duty Diesel Vehicle Idling
Construction	C-3	Use Local Construction Contractors
Construction	C-5	Use Advanced Engine Tiers
Construction	C-6	Use Diesel Particulate Filters
Construction	C-7	Use Oxidation Catalyst
Construction	C-8	Use Renewable Diesel
Construction	C-9	Use Dust Suppressants
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Construction	C-12	Sweep Paved Roads

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

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.	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352

Mit.	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
Mit.	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.64	0.53	4.72	6.19	0.01	0.22	0.00	0.22	0.20	0.00	0.20	—	962	962	0.04	0.01	0.00	965
Mit.	0.64	0.53	4.72	6.19	0.01	0.22	0.00	0.22	0.20	0.00	0.20	—	962	962	0.04	0.01	0.00	965
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.12	0.10	0.86	1.13	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	—	159	159	0.01	< 0.005	0.00	160
Mit.	0.12	0.10	0.86	1.13	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	—	159	159	0.01	< 0.005	0.00	160
% 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	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352

2026	0.89	0.75	6.61	8.67	0.01	0.31	0.00	0.31	0.28	0.00	0.28	—	1,347	1,347	0.05	0.01	0.00	1,351
2027	0.85	0.72	6.26	8.68	0.01	0.28	0.00	0.28	0.26	0.00	0.26	—	1,347	1,347	0.05	0.01	0.00	1,352
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
2026	0.89	0.75	6.61	8.67	0.01	0.31	0.00	0.31	0.28	0.00	0.28	—	1,347	1,347	0.05	0.01	0.00	1,351
2027	0.85	0.72	6.26	8.68	0.01	0.28	0.00	0.28	0.26	0.00	0.26	—	1,347	1,347	0.05	0.01	0.00	1,352
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.51	0.42	3.82	4.68	0.01	0.19	0.00	0.19	0.17	0.00	0.17	—	725	725	0.03	0.01	0.00	728
2026	0.64	0.53	4.72	6.19	0.01	0.22	0.00	0.22	0.20	0.00	0.20	—	962	962	0.04	0.01	0.00	965
2027	0.15	0.13	1.11	1.55	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	—	240	240	0.01	< 0.005	0.00	241
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.09	0.08	0.70	0.85	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	—	120	120	< 0.005	< 0.005	0.00	120
2026	0.12	0.10	0.86	1.13	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	—	159	159	0.01	< 0.005	0.00	160
2027	0.03	0.02	0.20	0.28	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	—	39.7	39.7	< 0.005	< 0.005	0.00	39.9

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	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
2026	0.89	0.75	6.61	8.67	0.01	0.31	0.00	0.31	0.28	0.00	0.28	—	1,347	1,347	0.05	0.01	0.00	1,351
2027	0.85	0.72	6.26	8.68	0.01	0.28	0.00	0.28	0.26	0.00	0.26	—	1,347	1,347	0.05	0.01	0.00	1,352
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2025	0.94	0.79	7.10	8.70	0.01	0.34	0.00	0.34	0.32	0.00	0.32	—	1,348	1,348	0.05	0.01	0.00	1,352
2026	0.89	0.75	6.61	8.67	0.01	0.31	0.00	0.31	0.28	0.00	0.28	—	1,347	1,347	0.05	0.01	0.00	1,351
2027	0.85	0.72	6.26	8.68	0.01	0.28	0.00	0.28	0.26	0.00	0.26	—	1,347	1,347	0.05	0.01	0.00	1,352
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.51	0.42	3.82	4.68	0.01	0.19	0.00	0.19	0.17	0.00	0.17	—	725	725	0.03	0.01	0.00	728
2026	0.64	0.53	4.72	6.19	0.01	0.22	0.00	0.22	0.20	0.00	0.20	—	962	962	0.04	0.01	0.00	965
2027	0.15	0.13	1.11	1.55	< 0.005	0.05	0.00	0.05	0.05	0.00	0.05	—	240	240	0.01	< 0.005	0.00	241
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2025	0.09	0.08	0.70	0.85	< 0.005	0.03	0.00	0.03	0.03	0.00	0.03	—	120	120	< 0.005	< 0.005	0.00	120
2026	0.12	0.10	0.86	1.13	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	—	159	159	0.01	< 0.005	0.00	160
2027	0.03	0.02	0.20	0.28	< 0.005	0.01	0.00	0.01	0.01	0.00	0.01	—	39.7	39.7	< 0.005	< 0.005	0.00	39.9

2.4. Operations 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.	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	243	245	0.20	0.01	0.77	254
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	228	230	0.20	0.01	0.02	239
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.05	0.04	0.08	0.62	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.92	210	212	0.20	0.01	0.30	220
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.32	34.7	35.0	0.03	< 0.005	0.05	36.4

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	243	245	0.20	0.01	0.77	254
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	228	230	0.20	0.01	0.02	239
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.04	0.08	0.62	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	206	206	0.01	0.01	0.30	209
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.05	0.04	0.08	0.62	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.92	210	212	0.20	0.01	0.30	220
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20
Waste	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.32	34.7	35.0	0.03	< 0.005	0.05	36.4

2.6. Operations Emissions by Sector, Mitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	243	245	0.20	0.01	0.77	254

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Area	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	1.92	228	230	0.20	0.01	0.02	239
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.05	0.04	0.08	0.62	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	—	206	206	0.01	0.01	0.30	209
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Waste	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.05	0.04	0.08	0.62	< 0.005	< 0.005	0.19	0.19	< 0.005	0.05	0.05	1.92	210	212	0.20	0.01	0.30	220
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6
Area	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Water	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20
Waste	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	0.32	34.7	35.0	0.03	< 0.005	0.05	36.4

3. Construction Emissions Details

3.1. Improvements (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	0.94	0.79	7.10	8.70	0.01	0.34	—	0.34	0.32	—	0.32	—	1,348	1,348	0.05	0.01	—	1,352
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	0.94	0.79	7.10	8.70	0.01	0.34	—	0.34	0.32	—	0.32	—	1,348	1,348	0.05	0.01	—	1,352
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	0.51	0.42	3.82	4.68	0.01	0.19	—	0.19	0.17	—	0.17	—	725	725	0.03	0.01	—	728
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	0.09	0.08	0.70	0.85	< 0.005	0.03	—	0.03	0.03	—	0.03	—	120	120	< 0.005	< 0.005	—	120
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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

3.2. Improvements (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	0.94	0.79	7.10	8.70	0.01	0.34	—	0.34	0.32	—	0.32	—	1,348	1,348	0.05	0.01	—	1,352
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	0.94	0.79	7.10	8.70	0.01	0.34	—	0.34	0.32	—	0.32	—	1,348	1,348	0.05	0.01	—	1,352
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	0.51	0.42	3.82	4.68	0.01	0.19	—	0.19	0.17	—	0.17	—	725	725	0.03	0.01	—	728
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	0.09	0.08	0.70	0.85	< 0.005	0.03	—	0.03	0.03	—	0.03	—	120	120	< 0.005	< 0.005	—	120
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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

3.3. Improvements (2026) - 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	0.89	0.75	6.61	8.67	0.01	0.31	—	0.31	0.28	—	0.28	—	1,347	1,347	0.05	0.01	—	1,351
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	0.89	0.75	6.61	8.67	0.01	0.31	—	0.31	0.28	—	0.28	—	1,347	1,347	0.05	0.01	—	1,351
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	0.64	0.53	4.72	6.19	0.01	0.22	—	0.22	0.20	—	0.20	—	962	962	0.04	0.01	—	965
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	0.12	0.10	0.86	1.13	< 0.005	0.04	—	0.04	0.04	—	0.04	—	159	159	0.01	< 0.005	—	160
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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

3.4. Improvements (2026) - 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	0.89	0.75	6.61	8.67	0.01	0.31	—	0.31	0.28	—	0.28	—	1,347	1,347	0.05	0.01	—	1,351
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	0.89	0.75	6.61	8.67	0.01	0.31	—	0.31	0.28	—	0.28	—	1,347	1,347	0.05	0.01	—	1,351
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	0.64	0.53	4.72	6.19	0.01	0.22	—	0.22	0.20	—	0.20	—	962	962	0.04	0.01	—	965
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	0.12	0.10	0.86	1.13	< 0.005	0.04	—	0.04	0.04	—	0.04	—	159	159	0.01	< 0.005	—	160
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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

3.5. Improvements (2027) - 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	0.85	0.72	6.26	8.68	0.01	0.28	—	0.28	0.26	—	0.26	—	1,347	1,347	0.05	0.01	—	1,352
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	0.85	0.72	6.26	8.68	0.01	0.28	—	0.28	0.26	—	0.26	—	1,347	1,347	0.05	0.01	—	1,352
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	0.15	0.13	1.11	1.55	< 0.005	0.05	—	0.05	0.05	—	0.05	—	240	240	0.01	< 0.005	—	241
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	0.03	0.02	0.20	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.7	39.7	< 0.005	< 0.005	—	39.9
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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. Improvements (2027) - 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	0.85	0.72	6.26	8.68	0.01	0.28	—	0.28	0.26	—	0.26	—	1,347	1,347	0.05	0.01	—	1,352
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	0.85	0.72	6.26	8.68	0.01	0.28	—	0.28	0.26	—	0.26	—	1,347	1,347	0.05	0.01	—	1,352
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	0.15	0.13	1.11	1.55	< 0.005	0.05	—	0.05	0.05	—	0.05	—	240	240	0.01	< 0.005	—	241
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	0.03	0.02	0.20	0.28	< 0.005	0.01	—	0.01	0.01	—	0.01	—	39.7	39.7	< 0.005	< 0.005	—	39.9
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

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

4.1. Mobile Emissions by Land Use

4.1.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Total	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Total	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6

4.1.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Total	0.06	0.05	0.08	0.82	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	239	239	0.01	0.01	0.77	243
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Total	0.06	0.05	0.09	0.66	< 0.005	< 0.005	0.21	0.21	< 0.005	0.05	0.05	—	224	224	0.01	0.01	0.02	227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6
Total	0.01	0.01	0.02	0.11	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	0.05	34.6

4.2. Energy

4.2.1. Electricity Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.2. Electricity Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

4.2.3. Natural Gas Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

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

Consum Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3.2. Mitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Landscape Equipme	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.4. Water Emissions by Land Use

4.4.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20
Total	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20

4.4.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Total	—	—	—	—	—	—	—	—	—	—	—	0.77	3.97	4.74	0.08	< 0.005	—	7.27
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20
Total	—	—	—	—	—	—	—	—	—	—	—	0.13	0.66	0.78	0.01	< 0.005	—	1.20

4.5. Waste Emissions by Land Use

4.5.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Total	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Total	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Total	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67

4.5.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Total	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04

Total	—	—	—	—	—	—	—	—	—	—	—	1.16	0.00	1.16	0.12	0.00	—	4.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Total	—	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67

4.6. Refrigerant Emissions by Land Use

4.6.1. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.6.2. 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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
General Light Industry	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

Equipment Type	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

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

Equipment Type	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. 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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Improvements	Building Construction	4/1/2025	4/1/2027	5.00	523	—

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
Improvements	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37

Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Improvements	Pavers	Diesel	Average	1.00	8.00	81.0	0.42

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Improvements	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Improvements	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Improvements	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Improvements	Graders	Diesel	Average	1.00	8.00	148	0.41
Improvements	Pavers	Diesel	Average	1.00	8.00	81.0	0.42

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Improvements	—	—	—	—
Improvements	Worker	0.00	18.5	LDA,LDT1,LDT2
Improvements	Vendor	0.00	10.2	HHDT,MHDT
Improvements	Hauling	0.00	20.0	HHDT
Improvements	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Improvements	—	—	—	—
Improvements	Worker	0.00	0.00	LDA,LDT1,LDT2

Improvements	Vendor	0.00	10.2	HHDT,MHDT
Improvements	Hauling	0.00	20.0	HHDT
Improvements	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 (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)

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
General Light Industry	0.00	0%

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
2026	0.00	532	0.03	< 0.005
2027	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	8.58	3.44	8.65	2,868	295	118	297	98,480

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	8.58	3.44	8.65	2,868	295	118	297	98,480

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.1.2. Mitigated

5.10.2. Architectural Coatings

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)
0	0.00	0.00	0.00	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00	532	0.0330	0.0040	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	0.00	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)

General Light Industry	400,063	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	400,063	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	2.15	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	2.15	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

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	32.2	annual days of extreme heat

Extreme Precipitation	8.10	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	51.3	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	5	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	0	0	0	N/A

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	5	1	1	4
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	1	1	1	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	91.1
AQ-PM	8.75
AQ-DPM	1.99
Drinking Water	94.5
Lead Risk Housing	48.4
Pesticides	34.1

Toxic Releases	9.44
Traffic	2.40
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	35.0
Haz Waste Facilities/Generators	16.6
Impaired Water Bodies	0.00
Solid Waste	83.3
Sensitive Population	—
Asthma	25.8
Cardio-vascular	55.3
Low Birth Weights	83.5
Socioeconomic Factor Indicators	—
Education	10.3
Housing	45.0
Linguistic	—
Poverty	61.1
Unemployment	81.7

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	30.18093161
Employed	34.62081355
Median HI	31.1176697
Education	—

Bachelor's or higher	61.5167458
High school enrollment	100
Preschool enrollment	1.873476197
Transportation	—
Auto Access	89.83703323
Active commuting	69.22879507
Social	—
2-parent households	65.95662774
Voting	71.97484922
Neighborhood	—
Alcohol availability	90.09367381
Park access	81.35506224
Retail density	10.74040806
Supermarket access	34.31284486
Tree canopy	91.35121263
Housing	—
Homeownership	75.87578596
Housing habitability	81.53471064
Low-inc homeowner severe housing cost burden	32.73450533
Low-inc renter severe housing cost burden	82.80508148
Uncrowded housing	66.9190299
Health Outcomes	—
Insured adults	34.33850892
Arthritis	0.0
Asthma ER Admissions	39.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	51.7
Cognitively Disabled	58.3
Physically Disabled	18.7
Heart Attack ER Admissions	3.5
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	91.9
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	85.1
SLR Inundation Area	0.0
Children	55.0
Elderly	12.9
English Speaking	84.4
Foreign-born	25.7
Outdoor Workers	28.0
Climate Change Adaptive Capacity	—

Impervious Surface Cover	99.2
Traffic Density	1.1
Traffic Access	23.0
Other Indices	—
Hardship	46.1
Other Decision Support	—
2016 Voting	89.4

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	42.0
Healthy Places Index Score for Project Location (b)	45.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
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

Land Use	Improvements to WWTP
Construction: Construction Phases	One construction phase for 24 months
Construction: Off-Road Equipment	Construction specific equipment

Appendix D: Reserved-Responses to Public Comments