INITIAL STUDY/
PROPOSED MITIGATED NEGATIVE DECLARATION

Digestion Improvements Project

Prepared for:
Tahoe-Truckee Sanitation Agency
13720 Butterfield Drive
Truckee, CA 96161

October 2025

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Prepared for:

Tahoe-Truckee Sanitation Agency
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Truckee, CA 96161

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October 2025

PROPOSED MITIGATED NEGATIVE DECLARATION

PROJECT: DIGESTION IMPROVEMENT PROJECT

LEAD AGENCY: TAHOE-TRUCKEE SANITATION AGENCY

Under the California Environmental Quality Act (CEQA), the lead agency is the public agency with primary responsibility over approval of the project. Tahoe-Truckee Sanitation Agency (T-TSA) is the CEQA lead agency because it is responsible for implementation and operation of the Digestion Improvement Project (project).

PROJECT DESCRIPTION SUMMARY

T-TSA is proposing improvements to their process and comfort heating facilities at T-TSA's Water Reclamation Plant (WRP). T-TSA currently operates steam boilers at the WRP that produce heat for anaerobic digestion heating and a portion of the on-site comfort heating needs. Though in operation, T-TSA's existing steam boilers have reached the end of their useful life and require replacement. T-TSA therefore is proposing to replace the existing steam boilers with a new heating and energy recovery system that is more efficient and reliable, reduces long-term operations and maintenance, and provides flexibility to accommodate future demands and processes. The project would include new hydronic boilers to replace the WRP's existing steam boilers, a new boiler building, a new access road, new digester gas conditioning equipment for the new boiler system, and replacement of existing facilities associated with T-TSA's existing process and comfort heating system, including piping systems, electrical equipment, and instrumentation and controls.

The project would be located at T-TSA's WRP at 13720 Butterfield Drive, Truckee, Nevada County, California. The WRP is located along the Truckee River in the eastern portion of the Town of Truckee near the intersection of the Truckee River and Martis Creek. The proposed project would be constructed within and adjacent to existing WRP buildings on T-TSA's property. The project site is approximately 1 acre, located within and on the northeast side of the existing WRP and entirely within the WRP property.

FINDINGS

An Initial Study has been prepared to assess the project's potential effects on the environment and the significance of those effects. Based on the Initial Study, it has been determined that the project would not have any significant effects on the environment once mitigation measures are implemented. The conclusion is supported by the following findings:

1. The project would have no impact related to agriculture and forestry resources, land use and planning, population and housing, public services, and recreation.
2. The project would have a less-than-significant impact on aesthetics, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, mineral resources, noise, transportation, utilities and service systems, and wildfire.
3. Mitigation is required to reduce potentially significant impacts related to air quality, biological resources, cultural resources, and tribal cultural resources to less-than-significant levels.

Pursuant to Section 21082.1 of the California Environmental Quality Act, T-TSA has independently reviewed and analyzed the Initial Study and Mitigated Negative Declaration for the project and finds that the Initial Study and Mitigated Negative Declaration reflects the independent judgment of T-TSA. T-TSA further finds that the project mitigation measures identified in the Initial Study shall be implemented as stated in the Mitigated Negative Declaration.

I hereby approve this project:

_____

Name/Title
Tahoe-Truckee Sanitation Agency
(to be signed upon approval of the project after the public review period is complete)

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LIST OF ABBREVIATIONS

2022 Scoping Plan	2022 Scoping Plan to Achieve Carbon Neutrality
AB	Assembly Bill
BMP	best management practices
Btu	British thermal units
CAA	Clean Air Act
CAL FIRE	California Department of Forestry and Fire Protection
CalGreen	California Green Building Code
Cal-IPC	California Invasive Plant Council
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CDFA	California Department of Food and Agriculture
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CGS	California Geological Survey
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO_2	carbon dioxide
DOC	California Department of Conservation
DTSC	California Department of Toxic Substance Control
DWR	California Department of Water Resources
EFZ	Earthquake Fault Zones
EIR	Environmental Impact Report
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FHSZ	fire hazard severity zone
FMMP	Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration
GHG	greenhouse gas
gpm	gallons per minute
H_2S	hydrogen sulfide
HP	horsepower
hr	hour
IPCC	Intergovernmental Panel on Climate Change

IS/Proposed MND	Initial Study/Proposed Mitigated Negative Declaration
MCAB	Mountain Counties Air Basin
MGD	million gallons per day
$MMTCO_2e$	metric tons of carbon dioxide equivalent
MRF	Material Recovery Facility
MRZ	Mineral Resource Zone Category
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NFPA	National Fire Protection Association compliance
Nox	nitrogen oxides
NO	nitric oxide
NPDES	National Pollutant Discharge Elimination System
NSAQMD	Northern Sierra Air Quality Management District
OSHA	Occupational Safety and Health Administration
PM	Town of Truckee Particulate Matter Air Quality Management Plan
PPV	peak particle velocity
PRC	Public Resources Code
project	Digestion Improvement Project
ROG	reactive organic compounds
scfm	standard cubic feet per minute
SLF	Sacred Lands File
SMAQMD	Sacramento Metropolitan Air Quality Management District
SR	State Route
SRA	State Responsibility Area
SWPPP	stormwater pollution prevention plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TART	Tahoe Truckee Area Regional Transit
TDPUD	Truckee Donner Public Utility District
TRI	Truckee River Interceptor
T-TSA	Tahoe-Truckee Sanitation Agency
TTSD	Truckee Tahoe Sierra Disposal
UCMP	University of California Museum of Paleontology
USFWS	US Fish and Wildlife Service
USGS	US Geological Survey
VdB	Vibration Decibels
VMT	vehicle miles travelled
VOC	volatile organic compounds
WGB	waste gas burner
WRP	Water Reclamation Plant

1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Proposed Mitigated Negative Declaration (IS/Proposed MND) has been prepared by the Tahoe-Truckee Sanitation Agency (T-TSA) to evaluate potential environmental effects resulting from the Digestion Improvement Project (project). Chapter 2, "Project Description," presents detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The Initial Study shows that there is no substantial evidence…that the project may have a significant impact on the environment, or (b) The Initial Study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an Environmental Impact Report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

1.2 PURPOSE OF THIS DOCUMENT

As described in the environmental checklist (Chapter 3), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/Proposed MND is the appropriate document for compliance with the requirements of CEQA. This IS/Proposed MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. T-TSA is the CEQA lead agency because they are responsible for approving and carrying out the project. The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/Proposed MND will be available for a 30-day public review period from October 27, 2025 to November 25, 2025.

Comments should be addressed to:

Scott Fleming, P.E.
Tahoe-Truckee Sanitation Agency
13720 Butterfield Drive
Truckee, CA 96161

E-mail comments may be addressed to: sfleming@ttsa.ca.gov

Supporting documentation referenced in this document is available for review during normal business hours at:

Tahoe-Truckee Sanitation Agency
13720 Butterfield Drive
Truckee, CA 96161

If you have questions regarding the IS/Proposed MND, please call Scott Fleming at: (530) 587-2525 ext. 105. If you wish to send written comments (including via e-mail), they must be postmarked by November 25, 2025.

After comments are received from the public and reviewing agencies, the T-TSA Board may (1) adopt the MND and approve the project, (2) undertake additional environmental studies, or (3) abandon the project. If the project is approved and funded, the project proponent may proceed with the project.

1.3 SUMMARY OF FINDINGS

Chapter 3 of this document contains the analysis and discussion of potential environmental impacts of the project.

Based on the issues evaluated in that chapter, it was determined that the project would have either no impact or a less-than-significant impact related to most of the issue areas identified in the Environmental Checklist, included as Appendix G of the State CEQA Guidelines. These include the following issue areas:

- aesthetics,
- agriculture and forestry 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,
- utilities and service systems, and
- wildfire.

Potentially significant impacts were identified for air quality, biological resources, cultural resources, and tribal cultural resources; however, mitigation measures included in the IS/Proposed MND would reduce all impacts to a less-than-significant level.

1.4 ENVIRONMENTAL PERMITS

In addition to T-TSA approval of the project, the project would require permits from the Northern Sierra Air Quality Management District as described in Chapter 2, "Project Description."

1.5 DOCUMENT ORGANIZATION

This IS/Proposed MND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document as well as presents a summary of findings.

Chapter 2: Project Description and Background. This chapter describes the purpose of and need for the proposed project, identifies project objectives, and provides a detailed description of the project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be significant after implementation of mitigation, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.

Chapter 4: References. This chapter lists the references used in preparation of this IS/Proposed MND.

Chapter 5: List of Preparers. This chapter identifies report preparers.

2 PROJECT DESCRIPTION

2.1 AGENCY BACKGROUND

Tahoe-Truckee Sanitation Agency (T-TSA) is a public agency that provides municipal wastewater collection and treatment for the North Lake Tahoe and Truckee region. T-TSA owns and operates the Water Reclamation Plant (WRP) where the Digestion Improvement Project (project) would occur. The WRP was originally constructed in the mid-1970s and began treating wastewater in 1978, with major expansions in 1982 and 2008. The WRP has a capacity of 9.6 million gallons per day (MGD) but currently receives an average annual flow of 4.02 MGD with a maximum month flow of 5.88 MGD. Wastewater is conveyed to the WRP from Tahoe City via the Truckee River Interceptor (TRI), which collects flows from T-TSA's service area and five member districts, including:

- North Tahoe Public Utility District
- Tahoe City Public Utility District
- Alpine Springs County Water District
- Olympic Valley Public Service District
- Truckee Sanitary District, which includes Northstar Community Services District

2.2 EXISTING FACILITIES

The existing treatment processes at the WRP include screening, grit removal, primary treatment, high purity oxygen activated sludge secondary treatment with advanced biological phosphorus removal (Phostrip™), chemical side-stream treatment (lime, carbon dioxide, and clarification), biological nitrogen removal, and advanced treatment (dual media filtration and disinfection) prior to discharge to soil via subsurface percolation. Solids are thickened and treated through meso- and thermophilic anaerobic digestion prior to dewatering and disposal. Anaerobic digestion produces digester gas, which when treated to remove hydrogen sulfide (H_2S), is similar in composition to natural gas and can be used as fuel to provide heating and electricity.

T-TSA currently operates steam boilers that produce heat for the WRP's four (4) anaerobic digesters and on-site heating needs. The existing steam comfort heating system is supplied by the boilers in Digester Control Building 32. The WRP also has an existing hot water boiler, the Camus boiler, that provides heat to the air handling units. The WRP's current comfort heating is broken up into multiple heat sources around the site, including hot water, steam, electricity, and natural gas.

The existing digester gas conditioning system for the steam boilers consists of digester foam separators, a moisture separator system with multiple moisture traps, and a roof mounted H_2S removal iron sponge. T-TSA currently operates an exhaust gas cooling system comprised of a wet scrubber mounted on the roof that cools the carbon dioxide (CO_2) rich boiler exhaust gas to moderate temperatures to compress and transport to a re-carbonation basin for use in process pH control. The existing scrubber cools the exhaust gases with a water impingement system. The gases are then compressed via three separate gas compressors and sent to the WRP's re-carbonation basin. Only the exhaust gases required for the process addition are cooled and compressed, while the remaining exhaust bypasses the system to the atmosphere.

An existing unimproved access road extends along the northern boundary of the project site to the proposed new boiler building site. The access road alignment crosses a rock-lined drainage swale about 3 feet deep and 5 feet wide in the northwestern portion of the project site and an approximately 18-inch-diameter stormwater culvert in the northeastern portion of the project site. This is the proposed alignment for the new access road to the new boiler building.

2.3 PROJECT OVERVIEW

T-TSA is proposing improvements to their process and comfort heating facilities as part of the project at T-TSA's WRP. T-TSA currently operates steam boilers at the WRP that produce heat for anaerobic digestion heating and a portion of the on-site comfort heating needs. Though in operation, T-TSA's existing steam boilers have reached the end of their useful life and require replacement. T-TSA therefore is proposing to replace the existing steam boilers with a new heating and energy recovery system that is more efficient and reliable, reduces long-term operations and maintenance, and provides flexibility to accommodate future demands and processes. The project would include new hydronic boilers to replace the WRP's existing steam boilers, a new boiler building, a new access road, new digester gas conditioning equipment for the new boiler system, and replacement of existing facilities associated with T-TSA's existing process and comfort heating system, including piping systems, electrical equipment, and instrumentation and controls.

2.3.1 Project Location

The project would be located at T-TSA's WRP at 13720 Butterfield Drive, Truckee, Nevada County, California (Figure 2-1). The WRP is located along the Truckee River in the eastern portion of the Town of Truckee near the intersection of the Truckee River and Martis Creek. The proposed project would be constructed within and adjacent to existing WRP buildings on T-TSA's property (Figure 2-2). The project site is approximately 1 acre, located within and on the northeast side of the existing WRP and entirely within the WRP property. Surrounding land uses include the Truckee River Legacy Trail and the Truckee River to the north, Martis Valley Quarry, which is operated by Teichert to the southeast, and vacant land throughout the remainder of the surrounding area. Access to the property is provided by Butterfield Drive, which is gated.

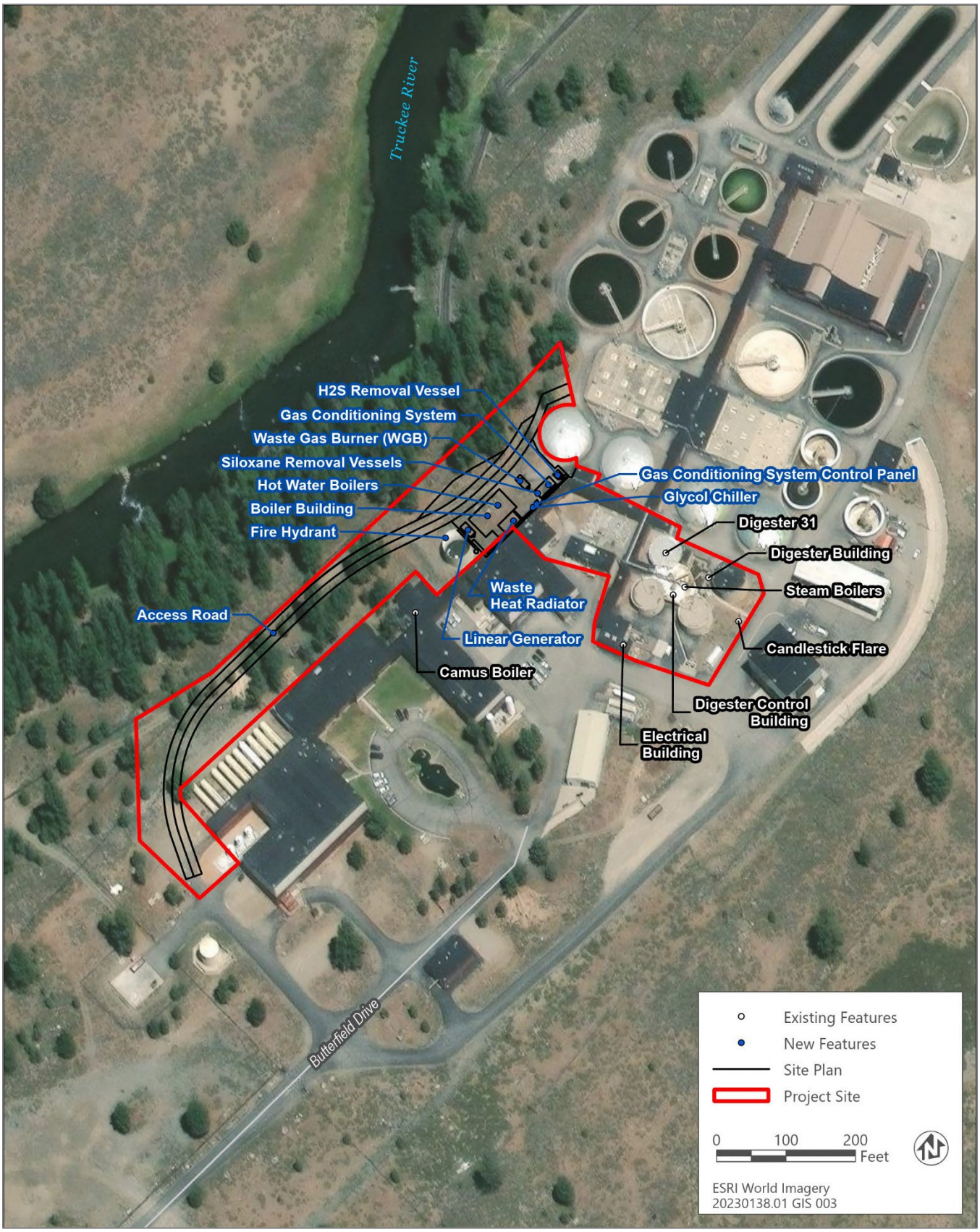
2.3.2 Project Objectives

The goal of the project is to design and construct a new boiler facility and system that meet the following project objectives:

- provide a safe, reliable, and efficient heating source for the WRP;
- minimize maintenance needs;
- incorporate system features that enable easy monitoring, control, and maintenance, thereby enhancing the system lifespan and reducing operational costs; and
- minimize disruption to existing operations during construction.

Source: Adapted by Ascent in 2025.

Figure 2-1 Project Vicinity



Source: Adapted by Ascent in 2025.

Figure 2-2 Project Site

2.4 PROPOSED PROJECT

Major project components would include the following:

- a new boiler building;
- new hot water boilers;
- new heat exchangers for hot water boilers;
- a new waste heat radiator;
- new hot water loop;
- comfort heating system conversion from steam to hot water;
- digester heat loop equipment replacement;
- 340 standard cubic feet per minute (scfm) digester gas candlestick flare replacement with an enclosed waste gas burner;
- digester 31 floating cover replacement;
- new digester gas conditioning equipment including H_2S, moisture, and siloxane removal and gas compression;
- new generator for energy recovery; and
- a new access road.

Each of these project components is described in more detail below.

2.4.1 New Boiler Building & Hot Water Boilers

The new boiler building would be located north of the existing administration building and its utility corridor. The new boiler building would be approximately 3,000 square feet. The building would be approximately 20 feet in height. A new fire hydrant would need to be extended to the new boiler building.

The proposed project would include two new boilers, one to meet the primary heating needs and one as a standby boiler. The new boiler sizing is based on the minimum and maximum heat demand scenarios estimated for the WRP. The boiler would be operated primarily with digester gas with the ability to run on either digester gas or supplemental natural gas, as needed. A 250 horsepower (HP) boiler is proposed to support the maximum heat demand, while also having the best turndown capabilities for the minimum heat demand; the standby boiler would have the same capacity.

2.4.2 New Heat Exchangers

The project would include replacement of the heat exchangers at three (3) of the four (4) digesters. Heat exchangers would be spiral-style heat exchangers. This style is compact, efficient, and easy to maintain. The new heat exchangers are proposed to be in place of or nearby the existing heat exchangers to enable the reuse of available infrastructure.

2.4.3 Waste Heat Radiator

When heat demands are at a minimum at the WRP, such as during the summer season, an excess of approximately 1,000 British thermal units (Btu) per hour (hr) of heat would be generated that would need to be rejected to avoid cycling the boilers. The project would include a water-to-air radiator located outdoors adjacent to the new boiler building to manage excess heat.

2.4.4 New Hot Water Loop

The main hot water loop configuration would require reconfiguring the existing steam piping system with the installation of a new hot water loop and pumping system. The flow rate for the hot water loop would be 373 gallons per minute (gpm) based on the maximum heat demand to be served by the new loop. Piping and pumps would be sized to accommodate this flow rate. The main pumps would be located within the new boiler building. The new boilers, digester heat exchangers, and other secondary heat loads would supply and return from the same side of the new heat loop and would be powered by their own secondary loop pumps. Both the main loop and secondary loop pumps would operate at constant speed while the three-way valve modulates to allow hot water into the secondary loop as needed based on temperature set points.

2.4.5 Comfort Heating System Conversion

Comfort heating at the WRP is currently provided by various heat sources around the site, including hot water, steam, electricity, and natural gas. Therefore, the project would include converting the existing heating system from steam, electricity, and natural gas to hot water in most buildings. These buildings would be served by a combination of the existing Camus boiler and the new hot water loop. Buildings that are too distant to be served by the hot water loop would be converted to electrical heaters. This would reduce maintenance and improve efficiency.

The pump and heat exchanger for the existing Camus boiler would need to be resized as well as a new interface installed with the new heat loop. This interface through an additional heat exchanger would allow the new boilers to provide a level of redundancy if the Camus boiler were to be out of service.

2.4.6 DIGESTER HEAT LOOP EQUIPMENT REPLACEMENT

Replacement of the existing digester heat loop equipment would include new heat exchangers, described above, piping, and heat recirculation pumps. The heat recirculation pumps would be replaced to accommodate the new heat exchanger flow requirements.

2.4.7 Digester Gas Candlestick Flare

The project would also replace T-TSA's existing candlestick-style digester gas flare with a new, enclosed-style low-NOx (nitrogen oxides) waste gas burner (WGB). The new WGB would be a low-emission, natural-draft, enclosed burner and would have a maximum capacity of approximately 340 scfm and be used for backup when digester gas could not be sent to the new hot water boilers.

2.4.8 New Digester Gas Conditioning Equipment

The project would include replacement of the existing H_2S removal and moisture separator systems with a new packaged skid-mounted gas conditioning system installed outside the new boiler building. Digester gas would be conveyed through new digester gas piping from the digesters to the gas conditioning equipment at the new boiler building. Condensate traps on the digester gas piping system would be installed to ensure National Fire Protection Association (NFPA) compliance. The existing digester gas equipment on each digester cover would not be removed, and connection to the new digester gas piping system would be made on the roof of each digester, downstream of the covers. Freeze protection would be provided for outdoor equipment, as necessary.

The gas conditioning system would begin with a single stainless steel vessel approximately 8 feet in diameter and 16 feet tall. The vessel would be packed with removable media (pelletized iron hydroxide) for H_2S removal. The new gas compression and moisture removal system would be a skid-mounted system that includes gas particulate filters, blowers, a dual-core gas heat exchanger, and instrumentation. If needed, a siloxane removal system would consist of a stainless-steel vessel with a 54-inch diameter and 12 feet in height packed with activated carbon.

During media replacement, the H_2S and siloxane vessels would be temporarily bypassed, with gas either flared through the new enclosed WGB or sent directly to the boiler. The gas conditioning system may either be heat-traced and located in a covered area outside the new boiler building with road access for contractors to replace media or installed in an outdoor enclosure to minimize exposure and the need to work on the system in harsh weather. Digester gas piping would be connected to the gas conditioning equipment, new boilers, WGB, and any additional digester gas utilization technology post gas conditioning. Gas piping would be designed to allow digester gas to bypass the gas conditioning system and be conveyed directly to the WGB or boilers for maintenance or repairs.

2.4.9 Digester 31 Cover Replacement

The operation of the existing cover for digester 31 is affected by snow, which can add weight to the cover, increasing its "ballast" and operating pressure. Therefore, a new, dual-membrane cover for the digester would be installed. A dual-membrane cover would increase digester gas storage and would be compatible with future opportunities such as energy recovery or increased gas production via high strength waste co-digestion. The dual-membrane cover would minimize the need for snow shoveling, enable automation, and allow for greater sludge level variation within the digester, improving digester operations and maintenance.

2.4.10 New Generator

A new linear generator would be installed at the WRP to generate electricity from digester gas and/or natural gas. This type of generator converts linear motion directly into electricity using chemical energy, without combustion, making them highly efficient and resulting in low NOx emissions. The new linear generator would be installed outside the new boiler building and be connected to the gas conditioning equipment downstream of the new boilers.

2.4.11 New Access Road

The project would include construction of a new access road to the new boiler building that generally follows the alignment of the existing unimproved access road extending along the northern border of the project site. The new road would be paved with asphalt and several trees would need to be removed for construction of the road. A fire hydrant would be installed along the new access road near the new boiler building.

2.4.12 Construction

Construction of the project would take approximately 24 months beginning in spring or summer of 2026. Soil-disturbing activities would generally take place between May 1 and October 15 of each year due to snow and ground freezing conditions.

The new boiler building would be constructed first and would involve site clearing, grading, excavation, underslab piping/electrical, footings, pouring, and backfill. Then the new access road would be constructed and new natural gas piping to the new boiler building would be installed. Equipment, piping, electrical, and controls for the comfort heaters and heat exchangers would be installed. Once these components are complete, the existing steam piping would be demolished, and the new primary and secondary heat loop piping would be installed. Equipment, piping, electrical, and controls for the gas conditioning equipment, WGB, exhaust gas scrubber, waste heat radiator, boilers, and generator would then be installed followed by digester cleaning and demolition of the existing digester gas piping. The new digester gas piping from the digesters to the new boiler building would be installed and routed on the side of the existing corridors, followed by installation of the new dual membrane cover for digester 31.

All vegetation would be stripped and grubbed from the project footprint and removed from the project site. Trees and associated roots greater than 0.5-inch in diameter that are within the project footprint would be removed, where necessary. Boulders that protrude more than 2 inches above subgrade within the project footprint would be cut back or removed.

The number of construction workers on-site would vary; however, approximately 15 to 30 workers are anticipated to be on-site during construction, and there may be several deliveries for materials each day with a few additional delivery trips during construction start-up and the end of construction. Equipment used for construction would include one or more of the following: excavator, backhoe, crane, dump truck/haul trucks, vibratory compactor, paver, sheepsfoot and loader.

Work hours generally would follow the Town of Truckee noise ordinances (Section 18.44.070 of the Development Code) and be limited to the hours between 7:00 a.m. and 9:00 p.m., Monday through Friday, and with working hours outside these times only granted under special circumstances by T-TSA. Upon completion of construction, all unpaved areas would be hydroseeded using a native seed mix.

2.4.13 Operations and Maintenance

The project is expected to be operational in 2028. Operation of the project would not change the operating hours at the existing WRP. Currently, the WRP operates 24 hours per day, every day. Routine maintenance would be similar to or less than existing maintenance and would occur for all new facilities. Maintenance would generally include preventative maintenance, and daily, weekly, monthly, quarterly, and annual inspections. Maintenance would occur periodically or annually depending on the specific facility and would be similar to existing maintenance. Operation of the project would not require additional employees to operate and maintain the new facilities; therefore, operation of the project would not result in an increase in long-term vehicle trips.

2.5 PROJECT APPROVALS

Permits and other project approvals that may be required by other agencies prior to project construction include the following:

- Northern Sierra Air Quality Management District – Authority to Construct Permit and Permit to Operate

3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: **T-TSA Digestion Improvement Project**
2. Lead Agency Name and Address: **Tahoe-Truckee Sanitation Agency**
3. Contact Person and Phone Number: **Scott Fleming, P.E., (530) 587-2525 ext. 105**
4. Project Location: **13720 Butterfield Drive, Truckee, CA 96161**
5. Project Sponsor's Name and Address: **T-TSA, 13720 Butterfield Drive, Truckee, CA 96161**
6. General Plan Designation: **See Section 3.11, "Land Use and Planning," below.**
7. Zoning: **See Section 3.11, "Land Use and Planning," below.**
8. Description of Project: **See Chapter 2, "Project Description."**
9. Surrounding Land Uses and Setting: **See Section 3.11, "Land Use and Planning," below.**
10. Other public agencies whose approval is required: **See Section 2.5 in Chapter 2, "Project Description."**
11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.? **See Section 3.18, "Tribal Cultural Resources," below.**

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where noted below with a "Y" for yes, the topic with a potentially significant impact will be addressed in an environmental impact report.

- ☐ Aesthetics
- ☐ Agriculture and Forestry Resources
- ☐ Air Quality
- ☐ Biological Resources
- ☐ Cultural Resources
- ☐ Energy
- ☐ Geology / Soils
- ☐ Greenhouse Gas Emissions
- ☐ Hazards / Hazardous Materials
- ☐ Hydrology / Water Quality
- ☐ Land Use / Planning
- ☐ Mineral Resources
- ☐ Noise
- ☐ Population / Housing
- ☐ Public Services
- ☐ Recreation
- ☐ Transportation
- ☐ Tribal Cultural Resources
- ☐ Utilities / Service Systems
- ☐ Wildfire
- ☐ Mandatory Findings of Significance
- ☐ None
- ☒ None with Mitigation Incorporated

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

No I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

Yes 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.

No I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

No 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.

Yes 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, nothing further is required.

Signature _____ Date 10/22/25

Printed Name Jason Hays Title General Manager

Agency Tahoe-Truckee Sanitation Agency

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Except as provided in Public Resources Code Section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☒	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Environmental Setting

The project site is within the T-TSA WRP property adjacent to existing WRP facilities and surrounded by high mountain vegetative communities. The Truckee River Legacy Trail runs parallel to the Truckee River approximately 100 feet north of the existing T-TSA WRP (Figures 3.1-1 through 3.1-4). The topography within the project site and surrounding area is on a slight hill that slopes towards the Truckee River. Overall vertical relief is estimated to be 15 feet (Black Eagle Consulting 2025). A few buildings and clarifying tanks are visible from the Truckee River Legacy Trail. There are trees, shrubs, boulders, and an existing black fence between the Truckee River Legacy Trail and the existing infrastructure on the project site.

The east and south sides of the project site have the largest concentration of existing structures at the WRP, with the less developed western half of the WRP having scattered structures, roads, office buildings, parking, and storage facilities. Structures on the site have an industrial appearance and consist of tanks and ponds of various sizes, concrete-construction and metal-construction buildings, conveyance pipes, below-ground and above ground tanks, pumps, and paved expanses. The majority of the facility is not landscaped, and natural vegetation consists of annual grasses, high desert shrubs, and conifer trees. The existing structures of the WRP are primarily visible from Butterfield Drive and Joerger Drive to the west and southwest of the WRP. The views of the existing facilities from these roads are distant, and not highly trafficked areas due to the isolated and industrial nature of the area. The closest residences are approximately 1,600 feet north of the project site across the Truckee River where views are obscured by existing topography and vegetation (Town of Truckee 2022, 4.1-11).

There are no officially designated state scenic highways near the project site; however, Interstate 80 (I-80) is the nearest eligible scenic highway, which is approximately 1.5 miles north of the project site (Caltrans 2025). The project site would not be visible from the eligible scenic highway due to distance, topography, and vegetation.

Source: Ascent in 2025.

Figure 3.1-1 Views from Truckee River Legacy Trail Looking West Toward the Project Site

Source: Ascent in 2025.

Figure 3.1-2 Views from the Truckee River Legacy Trail Looking South Toward the Project Site

Source: Ascent in 2025.

Figure 3.1-3 Views from the Truckee River Legacy Trail Looking Southeast Toward the Project Site

Source: Ascent in 2025.

Figure 3.1-4 Views from the Truckee River Legacy Trail Looking Southwest Toward the Project Site

The banks of the Truckee River and the Truckee River Legacy Trail provide public views of the existing WRP site. The Truckee River Legacy Trail and the adjacent project site have views of Mount Rose and the Truckee River that are considered scenic vistas in the Town of Truckee General Plan EIR (Town of Truckee 2022: 4.1-8).

The existing T-TSA WRP has limited nighttime lighting for security and work area safety. The surrounding area is mostly isolated industrial areas that are largely unlit but include nighttime lighting for security and work area safety.

3.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

Less-than-significant impact. The proposed project would be constructed within and adjacent to existing WRP buildings on T-TSA's property, south of the Truckee River. The Town of Truckee 2040 General Plan Update (2040 GPU) includes Figure 4.1-3, which displays scenic vistas within and surrounding the Town of Truckee (Town of Truckee 2022: 4.1-8). The Town of Truckee 2040 GPU characterizes the area between Glenshire Drive south to Joerger Drive, including the Truckee River, as a scenic vista (Town of Truckee 2022: 4.1-8). As stated above, the project site is within an area that has views of Mount Rose, views of the Truckee River, and is visible from the Truckee River Legacy Trail, which is between the river and project site.

Trees, shrub, and potentially boulder removal within the project footprint would be required for construction of the project; however, once constructed, the new boiler building and access road would be within the T-TSA property, adjacent to existing buildings, and would be almost completely screened from view by topography, trees, and shrubs. Because facilities at the T-TSA WRP site are already visible from the Truckee River Legacy Trail (see Figures 3.3-1 through 3.3-4) and the project features would be built adjacent to these existing facilities, it would not substantially degrade views of the project site from the Truckee River Legacy Trail. The project would be constructed on the northern portion of the T-TSA property and, therefore, would not change the views from Butterfield Drive or Joerger Drive, nor would it alter views of Mount Rose or I-80.

Construction equipment could temporarily disrupt views from the Truckee River Legacy Trail during construction activities; however, visual impacts are anticipated to be short-term and would not affect the same area for an extended period. Upon completion of construction, all unpaved areas would be hydroseeded using a native seed mix. Impacts to scenic vistas are anticipated to be temporary and less than significant, and no mitigation is required.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No impact. The nearest eligible state scenic highway is I-80, located approximately 1.5 miles north of the project site. However, the project site and staging area are not located within the viewshed of I-80. Because there are no eligible or designated state scenic highways with views of the project site, the project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. The project would have no impact on a state scenic highway, and no mitigation is required.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less-than-significant impact. As described above, a portion of the project would be upslope from the Truckee River and Truckee River Legacy Trail and would involve construction equipment that could temporarily degrade the scenic quality of views from these areas. However, construction activities would be short-term and obscured by vegetation and topography. Upon completion of construction, all unpaved areas would be hydroseeded using a native seed mix. Thus, the project would not substantially degrade the existing visual character or quality of public views. No mitigation is required.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less-than-significant impact. Construction-related activities would generally occur during daylight hours and with working hours outside daylight hours only granted under special circumstances by T-TSA. Construction equipment is unlikely to have reflective surfaces and would not be a substantial source of glare in the area. The project site and staging area are located in an industrial setting. Operation of the project would not change the operating hours at the existing WRP. Currently, the WRP operates 24 hours per day, every day. The existing T-TSA WRP has lighting for security and work area safety. The new building would include additional security lighting. However, this lighting would be consistent with lighting from the existing WRP facilities. The project would not result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Therefore, the project would have a less-than-significant impact related to light and glare, and no mitigation is required.

3.2 AGRICULTURE AND FORESTRY RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture and Forestry Resources. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

Farmlands are mapped by the California Department of Conservation (DOC) under the Farmland Mapping and Monitoring Program (FMMP). Under FMMP, land is delineated into the following eight categories: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban or Built-Up Land, Other Land, and Water. The project site is not classified as any type of farmland by DOC and therefore is not designated as Important Farmland (DOC 2025). The project site consists of the WRP facilities, natural vegetation,

maintenance roadways, and parking areas. The project area is surrounded by mining operations, a recreational trail, the Truckee River, and vacant land. There is no farmland in the project vicinity.

The California Land Conservation Act of 1965, commonly referred to as the Williamson Act, enables local governments to enter into contracts with private landowners for the purpose of preserving agriculture and restricting unnecessary conversion to urban uses. Under the contract, landowners receive reduced property tax assessments based on the property's value for farming and open spaces as opposed to full market value. Based on the Town of Truckee General Plan EIR, there are no lands in the project area that are under a Williamson Act contract (Town of Truckee 2022).

In addition, while there are forested areas in the project vicinity, there are no timberlands or lands designated as forest land in the project area, and the area is not zoned for forest land or forestry resources (Town of Truckee 2022; Town of Truckee n.d.).

3.2.2 Discussion

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

No impact. The proposed project would include new and upgraded facilities within the T-TSA WRP site. According to the DOC FMMP's California Important Farmland Finder, the project site is not located on land classified as farmland (DOC 2025). Additionally, the Town of Truckee General Plan EIR does not identify any farmland within the project site (Town of Truckee 2022). Thus, there would be no impact to Important Farmland, and no mitigation is required.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No impact. The project is not located on land designated or zoned for agricultural use. The land use designation/zoning for the project site is Public/Public Facilities within the boundaries of the Town of Truckee (Town of Truckee 2022). The public land use designation allows for public facilities and government offices. Adjacent land is characterized by industrial, resource conservation and open space, and public facilities uses. The project site is not zoned for agricultural use or subject to a Williamson Act contract. Therefore, the project would not conflict with zoning for agricultural use or a Williamson Act contract. There would be no impact, and no mitigation is required.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g])?

No impact. As previously discussed, the land use designation/zoning for the project area is Public/Public Facilities. Adjacent land is characterized by industrial, resource conservation and open space, and public facilities uses. The project site is located within T-TSA WRP property and is not located within or adjacent to land designated as forest land, timberland, or timberland zoned Timberland Production. There would be no impact, and no mitigation is required.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No impact. As previously discussed, the project is not located on lands that contain forest land or forest resources. Implementation of the proposed project would not result in the loss of forest land or conversion of forest land to non-forest uses. Thus, there would be no impact, and no mitigation is required.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No impact. As previously discussed, there are no lands within the project area that are designated as agricultural or farmland. Additionally, the project is not located on lands designated as forest land. The project would upgrade existing facilities and install new facilities within the T-TSA WRP site. No existing or planned farming operations occur within or adjacent to the project. Therefore, there would be no impact, and no mitigation is required.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. Air Quality. Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations. Are significance criteria established by the applicable air district available to rely on for significance determinations? Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Environmental Setting

Air quality conditions and pollutant concentrations found in the Town of Truckee result from the combination of pollutant emissions and meteorological conditions. Air pollutant emissions generated in the Town of Truckee affect both residents of the town and those downwind. Likewise, emissions generated upwind of the town can affect town residents. Short-term changes in air pollutant concentrations are mostly determined by changes in meteorology; however, long-term trends are primarily affected by rates of air pollutant emissions.

TOPOGRAPHY, CLIMATE, AND ATMOSPHERIC CONDITIONS

The project site is located in the Mountain Counties Air Basin (MCAB), which encompasses all of Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa Counties, as well as the middle portion of Placer County and the western portion of El Dorado County. The project historically experiences mild summers characterized by clear skies with warm daytime temperatures and cool nights. Cold temperatures coupled with changeable weather conditions characterize winters. Most precipitation occurs during the months of November through April in the form of snow. Based on a 112-year period from 1904 to 2016, average maximum temperatures are 39.2 degrees Fahrenheit (°F) and 82.3°F for January and July, respectively. Average minimum temperatures for January and July are 14.6°F and 41.7°F, respectively. Average total snowfall is 201.8 inches and average precipitation (i.e., rain) is 30.15 inches totaling 231.95 inches per year (WRCC 2016). The prevailing wind direction comes from the south (WRCC 2002).

EXISTING AIR QUALITY AND ATTAINMENT STATUS SUMMARY

The federal Clean Air Act (CAA) requires the US Environmental Protection Agency (EPA) to set national ambient air quality standards (NAAQS) (40 CFR Part 50) for pollutants considered harmful to public health and the environment:

ground-level ozone, carbon monoxide, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter (PM) and lead. EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally based criteria (science-based guidelines) for setting permissible levels.

Under amendments to the CAA, EPA has classified air basins, or portions thereof, as either "attainment" or "nonattainment" for each criteria pollutant based on whether the national standards have been achieved. The California Clean Air Act, patterned after the CAA, also designates areas as "attainment" or "nonattainment" for state standards. Thus, California has two sets of attainment-nonattainment designations: one with respect to national standards and one with respect to state standards. Table 3.3-1 identifies the federal and state ambient air quality standards.

Table 3.3-1 Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California (CAAQS)[a,b]	National NAAQS[c] Primary[b,d]	National NAAQS[c] Secondary[b,e]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	–[e]	Same as primary standard
	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (147 µg/m^3)	
Carbon monoxide (CO)	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	—
	8-hour	9 ppm[f] (10 mg/m^3)	9 ppm (10 mg/m^3)	
Nitrogen dioxide (NO_2)	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	53 ppb (100 µg/m^3)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
Sulfur dioxide (SO_2)	24-hour	0.04 ppm (105 µg/m^3)	—	—
	Annual arithmetic mean	—	—	10 ppb
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb	—
Respirable particulate matter (PM_{10})	Annual arithmetic mean	20 µg/m^3	—	Same as primary standard
	24-hour	50 µg/m^3	150 µg/m^3	
Fine particulate matter ($PM_{2.5}$)	Annual arithmetic mean	12 µg/m^3	9.0 µg/m^3	15.0 µg/m^3
	24-hour	—	35 µg/m^3	Same as primary standard
Lead [f]	Calendar quarter	—	1.5 µg/m^3	Same as primary standard
	30-day average	1.5 µg/m^3	—	—
	Rolling 3-month average	—	0.15 µg/m^3	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	No national standards	
Sulfates	24-hour	25 µg/m^3		
Vinyl chloride [f]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: µg/m^3 = micrograms per cubic meter; CAAQS = California ambient air quality standards; km = kilometers; mg/m^3 = milligrams per cubic meter; NAAQS = national ambient air quality standards; ppb = parts per billion; ppm = parts per million.

[a] California standards for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[b] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[c] National standards (other than the standards for ozone and particulate matter and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. The $PM_{2.5}$ 24-hour standard is attained when

98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact EPA for further clarification and current federal policies.

[d] National primary standards: The levels of air quality necessary, with an adequate margin of safety, to protect public health.

[e] National secondary standards: The levels of air quality necessary to protect public welfare from any known or anticipated adverse effects of a pollutant.

[f] The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: CARB 2024; EPA 2025a.

Attainment, nonattainment, or unclassified status is determined for air basins and counties. The project is located in eastern Nevada County within the MCAB. The project site is within the jurisdiction of the Northern Sierra Air Quality Management District (NSAQMD). NSAQMD is responsible for maintaining air quality conditions in Nevada County through comprehensive programs of planning, regulations, enforcement, technical innovation incentive programs, and promotion of the understanding of air quality issues. NSAQMD also inspects stationary sources to ensure that such sources abide by permit requirements, responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements other programs and regulations required under the CAA and the California CAA (CCAA).

In 2017, NSAQMD released the "Portola Fine Particulate Matter Attainment Plan" to address the nonattainment status of Plumas County, which NSAQMD oversees; however, NSAQMD has not released an air quality plan to address the nonattainment status of Nevada County for ozone or PM_{10}.

The most current NAAQS and CAAQS designations for Nevada County are presented in Table 3.3-2 for each pollutant.

Table 3.3-2 Attainment Status Designations for Nevada County

Pollutant	California Designation	National Designation
Ozone	Nonattainment	Attainment (partial)[1]
PM_{10}	Nonattainment	Unclassified
$PM_{2.5}$	Unclassified	Unclassified/Attainment
Carbon Monoxide	Unclassified	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified/Attainment
Sulfates	Attainment	No National Standard
Hydrogen Sulfide	Unclassified	No National Standard
Visibility Reducing Particles	Unclassified	No National Standard

[1] Only the western portion of Nevada County is classified as nonattainment for the ozone NAAQS. The eastern portion of the county, where the project is located, is in attainment for the ozone NAAQS.

Source: CARB 2023; EPA 2025b.

CRITERIA AIR POLLUTANTS AND SOURCES

Ozone

Ozone is a photochemical oxidant (a substance whose oxygen combines chemically with another substance in the presence of sunlight) and the primary component of smog. Ozone is not directly emitted into the air but is formed through complex chemical reactions between precursor emissions of reactive organic compounds (ROG) and oxides of nitrogen (NO_X) in the presence of sunlight. ROG are volatile organic compounds (VOCs) that are photochemically reactive. For the purposes of this CEQA analysis, ROG are used consistently and represent the same group of

emissions as VOCs. ROG emissions result primarily from incomplete combustion and the evaporation of chemical solvents and fuels. NO_X are a group of gaseous compounds of nitrogen and oxygen that result from the combustion of fuels.

Acute health effects of ozone exposure include increased respiratory and pulmonary resistance, cough, pain, shortness of breath, and lung inflammation. Chronic health effects include permeability of respiratory epithelia and possibility of permanent lung impairment (EPA 2025c).

Nitrogen Dioxide

NO_2 is a brownish, highly reactive gas that is present in all urban environments. The major human-made sources of NO_2 are combustion devices, such as boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NO_X and are reported as equivalent NO_2.

Acute health effects of exposure to NO_X include coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis, pulmonary edema, breathing abnormalities, cyanosis, chest pain, rapid heartbeat, and death. Chronic health effects include chronic bronchitis and decreased lung function (EPA 2025c).

Particulate Matter

PM_{10} consists of particulate matter emitted directly into the air, such as fugitive dust; soot; smoke from mobile and stationary sources, construction operations, and fires; natural windblown dust; and smog. In addition, controlled human exposure studies have shown that exposure to elevated levels of PM_{10} causes adverse health effects, especially related to the inhibition of lung function and an increase in respiratory and cardiovascular afflictions, as well as cancer risks. PM_{10} causes a greater health risk than larger particles because fine particles are too small for the natural filtering process of the human body and can more easily penetrate the defenses of the human respiratory system. Individuals with preexisting respiratory or cardiovascular disease are especially susceptible to the adverse effects of PM_{10} exposure, as are asthmatic children and the elderly. Children exposed to high concentrations of PM_{10} for prolonged periods also exhibit decreased immune function. Additionally, associations between long-term exposure to PM_{10} and adverse cognitive effects, such as faster cognitive decline, including memory and attention span loss, are being further examined by health researchers.

Because $PM_{2.5}$ is smaller than PM_{10}, it can more deeply penetrate the human body through inhalation, allowing many chemicals harmful to human health to be carried to internal organs. Long-term exposure to these particulates can increase the chance of chronic respiratory disease and cause lung damage and irregular heartbeat. Short-term exposure can aggravate respiratory illnesses, such as bronchitis and asthma, and cause heart attacks and arrhythmias in people with heart disease. Additionally, an estimated 9,000 people die prematurely each year in California as a result of $PM_{2.5}$ exposure (CARB 2010). A safe threshold for $PM_{2.5}$ has not been established, and research indicates that health effects exist at low concentrations.

Toxic Air Contaminants

According to the *California Almanac of Emissions and Air Quality* (CARB 2013), the majority of the estimated health risks from toxic air contaminants (TACs) can be attributed to relatively few compounds, the most important being diesel PM. Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, the California Air Resources Board (CARB) has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon

tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel PM poses the greatest health risk among the 10 TACs mentioned. Based on estimated ambient statewide diesel PM levels in 2012, the current cancer risk is estimated to be 520 new cases of cancer projected to occur per million residents exposed (CARB n.d.). Overall, statewide emissions of diesel PM are forecasted to decline by 71 percent between 2000 and 2035 (CARB 2013: 3-8). Concentrations of diesel PM are generally greatest near highways with large volumes of diesel truck traffic and adjacent to stationary sources such as rail yards and ports.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Odor is inherently complex because it is often caused by a mixture of chemical substances and has subjective components associated with human perception by the olfactory senses. Odorants (i.e., odor-causing chemicals) are often complex mixtures of chemical substances, and even slight changes in the chemical composition of the mixtures can greatly affect how humans perceive a particular odor. Some odors can also be caused by very minute levels of odorants (sometimes in the parts-per-trillion range) that can be detected by human noses but are well below instrumental or laboratory detection levels. Human noses are well-adapted at distinguishing specific odors in complex environments.

The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals can smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another (e.g., fast food restaurant). It is important to also note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

SENSITIVE RECEPTORS

Sensitive receptors generally include those land uses where exposure to pollutants could result in health-related risks to sensitive individuals, such as children or the elderly. Residential dwellings, schools, hospitals, playgrounds, and similar facilities are of primary concern because of the presence of individuals particularly sensitive to pollutants and/or the potential for increased and prolonged exposure to pollutants. The nearest sensitive receptor is a residence along Glenshire Drive approximately 1,600 feet from the project site's northwestern boundary with additional residential receptors located along Samuel Drive.

3.3.2 Discussion

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less-than-significant impact. The air quality plan applicable to the project is the *Town of Truckee Particulate Matter Air Quality Management Plan* (PM AQMP), which includes objectives and control strategies to reduce PM emissions and improve air quality. Specifically, the PM AQMP identifies solid fuel burning devices and re-entrained road dust as the sources of PM with the most potential for emissions reductions in the Town of Truckee (Town of Truckee 1999). The proposed project would include construction of a new access road to the new boiler building that generally follows the alignment of the existing unimproved access road extending along the northern border of the project site. Therefore, the project would replace the existing unimproved road with a paved road, which would reduce the potential for re-entrained road dust.

Objective 5 of the PM AQMP identifies PM reductions that may be achieved through heating and building energy conservation practices to reduce reliance on solid fuel burning devices and other heating devices which generate PM emissions. According to the PM AQMP, "Emissions from solid fuel burning devices are one of the two major sources

of particulate matter in the Truckee air basin…" (Town of Truckee 1999). Implementation of the project would increase the efficiency of anaerobic digestion at the WRP, allowing for increased use of combustion of digester gas as an alternative to solid fuel combustion. Because the project would result in improvements to the facilities involved in the anaerobic digestion process, the project would support Objective 5 of the PM AQMP.

Lastly, as discussed under Impact 3.3.2b below, the project would not generate significant emissions of PM during project construction. Operation of the project would involve routine maintenance similar to or less than existing maintenance, which would result in emissions from these activities also being similar to or less than existing conditions. The project would not require additional employees to operate or maintain the new facilities; therefore, post-project operation of the facility would result in a similar number of vehicle trips to current conditions. Thus, operation of the project would not result in emissions above existing conditions.

For these reasons, the project would not conflict with the PM AQMP. This impact would be less than significant, and no mitigation is required.

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 with mitigation incorporated. As shown in Table 3.3-2, Nevada County is currently categorized as nonattainment for the ozone and PM_{10} CAAQS. Nevada County is in partial nonattainment for the ozone NAAQS due to nonattainment of the western portion of the county. The eastern portion of Nevada County, where the project is located, is in attainment for the ozone NAAQS (EPA 2025a, CARB 2023). The following analysis evaluates project-generated emissions and compares them to local thresholds that have been developed to attain and maintain the NAAQS and CAAQS within the MCAB.

Construction

Construction of the project would generate emissions of criteria air pollutants and precursors, including ROG, NO_X, PM_{10}, and $PM_{2.5}$, from site preparation (e.g., excavation, clearing), off-road equipment, material delivery, worker commute trips, and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings). Equipment used for construction would include one or more of the following: excavator, backhoe, crane, dump truck/haul trucks, vibratory compactor, paver, sheepsfoot and loader. Fugitive dust emissions of PM_{10} and $PM_{2.5}$ are associated primarily with site preparation and vary as a function of soil silt content, soil moisture, wind speed, acreage of disturbance, and mobile sources. Ozone precursors are emitted in the exhaust of construction equipment and on-road vehicles. Paving and the application of architectural coatings also results in off-gas emissions of VOCs. PM_{10} and $PM_{2.5}$ are also contained in equipment and vehicle exhaust.

As described in Chapter 2, "Project Description," construction of the project would last approximately 24 months beginning in spring or summer of 2026, with soil-disturbing activities generally taking place between May 1 and October 15 of each year due to snow and ground freezing conditions. The number of construction workers on-site would vary; however, approximately 15 to 30 workers are anticipated to be on-site during construction, and there may be several deliveries for materials each day with a few additional delivery trips during construction start-up and the end of construction.

Table 3.3-3 summarizes modeled construction emissions estimates. For detailed modeling assumption see Appendix A.

NSAQMD has developed a tiered approach to significance levels: Level A (0–24 pounds per day [lb/day] of NO_X and ROG, and 0–79 lb/day for PM_{10}), Level B (24–136 lb/day of NO_X and ROG, and 79 to 136 lb/day of PM_{10}), and Level C (over 136 lb/day of NO_X, ROG, and PM_{10}). NSAQMD recommends that projects with emissions meeting Level A thresholds implement the most basic mitigations from its CEQA guidance document, projects with projected emissions in the Level B range necessitate more extensive mitigations, and those projects which exceed Level C thresholds should implement the most extensive mitigations (NSAQMD 2009: 9). As shown in Table 3.3-3, above, the project would generate emissions of ROG, NO_x, and PM_{10} within the range of NSAQMD's Level A Thresholds.

Table 3.3-3 Maximum Daily Emissions of Criteria Air Pollutants and Precursors

Year	ROG (lb/day)[1]	NOx (lb/day)	PM_{10} (lb/day)
2026	3	13	3
2027	1	10	1
2028	1	7	<1
NSAQMD's Level A Range[2]	0–24	0–24	0–79
Project Status?	Within	Within	Within
NSAQMD's Level B Range[3]	24–136	24–136	79–136
Project Status?	Below	Below	Below
NSAQMD's Level C Threshold[4]	>136	>136	>136
Project Status?	Below	Below	Below

Notes: ROG = reactive organic gases, NO_X = oxides of nitrogen, PM_{10} = respirable particulate matter.

[1] Emissions are ROG were adjusted off-model to account for modeling assumptions made in CalEEMod.

[2] NSAQMD recommends that projects with emissions between 0–24 lb/day for ROG and NO_X and 0–79 lb/day for PM_{10} implement the most basic mitigations as identified in its CEQA Guidance Document.

[3] NSAQMD recommends that projects with emissions between 24–136 lb/day for ROG and NO_X and 79–136 lb/day for PM_{10} implement the more extensive mitigations as identified in its CEQA Guidance Document.

[4] NSAQMD recommends that projects with emissions between greater than 136 lb/day for ROG, NO_X, and PM_{10} implement the most extensive mitigations as identified in its CEQA Guidance Document.

Source: Modeling performed by Ascent in 2025.

Operations

Operation of the project would involve routine maintenance activities for the newly constructed facilities. Routine maintenance would be similar to or less than existing maintenance and would occur for all new facilities. Maintenance would generally include preventative maintenance and daily, weekly, monthly, quarterly, and annual inspections. Maintenance would occur periodically or annually depending on the specific facility and would be similar to existing maintenance. Operation of the project would not require additional employees to operate and maintain the new facilities; therefore, operation of the project would not result in an increase in long-term vehicle trips. Further, while the project proposes operation of a generator, the type of generator proposed converts linear motion directly into electricity using chemical energy, without combustion, making them highly efficient and resulting in minimal NO_x emissions. While the project includes new boilers and a flare, the new equipment would not require additional natural gas infrastructure or generate natural gas demand above baseline conditions. In addition, the project would remove existing boilers, which allow combustion of fuel oil and replace them with boilers equipped with low NOx burners and that would not be able to use fuel oil for combustion. Finally, the project would remove an older candlestick flare and replace it with an enclosed flare. In total, the newer equipment would result in lower NOx emissions than the existing equipment. Thus, under current operating conditions, the project would not generate emissions above existing conditions.

Conclusion

Construction of the project would generate emissions of ROG, NOx, or PM_{10} within NSAQMD's Level A Threshold. Therefore, project construction would result in a significant effect related to emissions.

Operation of the project would also result in slight increases in future emissions of SO_2 and HAPs above existing emissions. This increase is due to anticipated increase in flow to the WRP and would be similar to increased future emissions from the WRP without the project. However, the project would not result in an increase in PM emissions or increases in ozone precursors. Maintenance activities would be similar to existing maintenance and operation of the project would not require additional employees to operate and maintain the new facilities.

Mitigation Measures

Mitigation Measure 3.3-1: Implement NSAQMD Basic Construction Mitigation Measures

As a condition of project approval, in accordance with the requirements of the NSAQMD CEQA guidance document, T-TSA will ensure that the following measures are implemented during the project's construction phase:

- Alternatives (e.g., chipping, mulching, or conversion to biomass fuel) to open burning of vegetative material be used unless otherwise deemed infeasible by NSAQMD, and
- Grid power shall be used (as opposed to diesel generators) for job site power needs where feasible during construction.

Significance after Mitigation

Implementation of Mitigation Measure 3.3-1 would avoid air pollutant emissions related to the open burning of vegetative material by requiring alternatives such as chipping or mulching, as well as avoid emissions from the use of diesel generators for on-site power by requiring the use of grid power. Implementation of Mitigation Measure 3.3-1 would comply with the basic mitigation measure requirements of the NSAQMD CEQA guidance document and reduce impacts to **less than significant**.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less-than-significant impact. NSAQMD does not have a threshold for evaluating the significance of a TAC impact; however, several air districts throughout the state have adopted thresholds of significance for TAC impacts. Nearby Sacramento Metropolitan Air Quality Management District's (SMAQMD's) thresholds for cancer and non-cancer risk from TACs was selected for this analysis and is aligned with other air districts in the state including the Bay Area Air District and the Placer County Air Pollution Control District. According to SMAQMD, a project would have a significant impact related to TACs if it would result in an incremental increase in cancer risk greater than 10 in 1 million at any off-site receptor or result in a ground-level concentration of project-generated TACs that would result in a Hazard Index greater than 1.0 at any off-site receptor.

Construction-related activities would result in temporary, intermittent emissions of diesel PM from the exhaust of heavy-duty off-road diesel equipment used during activities such as site preparation, demolition, grading, paving, and building construction. On-road, diesel-powered haul trucks traveling to and from the project site during construction to deliver materials and equipment are less of a concern because they do not operate at a single location for extended periods and therefore would not expose a single receptor to excessive diesel PM emissions. This analysis focuses primarily on heavy duty construction equipment used on-site that may affect nearby off-site land uses. Because operation of the project would involve periodic maintenance similar to existing maintenance activities and would not result in new truck trips, the project would not generate operational TAC emissions above existing conditions.

Diesel PM was identified as a TAC by CARB in 1998. The potential cancer risk from inhaling diesel PM outweighs the potential for all other diesel PM-related health impacts (i.e., noncancer chronic risk, short-term acute risk). Chronic and acute exposure to noncarcinogens is expressed as a hazard index, which is the ratio of expected exposure levels to an acceptable reference exposure level. As shown in Table 3.3-3 above, maximum daily PM_{10} emissions, which is considered a surrogate for diesel PM, could reach a maximum of 3 lb/day during construction. This is within NSAQMD's Level A threshold of 0-79 lb/day. Additionally, the majority of total PM_{10} emissions are from dust, meaning that the concentration of exhaust PM_{10} is much less than 3 lb/day. Specifically, maximum daily exhaust PM_{10} emissions related to construction of the project would be approximately 1 lb/day (see Appendix A for modeling details and assumptions).

The dose to which receptors are exposed is the primary factor used to determine health risk (i.e., potential exposure to TAC levels that exceed applicable standards). Dose is a function of the concentration of a substance in the environment and the duration of exposure to the substance. It is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for any exposed receptor. Thus, the risks estimated for an exposed individual are higher if the exposure occurs over a longer period. According to the Office of

Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TACs, should be based on a 70- or 30-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (OEHHA 2015: 5-23, 5-24). For this reason, it is important to consider that the use of heavy-duty off-road diesel equipment would be limited to a 24-month period, with the most emissions-intensive construction activities (i.e., earthmoving and grading activities) occurring within an approximately 5.5-month time frame.

In addition, studies show that diesel PM is highly dispersive and that concentrations of diesel PM decline with distance from the source (e.g., 500 feet from a freeway, the concentration of diesel PM decreases by 70 percent) (Roorda-Knape et al. 1999; Zhu et al. 2002, cited in CARB 2005: 9).

The nearest off-site receptors to the project are residences approximately 1,600 feet from the project's northwest boundary. This distance would result in an even greater reduction in TAC concentration than the 70 percent reduction identified at 500 feet from a TAC source. Thus, exposure to TAC emissions would be negligible considering the limited construction duration (i.e., 24 months), relatively low exhaust PM_{10} emissions (i.e., approximately 1 lb/day), and distance to the nearest receptor. Therefore, TACs would not expose sensitive receptors to an incremental increase in cancer risk that exceeds 10 in 1 million or a hazard index of 1.0 or greater. This impact would be **less than significant**, and no mitigation is required.

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

Less-than-significant impact. The occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the affected receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress among the public and often generate citizen complaints to local governments and regulatory agencies. Projects with the potential to frequently expose a substantial number of people to objectionable odors would be deemed to have a significant impact.

The predominant source of power for construction equipment is diesel engines. Exhaust odors from diesel engines, as well as emissions associated with paving and the application of architectural coatings may be considered offensive to some individuals. The generation of these odor emissions would vary greatly on a day-to-day basis depending on the type of construction activities. Application of architectural coatings would also be a source of offensive odors from VOCs. However, because the application of architectural coatings would be required to comply with NSAQMD Rule 205, "Nuisance," which regulates land uses that potentially emit odors, the potential for odor impacts on existing and new sensitive receptors in the county would be further reduced. This rule would minimize potential odor impacts occurring from the project.

Minor odors from the use of heavy-duty diesel equipment would be intermittent and temporary and would dissipate rapidly from the source with an increase in distance. As stated above, the nearest receptors are residences approximately 1,600 feet from the project site. Given the temporary nature of construction activities and the distance of the sensitive receptors from the project site, project construction is not anticipated to result in an odor-related impact during the construction of the project.

While the project is located at the WRP and wastewater treatment plants can be associated with odors, the project would not involve treatment processes that would result in new sources of substantial odor. This impact would be **less than significant**, and no mitigation is required.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Environmental Setting

To determine the existing conditions on the project site, a biological reconnaissance survey was conducted on October 2, 2024. Additionally, to help determine the biological resources that may be subject to project impacts, the following data sources were reviewed:

- California Natural Diversity Database (CNDDB) records search of the US Geological Survey (USGS) 7.5-minute quadrangles including and surrounding the project site (CNDDB 2025).
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants search of the USGS 7.5-minute quadrangles including and surrounding the project site (CNPS 2025).
- US Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) electronic records search (USFWS 2025).

- National Wetlands Inventory mapping data downloaded from USFWS.
- Aerial photographs of the project site and region.

The project site, which is within and adjacent to the T-TSA WRP, is mainly surrounded by open space except for a sand and gravel supplier to the southeast. The Truckee River is less than 200 feet northwest and downslope of the project site. Along the Truckee River, in between the water and the project site, is the Truckee River Legacy Trail. Vegetation communities in open space areas surrounding the project site include Jeffrey pine, antelope bitterbrush–big sagebrush scrub, and big sagebrush scrub. There are also wetlands along the Truckee River to the north and northwest of the project site. The elevation range of the project site is approximately 5,720 feet to 5,790 feet. The project site is fenced and gated.

LAND COVER AND HABITAT TYPES

The project site consists primarily of urban land cover (approximately 3 acres), which contains conifer trees in the northwestern portion of the project site, and Jeffrey pine habitat (approximately 0.6 acres) on the northwest border of the project site. During the biological reconnaissance survey, Jeffrey pine (*Pinus jeffreyi*) was observed on the project site along with quaking aspen (*Populus tremuloides*). Shrub species observed include bitterbrush (*Purshia tridentata*), wax current (*Ribes cereum*), and rubber rabbitbrush (*Ericameria nauseosa*). Herbaceous species observed on the project site include tall annual willowherb (*Epilobium brachycarpum*), sulphur flower (*Eriogonum umbellatum*), silver wormwood (*Artemisia ludoviciana*), and Sierra wildrye (*Elymus sierrae*). The Jeffrey pine community extends from the project site northwest and downhill to the Truckee River, which is a perennial stream. Along the Truckee River is a freshwater forested/shrub wetland.

SENSITIVE NATURAL COMMUNITIES AND OTHER SENSITIVE HABITATS

Sensitive natural communities are those native plant communities defined by the California Department of Fish and Wildlife (CDFW) as having limited distribution statewide or within a county or region and that are often vulnerable to environmental effects of projects (CDFW 2018). These communities may or may not contain special-status plants or their habitat (CDFW 2018). CDFW designates sensitive natural communities based on their state rarity and threat ranking using NatureServe's Heritage Methodology. Natural communities with rarity ranks of S1 to S3, where S1 is critically imperiled, S2 is imperiled, and S3 is vulnerable, are considered sensitive natural communities to be addressed in the CEQA environmental review process (CDFW 2018). Sensitive natural communities are generally identified at the alliance level of vegetation classification hierarchy using *A Manual of California Vegetation* (Sawyer et al. 2009). There are no natural communities on the project site that meet the membership rules of any sensitive natural communities recognized in *A Manual of California Vegetation* (Sawyer et al. 2009).

Known occurrences of sensitive natural communities are included in the CNDDB; however, no new occurrences have been added to the CNDDB since the mid-1990s when funding was eliminated for this portion of the CNDDB program. Additionally, these communities were mapped and classified in the CNDDB prior to publication of *A Manual of California Vegetation* and are classified according to Holland (1986), which is no longer the state standard for identifying California's natural communities. Three sensitive natural communities were identified within the 7.5-minute quadrangles including and surrounding the project site through a query of the CNDDB: Great Basin cutthroat trout/Paiute sculpin stream, Great Basin sucker/dace/redside stream with cutthroat trout, and fen (CNDDB 2025). None of these sensitive natural communities are present on the project site.

SPECIAL-STATUS SPECIES

Special-status species are plants or wildlife that are legally protected under the federal Endangered Species Act (ESA); California Endangered Species Act (CESA); California Fish and Game Code; local plans, policies, and regulations; or that are otherwise considered sensitive by federal, state, or local resource conservation agencies. For the purposes of this IS/MND, special-status species are defined as:

- species listed or proposed for listing as threatened or endangered under the ESA;
- species designated as candidates for listing as threatened or endangered under the ESA;
- species listed, proposed for listing, or candidates for listing as threatened or endangered under CESA;
- species listed as fully protected under the California Fish and Game Code;
- animals identified by CDFW as species of special concern;
- plants considered by CDFW to be "rare, threatened or endangered in California" and assigned a California Rare Plant Rank of 1A, presumed extinct in California; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California but more common elsewhere; and 2B, considered rare or endangered in California but more common elsewhere;
- species considered locally significant—that is, species that are not rare from a statewide perspective but are rare or uncommon in a local context, such as in a county or region (State CEQA Guidelines Section 15125[c]), or that are so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines Appendix G); and
- taxa (i.e., taxonomic categories or groups) that meet the criteria for listing even if they are not currently included on any list, as described in Section 15380 of the State CEQA Guidelines.

A total of 33 special-status plant species and 30 special-status wildlife species were reviewed as having potential to occur on the project site (Appendix B). Based on further evaluation of species ranges, habitat requirements, and conditions on the project site, three special-status plant species and eight special-status wildlife species were determined to have potential to occur on or near the project site (Table 3.4-1; CNDDB 2025; CNPS 2025; USFWS 2025). Other species evaluated during the desktop review were determined to not have potential to occur because they are restricted to habitat types that are not present within the project site (e.g., wetlands, streamsides), they require areas further from human disturbance than the project site, or the project site is outside of the species' known range (Appendix B).

Table 3.4-1 Special-Status Plant and Wildlife Species with Potential to Occur in the Vicinity and Within the Project Site

Name	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Plants					
Trinity mountain rockcress Galena Creek rockcress *Boechera rigidissima* (synonym: Galena Creek rockcress [*Arabis rigidissima* var. *demota*])	—	—	1B.2	Rocky areas in open conifer forest. 5,900–8,400 feet in elevation. Blooms July–August. Perennial.	May occur. Conifer habitat potentially suitable for this species is present on the project site.
Subalpine aster *Eurybia merita*	—	—	2B.3	Upper montane coniferous forest. Wetland indicator - facultative upland (usually occurs in non-wetlands but occasionally found in wetlands). 4,260–6,560 feet in elevation. Blooms July–August. Perennial.	May occur. Conifer habitat potentially suitable for this species is present on the project site.
Sagebrush bluebells *Mertensia oblongifolia* var. *oblongifolia*	—	—	2B.2	Great Basin scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Usually in mesic sites. Wetland indicator - facultative (equally likely to occur in wetlands and non-wetlands). 3,280–9,850 feet in elevation. Blooms April–July. Perennial.	May occur. Conifer habitat potentially suitable for this species is present on the project site.

Name	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Birds					
Golden eagle *Aquila chrysaetos*	—	FP	—	Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forest, and valley and foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. May desert nest in early incubation if disturbed by humans. Needs open terrain for hunting.	May occur. The yearlong range of golden eagle overlaps the project site. This species has been observed less than 1 mile southwest of the project site along the Truckee River and 1.1 miles southeast of the project site at Martis Lake (eBird 2025a). Nesting is not likely on the project site because it is a developed site with a high level of human disturbance and does not contain preferred cliff habitat; however, the disturbance zone for nesting golden eagle is a 1-mile radius around each nest site and this species could nest within 1 mile of the project site.
Long-eared owl *Asio otus*	—	SSC	—	Riparian habitat required. Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. Usually hunts in open areas, occasionally in woodland and forested habitats.	May occur. The yearlong range of long-eared owl overlaps the project site. Riparian habitat suitable for this species is not present on the project site, though may be present along the Truckee River, which is less than 200 feet northwest of the project site.
Olive-sided flycatcher *Contopus cooperi*	—	SSC	—	Lower montane coniferous forest, redwood, upper montane coniferous forest. Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. Sallies out for flying insects over forest canopy or adjacent meadows, clearings, or shrub-covered slopes in wide-ranging flights from high, conspicuous perches. Favors honey bees.	May occur. The breeding range of olive-sided flycatcher overlaps the project site. This species has been observed 0.2 miles northwest and 0.2 miles west of the project site (eBird 2025b). Conifer habitat suitable for this species is present on and adjacent to the project site.
Bald eagle *Haliaeetus leucocephalus*	FD	SE; FP	—	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter. Usually does not begin nesting if human disturbance is evident.	May occur. The yearlong range of bald eagle overlaps the project site. This species has been observed less than 0.5 miles and 0.6 miles northeast of the project site along the Truckee River (eBird 2025a). Conifer habitat potentially suitable for bald eagle is on and adjacent to the project site, though this species is more likely to be present adjacent to the project site, closer to the Truckee River, which is less than 200 feet northwest of the project site. Nesting is unlikely on the project site itself, since bald eagle usually does not begin nesting if human disturbance is evident; however, this species could nest within 0.25 miles of the project site.

Name	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Yellow warbler *Setophaga petechia*	—	SSC	—	Riparian forest, riparian scrub, riparian woodland. Riparian plant associations in proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods (*Populus* spp.), western sycamores (*Platanus racemosa*), ash (*Fraxinus* spp.), and alders (*Alnus* spp.). Also nests in montane shrubbery in open conifer forests with substantial amounts of shrub cover in Cascades and Sierra Nevada.	May occur. The breeding range of yellow warbler overlaps the project site. This species has been observed less than 0.3 miles northeast of the project site along the Truckee River and less than 0.3 miles north of the project site (eBird 2025a). Conifer habitat suitable for yellow warbler is on and adjacent to the project site. However, there are minimal patches on the project site with substantial amounts of shrub cover. Therefore, this species is more likely to nest adjacent to the project site in the conifer habitat along the Truckee River, which is less than 200 feet northwest of the project site.
Invertebrates					
Western bumble bee *Bombus occidentalis*	—	SC	—	Once common throughout much of its range, in California, this species is currently largely restricted to high elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	May occur. The range of western bumble bee overlaps the project site. Floral resources on the project site provide a potential food source for this species and open grassy areas within conifer habitat on the project site may provide nesting habitat suitable for this species.
Monarch *Danaus plexippus*	FP	—	—	Habitat requirements include host plants for larvae (primarily milkweeds [*Asclepias* spp.]); adult nectar sources (i.e., flowering plants); and sites for roosting, thermoregulation, mating, hibernation, and predator escape. Additionally, monarch butterfly requires conditions and resources for initiating and completing migration both to and from winter roosting areas. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves, with nectar and water sources nearby.	May occur. The project site is within the monarch summer breeding zone (Xerces Society et al. 2024). Floral resources on the project site provide a potential food source for this species and the project site could also contain milkweed plants. This species has been observed less than 0.5 miles west of the project site (iNaturalist 2025).
Mammals					
Northern California ringtail *Bassariscus astutus raptor*	—	FP	—	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Dens most often in rock crevices, boulder piles, or talus, but also tree hollows, root cavities, and rural buildings. Rarely use same den for more than a few days. Females with litters change dens within 10 days of birth and almost daily after 20 days.	May occur. The range of ringtail overlaps the project site. Conifer habitat suitable for this species is present on the project site.

Notes: CEQA = California Environmental Quality Act; CESA = California Endangered Species Act; CRPR = California Rare Plant Rank; CNDDB = California Natural Diversity Database; ESA = Endangered Species Act; ssp. = subspecies; var. = variety.

[1] Legal Status Definitions

Federal:

FP Federally proposed for listing (no formal protection other than CEQA consideration)

FD Federally delisted

State:
SE Endangered (legally protected)
SC State candidate for listing (legally protected)
FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)

California Rare Plant Ranks (CRPR):
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA).
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA).

CRPR Threat Ranks:
0.2 Moderately threatened in California (20-80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Source: CNDDB 2025; CNPS 2025; eBird 2025a; eBird 2025b; iNaturalist 2025; USFWS 2025; Xerces Society et al. 2024.

INVASIVE PLANT SPECIES

Nonnative species do not naturally occur in an area but have become established and continue to reproduce. Invasive plant species are plants that are not native to an environment, and once introduced, they establish, quickly reproduce and spread, and cause harm to the environment, economy, or human health (Cal-IPC n.d.-a). When introduced to a region, invasive plants tend to compete with native vegetation for resources such as light, water, and nutrients thereby adversely affecting native plant species as well as wildlife species that feed on native plants or otherwise rely on native plants to meet their life history needs. For purposes of this document, invasive plant species means those plant species identified as invasive by the California Invasive Plant Council (Cal-IPC) or defined as noxious weeds under California law by the California Department of Food and Agriculture (CDFA). Noxious weeds are defined as likely to be troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate (CDFA n.d.).

Invasive plant species observed on the project site during the biological reconnaissance survey include cheat grass (*Bromus tectorum*), which is ranked "high" by Cal-IPC (Cal-IPC n.d.-b). Plant species ranked high by Cal-IPC are those species that have severe ecological impacts on physical processes, plant and wildlife communities, and vegetation structure (Cal-IPC n.d.-c). Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment and most are widely distributed ecologically (Cal-IPC n.d.-c). Other invasive species observed during the biological reconnaissance survey includes Kentucky blue grass (*Poa pratensis* ssp. *pratensis*), Russian thistle (*Salsola tragus*), and woolly mullein (*Verbascum thapsus*) all of which are ranked "limited" (Cal-IPC n.d.-b). Plant species ranked limited by Cal-IPC are those species that are invasive, but their ecological impacts are minor on a statewide level or there is not currently enough information to justify a higher score (Cal-IPC n.d.-c). Their reproductive biology and other attributes result in low to moderate rates of invasiveness and their ecological amplitude (i.e., species range of tolerance) and distribution are generally limited, but these species may be locally persistent and problematic (Cal-IPC n.d.-c).

WILDLIFE MOVEMENT CORRIDORS

A wildlife movement corridor is generally a topographical/landscape feature or movement zone that connects two or more natural habitat areas. Wildlife corridors link areas of suitable wildlife habitat that are separated by variation in vegetation, rugged terrain, human disturbance and habitat fragmentation, or other biophysical factors. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing wildlife to move between various locations within their range.

Mule deer (*Odocoileus hemionus*) movement data can be used to understand the movement of other large mammals across the landscape, including mountain lions. Migration corridors, stopovers, and winter range locations for mule deer were developed for the Verdi-Truckee herd, which migrate between Nevada and California (Garcia et al. 2022). Migration corridors represent movement routes used by deer between winter and summer range habitats from 2009

to 2010 and 2012 to 2017 (Garcia et al. 2022). The project site is within a migration corridor of the Verdi-Truckee herd (Garcia et al. 2022).

NATIVE WILDLIFE NURSERY SITES

Nursery sites are locations where fish and wildlife concentrate for hatching or raising young, such as nesting rookeries for birds, spawning areas for native fish, fawning areas for deer, and maternal roosts for bats. Nursery sites are considered in this analysis for native wildlife that are not defined and otherwise considered under CEQA as special-status species. Conifer trees and human-made structures on the project site may provide habitat for wildlife nurseries, particularly maternal bat roosts.

3.4.2 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 or the US Fish and Wildlife Service?

Less-than-significant impact with mitigation incorporated. The proposed project would include grading of the project site and vegetation removal that have the potential to harm special-status species that occupy the project site. In addition, noise from project activities has the potential to affect special-status species adjacent to the project site. The potential impacts on special-status plants, birds, invertebrates, and mammals are described below.

Special-Status Plant Species

Three special-status plant species could potentially occur on the project site (Table 3.4-1). Project activities could cause mortality of individual special-status plants through direct removal or damage, such as trampling, cutting, crushing, breaking, uprooting, or burial by excavated soil or mulch material. Indirect impacts could result from habitat degradation caused by introduction or spread of invasive plants, soil compaction, altered topography, hydromodification, or removal of overstory vegetation that reduces sun and wind exposure. This impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Biological Resources Environmental Awareness Training

Before the implementation of project activities (e.g., tree removal, vegetation clearing, ground disturbance, grading), including equipment staging, all project personnel will participate in a biological resources environmental awareness training regarding special-status species and other sensitive resources. If new personnel are added to the project, they must receive the training before starting work. As part of the training, materials will be provided to all personnel that describe and illustrate sensitive resources to be avoided during project construction.

Mitigation Measure 3.4-2: Conduct Special-Status Plant Surveys

Prior to project activities a qualified botanist will conduct protocol-level botanical surveys of the project site using *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). Populations of special-status plants, if any, will be identified and mapped. A report and map will be prepared following the surveys to document the results. If special-status plants are identified, the botanist will determine appropriate buffer zones, within which no project activity will occur. Areas containing special-status plants will be flagged for avoidance before implementing project activities that result in ground disturbance or vegetation removal. No staging would occur in these buffer zones.

If areas containing special-status plant species cannot be avoided by project activities, T-TSA will prepare a Compensatory Mitigation Plan. The Compensatory Mitigation Plan will include mitigation measures for the population(s) to be directly affected. Possible mitigation for impacts on special-status plant species can include implementation of a program to transplant, salvage, cultivate, or re-establish the species at suitable sites (if feasible), purchase of mitigation

credits from a CDFW-approved conservation or mitigation bank in sufficient quantities to offset the loss of occupied habitat, or through an in-lieu fee program, if available. The actual level of mitigation may vary depending on the sensitivity of the affected species, its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival. The final mitigation strategy for directly affected special-status plant species will be determined with input from CDFW through the mitigation plan approval process.

If relocation efforts are part of the Compensatory Mitigation Plan, the plan will include details on the methods to be used including collection, storage, propagation, receptor site preparation, installation, long-term protection and management, monitoring and reporting requirements, success criteria, and remedial action responsibilities should the initial effort fail to meet long-term monitoring requirements. The following performance standards will be applied for relocation:

- the extent of occupied area will be substantially similar to the affected occupied habitat and will be suitable for self-producing populations. Re-located/re-established populations will be considered suitable for self-producing when:
  - habitat conditions allow for plants to reestablish annually for a minimum of 5 years with no human intervention, such as supplemental seeding; and
  - reestablished habitats contain an occupied area comparable to existing occupied habitat areas in similar habitat types in the region.

If preservation of existing populations or creation of new populations is part of the mitigation plan, the Compensatory Mitigation Plan will include a summary of the proposed compensation lands and actions (e.g., the number and type of credits, location of mitigation bank or easement, restoration or enhancement actions), parties responsible for the long-term management of the land, and the legal and funding mechanisms (e.g., holder of conservation easement or fee title). T-TSA will submit evidence that the necessary mitigation has been implemented or that T-TSA has entered into a legal agreement to implement it and that compensatory plant populations will be preserved in perpetuity.

If mitigation includes dedication of conservation easements, purchase of mitigation credits, or other off-site conservation measures, the details of these measures will be included in the mitigation plan, including information on responsible parties for long-term management, conservation easement holders, long-term management requirements, funding assurances, and success criteria such as those listed above and other details, as appropriate, to target the preservation of long-term viable populations.

If mitigation includes restoring or enhancing habitat within the project site or outside of the project site, the Compensatory Mitigation Plan will include a description of the proposed habitat improvements, success criteria that demonstrate the performance standard of maintained habitat function has been met, legal and funding mechanisms, and parties responsible for long-term management and monitoring of the restored habitat.

Mitigation Measure 3.4-3: Treat and/or Avoid Invasive Plant Species

T-TSA will impose the following conditions during project activities:

- Retain a qualified biologist to conduct a preconstruction invasive plant species survey to record locations of invasive plants, the presence of which were confirmed during the biological reconnaissance survey (see "Invasive Plant Species" in Section 3.4.1, "Environmental Setting").
- Known invasive plant infestations within the project footprint will be avoided or treated prior to the start of construction activities. If ground disturbance in any existing invasive plant infestations cannot be avoided, these infestations will be treated prior to disturbance using chemical (herbicide), mechanical, and/or manual treatment methods. Treatment methods will be selected based on species-specific, best available treatment and control recommendations, as determined in consultation with a qualified invasive plant specialist. All treatment methods, including the use of herbicides, will be conducted in accordance with all applicable laws, regulations, and policies. In areas where treatment is not feasible, invasive plant infestations will be flagged for avoidance to clearly delineate work exclusion. Equipment, vehicles, and staff will not be allowed to operate within flagged invasive plant avoidance areas. Any gravel, fill, or other materials used as part of the project will come from on-site or local sources, as feasible, and will be free of invasive weeds. As feasible, seeds will be native and locally collected

from near the project site, in the same watershed, and at a similar elevation for revegetation of the project site. Seeds collected will also be free of invasive or noxious weeds.

- All personnel will clean clothing, footwear, and equipment to be used during project activities of soil, seeds, vegetative matter, or other debris or seed-bearing material, or water (e.g., rivers, streams, creeks, lakes) before entering the project site.
- All equipment and vehicles used for project implementation must be free of invasive plant material before moving into the project site. All equipment, vehicles, tools, or other materials will be inspected for signs that invasive seeds or propagules could be present, prior to use on the project site. Equipment will be considered clean when visual inspection does not reveal soil, seeds, plant material, or other such debris. Equipment and vehicles will be pressure washed, if feasible, or otherwise appropriately decontaminated at a designated weed-cleaning station prior to entering the project site. Equipment and vehicles will be cleaned again if it leaves the project site prior to reentry.
- During the fall immediately following project completion, any temporarily disturbed areas will be seeded with an appropriate seed mix to establish ground cover by native species.

Significance after Mitigation

With implementation of Mitigation Measures 3.4-1, 3.4-2, and 3.4-3, potential impacts on special-status plant species would be reduced to a less-than-significant level. Mitigation Measure 3.4-1 would require that all construction personnel undergo environmental awareness training, which would reduce the potential for unintended impacts on all special-status plants and wildlife species with potential to occur. Pursuant to Mitigation Measure 3.4-2, a qualified botanist will conduct surveys for special-status plant species, determine appropriate no-disturbance buffers for any special-status plants found, and develop a Compensatory Mitigation Plan in certain circumstances, which would be reviewed and approved by CDFW and implemented to offset any unavoidable loss of special-status plants. Finally, pursuant to Mitigation Measure 3.4-3, invasive plant species would be removed from the project site and spread of invasive plant species would be minimized.

Special-Status Wildlife Species: Nesting Birds and Raptors

Five special-status birds have potential to occur on or adjacent to the project site (Table 3.4-1). Bald eagle and golden eagle could potentially nest near the project site and construction disturbances can affect nesting bald and golden eagles within 0.25 miles and 1 mile, respectively. Long-eared owl could potentially nest adjacent to the project site along the Truckee River, most likely in the freshwater forested/shrub wetland. Yellow warbler could potentially nest on the project site, though when nesting in conifer habitat this species usually does so in areas with substantial amounts of shrub cover, so nesting is more likely to occur adjacent to the project site in the conifer habitat along the Truckee River. Lastly, olive-sided flycatcher could nest on or adjacent to the project site in conifer habitat. Ground disturbance, tree and other vegetation removal, and other project activities could result in the direct removal of active nests, or disturb nesting birds, potentially resulting in nest abandonment, nest failure, or mortality of chicks or eggs if they are present in the vicinity of project. This impact would be potentially significant.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.4-4: Avoid Disturbance of Nesting Birds and Raptors

T-TSA will impose the following conditions prior to and during project activities:

- Project activities (e.g., tree removal, vegetation clearing, ground disturbance, grading, staging) will be conducted during the nonbreeding season (September 1 through January 31), if feasible. If project activities are conducted during the nonbreeding season, no further mitigation will be required.
- Within 14 days before the onset of project activities during the breeding season (February 1 through August 31), a qualified biologist familiar with the ecology of special-status nesting birds and raptors will conduct preconstruction

surveys for active nests of golden eagle in accessible areas within 1 mile of the project site, bald eagle in accessible areas within 0.25 mile of the project site, long-eared owl in accessible areas within 500 feet of the project site, and olive-sided flycatcher and yellow warbler in accessible areas within 100 feet of the project site.

- If no active nests are found, the qualified biologist will submit a report documenting the survey methods and results to the project applicant, and no further mitigation will be required.
- If active nests are found, impacts on nesting birds and raptors will be avoided by establishing appropriate no-disturbance buffers around active nest sites. Project activity will not commence within the buffer areas until a qualified biologist has determined that the young have fledged, the nest is no longer active, or reducing the buffer would not likely result in nest abandonment. Buffers will be determined by a qualified biologist. Factors to be considered for determining buffer size will include the presence of natural buffers provided by vegetation or topography, nest height above ground, baseline levels of noise and human activity, species sensitivity, and proposed project activities. Generally, buffer sizes would be as follows:
  - golden eagle: 1 mile (5,280 feet);
  - bald eagle: 0.25 miles (1,320 feet);
  - long-eared owl and other raptors: 500 feet; and
  - olive-sided flycatcher, yellow warbler, and other nesting birds: 100 feet.
- The size of the no-disturbance buffer may be adjusted if a qualified biologist determines that such an adjustment is appropriate and would not be likely to adversely affect the nest. Periodic monitoring of the nest by a qualified biologist during project activities will be required if the activity has potential to adversely affect the nest or the buffer has been reduced. Buffers will be increased if birds within active nests are showing behavioral signs of agitation (e.g., standing up from a brooding position, flying off the nest) during project activities, as determined by the qualified biologist.

Significance after Mitigation

With implementation of Mitigation Measures 3.4-1 and 3.4-4, potential impacts on nesting birds and raptors would be reduced to a **less-than-significant** level. All construction personnel would undergo environmental awareness training related to nesting birds pursuant to Mitigation Measure 3.4-1. To avoid impacts on bird or raptor nests, vegetation removal would occur outside of the nesting bird season to the extent feasible, or, if avoidance of the nesting bird season is not feasible, a specialized survey for nesting special-status bird species will be conducted within 14 days of project activities during the breeding season. If any nests are identified during the survey, appropriately sized no-disturbance buffers would be installed around any active, occupied nests during the nesting season.

Special-Status Wildlife Species: Invertebrates

Two special-status invertebrate species have potential to occur on the project site: western bumble bee and monarch (Table 3.4-1). Construction activities would include removal of floral resources, which could include potential breeding habitat, and ground disturbance, that could result in loss of habitat or direct loss of or injury to western bumble bees or monarchs. This impact would be potentially significant.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.4-5: Avoid Disturbance of Western Bumble Bee Colonies

T-TSA will impose the following conditions prior to and during project activities:

- If project activities occur during the colony active period for this species, which is typically April 1 through September 30, T-TSA will retain a qualified biologist familiar with bumble bees of California, and with experience using survey methods for bumble bees, to conduct surveys of habitat potentially suitable for western bumble bee

within the project site. *Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species* (CDFW 2023) will be used to guide surveys.

- If no western bumble bees are detected during surveys, the survey results will be submitted to the project applicant, and no further mitigation will be required.
- If western bumble bees are detected during surveys, appropriate avoidance measures will be implemented in consultation with and with approval from CDFW. Avoidance measures may include the following, if feasible:
    - Protective buffers will be implemented around active overwintering or breeding colonies until the colonies are no longer active.
    - Project activities will occur from October through February to avoid the bumble bee flight season.
    - Project activities, including ground disturbance, will be conducted using a phased approach, such that the entirety of the habitat is not removed at once; the objective of this measure is to provide refuge for bumble bees during project activities and temporary retention of suitable floral resources proximate to the active construction areas.

Mitigation Measure 3.4-6: Avoid Disturbance of Monarch Reproduction

T-TSA will impose the following conditions prior to and during project activities:

- If project activities (e.g., tree removal, vegetation clearing, ground disturbance, grading, staging) occur during the period when milkweed plants may host monarch eggs or caterpillars (approximately mid-March through late September, depending on elevation and other factors) a qualified biologist will conduct a preconstruction survey of the project site for milkweed plants.
    - If milkweed plants are found, a qualified biologist will inspect the milkweed plants for the presence of monarch eggs or caterpillars no more than 14 days before project activities. If monarch eggs or caterpillars are detected, the milkweed plants will be avoided until they are no longer being used by monarch caterpillars, as confirmed by a qualified biologist, if feasible.
    - If no eggs or caterpillars are detected, no additional protection measures are necessary.
- If monarch, which is currently proposed for listing, is listed under ESA prior to the start of construction, T-TSA will implement the above measures in consultation with and approval from USFWS.

Significance after Mitigation

With implementation of Mitigation Measures 3.4-1, 3.4-5, and 3.4-6, potential impacts on special-status invertebrate species would be reduced to a less-than-significant level. All construction personnel would undergo environmental awareness training related to special-status invertebrates pursuant to Mitigation Measure 3.4-1, a survey for western bumble bee would occur prior to project work in a certain time period and avoidance of western bumble bee colonies would be implemented pursuant to Mitigation Measure 3.4-5, and a preconstruction survey for monarchs would occur prior to project work in a certain time period and avoidance of monarch reproduction would be implemented pursuant to Mitigation Measure 3.4-6.

Special-Status Wildlife Species: Ringtail

One special-status mammal species has potential to occur on the project site: ringtail (Table 3.4-1). Project activities that would involve ground disturbance may result in impacts including direct loss of ringtail by running them over with construction vehicles or equipment, smothering within collapsed dens, or disturbance leading to parental abandonment of active dens resulting in mortality of dependent young. This impact would be potentially significant.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.4-7: Avoid Disturbance of Northern California Ringtail Nests

T-TSA will impose the following conditions prior to and during project activities:

- Retain a qualified biologist to conduct preconstruction surveys prior to project activities to identify individual northern California ringtails and potential nests.
  - If individuals or potential or occupied nests are not found, further mitigation will not be required.
  - If northern California ringtail or potential nests are found, an appropriate method will be used by the qualified biologist to confirm whether a northern California ringtail is occupying the nest (e.g., remote field cameras, track plates, hair snares, fiber optic scope).
  - If a nest is determined to be occupied by a northern California ringtail, a buffer will be established around the nest tree (or other nest structure) sufficient to protect the nest from construction disturbance as determined by the qualified biologist in coordination with CDFW. No project activities will occur within the buffer until the nest is unoccupied as determined by a qualified wildlife biologist in coordination with CDFW.
- Disturbance, injury, or mortality of northern California ringtail will be avoided.

Significance after Mitigation

With implementation of Mitigation Measures 3.4-1 and 3.4-7, potential impacts on special-status mammals would be reduced to a less-than-significant level. All construction personnel would undergo environmental awareness training related to special-status mammals pursuant to Mitigation Measure 3.4-1 and preconstruction surveys would be required to identify any occupied ringtail nests on the project site and no-disturbance buffers may be implemented pursuant to Mitigation Measure 3.4-7.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the US Fish and Wildlife Service?

No impact. There are no sensitive natural communities or riparian habitats on the project site. Therefore, there would be no impact on sensitive natural communities or riparian habitat, and no mitigation is required.

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. There are no mapped wetlands or other waters on the project site. Therefore, there would be no impact on state or federally protected wetlands, and no mitigation is required.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less-than-significant with mitigation incorporated. Although the project site is within a migration corridor of the mule deer Verdi-Truckee herd (Garcia et al. 2022), the project site is fenced and much of the site is already developed so it is highly unlikely that deer use the project site as part of their migration corridor. The Truckee River is less than 200 feet to the northwest, which is likely used by the mule deer Verdi-Truckee herd as a migration corridor. Noise from construction may make this wildlife migration corridor less desirable to use but those noise impacts would be temporary. In addition, the Truckee River Legacy Trail is between the water and the project site bringing human noise from visitors on a regular basis. Therefore, the impact related to migratory wildlife corridors is less than significant. However, habitat potentially suitable for native wildlife nursery sites, particularly bat species, is present on the project site. This includes conifer trees and human-made structures. Nursery sites are considered in this analysis for native wildlife that are not defined and otherwise considered under CEQA as special-status species. Due to the potential for maternal bat roosts on the project site, the impact on native wildlife nursery sites is potentially significant.

Mitigation Measures

Mitigation Measure 3.4-1: Conduct Biological Resources Environmental Awareness Training (described above)

Mitigation Measure 3.4-8: Avoid, Minimize, and Mitigate Impacts on Native Wildlife Nursery Sites

T-TSA will impose the following conditions prior to and during project activities:

- Retain a qualified biologist who will conduct a preconstruction survey no more than 14 days prior to any project activities (e.g., tree removal, vegetation clearing, ground disturbance, grading, staging) to identify any native wildlife nursery sites on the project site, particularly maternal bat roosts.
- If any nursery sites are identified, prior to project activities a no-disturbance buffer will be established around the nursery site if project activities are required while the nursery site is active/occupied. The appropriate size and shape of the buffer will be determined by a qualified biologist based on potential effects of project-related habitat disturbance, noise, visual disturbance, and other factors, but will typically be a minimum of 100 feet. No project activities will commence within the buffer area until a qualified biologist confirms that the nursery site is no longer active/occupied. Monitoring the effectiveness of the no-disturbance buffer around the nursery site by a qualified biologist during project activities may be required. If project activities cause agitated behavior of the individual(s), as observed during monitoring, the buffer distance will be increased or project activities modified until the agitated behavior stops. The qualified biologist will have the authority to stop any project activities that could result in potential adverse effects on wildlife nursery sites.

Significance After Mitigation

With implementation of Mitigation Measures 3.4-1 and 3.4-8, potential impacts on native wildlife nursery sites would be reduced to a less-than-significant level. All construction personnel would undergo environmental awareness training related to special-status mammals pursuant to Mitigation Measure 3.4-1 and preconstruction surveys would be required to identify any native wildlife nursery sites on the project site and no-disturbance buffers may be implemented pursuant to Mitigation Measure 3.4-8.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. Section 18.30.155 of the Town of Truckee Development Code provides for the protection of trees greater than 24 inches diameter at breast height (dbh). While the proposed project would require the removal of conifer trees to accomplish construction of the proposed project, some of which could exceed 24 inches dbh. While T-TSA is a special district created by the California Legislature under state law (Assembly Bill [AB] 1749, Tahoe-Truckee Sanitation Act) and therefore following local ordinances is discretionary, T-TSA generally strives to adhere to the Town of Truckee ordinances where reasonable and would limit tree removal to the minimum extent necessary to build the required infrastructure to carry out its essential state-authorized functions. The Town of Truckee 2040 GPU Conservation and Open Space Element also has policies protecting biological resources including sensitive species and native plant species (Town of Truckee 2023). The policies require biological surveys in certain situations and the application of mitigation measures to help minimize impacts on sensitive biological resources from development. As described in Impacts 3.4.2a and 3.4.2d above, although the project could affect some sensitive biological resources, mitigation measures for the project would reduce all potentially significant impacts to sensitive biological resources covered by the 2040 GPU to a less-than-significant level. For these reasons, there would be no conflict related to local policies or ordinances protecting biological resources. No mitigation is required.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No impact. The project site is not within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, there would be no conflict with the provisions of any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No mitigation is required.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Substantially disturb human remains, including those interred outside of dedicated cemeteries?	☐	☐	☒	☐

3.5.1 Environmental Setting

On October 24, 2024, a California Historical Resources Information System records search was conducted by the North Central Information Center (NCIC) on the campus of California State University, Sacramento, to determine whether precontact archaeological, historic era archaeological, or built-environment features had been previously recorded within the project site, the extent to which the project site has been previously surveyed, and the number and type of cultural resources within a 0.25-mile radius of the project site (Ascent 2025).

Review of the NCIC records search results revealed that one previously recorded resource is located within the project site. The resource within the project site, P-29-000238, is a sparce lithic scatter originally recorded in 1973. The results of the NCIC records search also found that four previous investigations have occurred within the project site covering approximately 30 percent of the area. Attempts to relocate P-29-000238 were made in 1998 by Jensen & Associates and it was noted that the site no longer exists. It was stated in the report that the site was destroyed during construction of the WRP facilities and buildings within the northeast portion of the WRP (Ascent 2025).

A pedestrian survey of the project site was conducted on November 7, 2024. The entirety of the project site was surveyed. Attempts were made to relocate P-29-000238, but there was no cultural material identified. Discrepancies related to the site boundaries were revealed as part of the current investigation; the original location of the site as it was recorded in 1973 is approximately 410 feet (125 meters) southwest from the location provided by the NCIC GIS data. Nevertheless, the boundaries of P-29-000238 would still be located within the project site, however, the site appears to have been destroyed during prior building development. The survey did not result in the identification of any archaeological sites or built-environment features (Ascent 2025).

3.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

No impact. No built environment (historical) resources were identified at the project site as a result of either the NCIC record search, background research, or pedestrian survey. Therefore, there would be no impact to historical resources as a result of the project, and no mitigation is required.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less-than-significant impact with mitigation incorporated. As previously discussed, the pedestrian survey resulted in careful examination of P-29-000238, confirming that the site is no longer present due to previous site development. In addition, no new archaeological materials or sites were identified as a result of the pedestrian survey (Ascent 2025). Nevertheless, because the area is known to have been used by tribes, the possibility remains that subsurface archaeological materials could be encountered during ground-disturbing activities. These activities could damage or destroy previously undiscovered unique archaeological resources pursuant to Section 15064.5. This would be a potentially significant impact.

Mitigation Measures

Mitigation Measure 3.5-1 Conduct Cultural Resources Worker Awareness Training

Prior to the initiation of project construction, T-TSA will ensure that all crew members and contractors conducting ground-disturbing activities receive training overseen by a qualified professional archaeologist on the protection of sensitive archaeological resources. As part of the training, workers will be instructed to halt work if archaeological materials are encountered during ground-disturbing activities. The training will include relevant information regarding applicable laws and regulations, the consequences of violating said laws and regulations, protocols for resource avoidance, and protocols for discoveries. In addition, workers will be instructed to not return to work in the location of the find until instructed to do so by T-TSA.

Mitigation Measure 3.5-2 Halt Ground Disturbance Upon Discovery of Subsurface Archaeological Features

If archaeological materials (e.g., locally darkened soils [i.e., midden], stone tools, chipped stone, baked clay, or concentrations of shell, bone, charcoal, glass, metal, or ceramics) are inadvertently discovered during ground-disturbing activities, the contractor will cease all work within 100 feet (30.5 meters) of the find and T-TSA will immediately retain the services of a qualified professional archaeologist. At that time, T-TSA will coordinate any necessary investigation of the site with the archaeologist as needed to evaluate the significance of the resource per PRC Sections 5024.1 and 21083.2(g) and provide proper management recommendations. If the find is determined to be a historical resource and/or a unique archeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures and/or mitigation will be made available. Possible management recommendations for significant resources could include resource avoidance or data recovery excavations. If the qualified archaeologist determines the archaeological material to be Native American in nature, T-TSA will contact the appropriate Native American tribe(s) for their input on the preferred treatment of the find. The contractor will implement any measures deemed necessary by the archeologist and/or tribe for the protection of the cultural resources. The archaeologist will instruct the contractor to not to resume work in the area of the discovery until directed to do so.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-1 would reduce potential impacts to undiscovered archaeological resources by requiring workers to undergo worker awareness training to be informed about the protection of cultural resources. Similarly, implementation of Mitigation Measure 3.5-2 would also reduce impacts to archaeological resources by requiring that steps be taken in the event that archaeological resources are encountered during project construction. Therefore, with the implementation of Mitigation Measures 3.5-1 and 3.5-2, impacts to archaeological resources would be **less than significant**.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

Less-than-significant impact. Based on the NCIC results and pedestrian survey, no evidence suggests that any precontact or historic era marked or un-marked human interments are present within or in the immediate vicinity of the project site. However, the location of grave sites and Native American remains can occur outside of identified cemeteries or burial sites. Therefore, there is a possibility that unmarked, previously unknown Native American or

other graves could be present within the project site and could be uncovered by project-related construction activities.

California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains, and discovery of any human remains, are contained in California Health and Safety Code Section 7050.5 and PRC Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the Nevada County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours, and the guidelines of NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated most likely descendants and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097, would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be less than significant, and no mitigation is required.

3.6 ENERGY

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

3.6.1 Environmental Setting

Energy Types and Sources

California relies on a regional power system composed of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2024, renewable resources, including hydroelectric power and small-scale solar power, supplied 57 percent of California's in-state electricity generation. Natural gas fueled another 35 percent and nuclear power provided almost all the rest (EIA 2025).

The Truckee Donner Public Utility District (TDPUD) is the primary electricity supplier to the greater Truckee area. In 2023, the year of the most recent available data, TDPUD was powered by 47.3 percent renewables (including biomass, geothermal, small hydroelectric, solar, and wind), 6.2 percent large hydroelectric, 12.5 percent natural gas, 5.5 percent from other sources, and 28.5 percent unspecified power (i.e., electricity that has been purchased through open market transactions and is not traceable to a specific generation source) (CEC 2024a).

Alternative Fuels

A variety of alternative fuels are used to reduce demand for petroleum-based fuel. The use of these fuels is encouraged through various statewide regulations and plans (e.g., Low Carbon Fuel Standard, Scoping Plan). Conventional gasoline and diesel may be replaced (depending on the capability of the vehicle) with many transportation fuels, including:

- biodiesel,
- electricity,
- ethanol (E-10 and E-85),
- hydrogen,
- natural gas (methane in the form of compressed and liquefied natural gas),
- propane,
- renewable diesel (including biomass-to-liquid),
- synthetic fuels, and
- gas-to-liquid and coal-to-liquid fuels.

California has a growing number of alternative fuel vehicles through the joint efforts of the California Energy Commission (CEC), CARB, local air districts, federal government, transit agencies, utilities, and other public and private entities. As of December 2023, California contained more than 60,200 alternative fueling stations (AFDC 2025).

Energy Use for Transportation

The transportation sector uses about 86 percent of the petroleum consumed in the state. The industrial sector accounts for about 10 percent of state petroleum use, and the commercial sector consumes about 3 percent. The residential sector uses about 1 percent. A small amount of petroleum is used for electricity generation (EIA 2025).

Vehicle Miles Traveled and Gasoline Consumption

According to the US Energy Information Administration, in the 20-year period between 2003 and 2023, statewide motor gasoline consumption decreased by 16 percent (EIA 2025). According to the California Department of Transportation (Caltrans), in the same period, statewide vehicle miles travelled (VMT) has decreased by 2 percent. However, currently, VMT across the US and California is trending upward. Prior to the Covid-19 pandemic, total and per capita VMT were increasing in California. While VMT decreased sharply during the pandemic, it has since rebounded returning to pre-pandemic levels. To meet the state's climate goals, daily per capita VMT must reach 17.2 by 2045 (a 29 percent reduction from 2001 levels) (Caltrans 2023).

Total gasoline use in California varies from year to year because of a variety of factors, such as gas prices, periods of economic growth and decline, and fuel economy of vehicles. Between January 2015 and December 2024, approximately 143 billion gallons of gasoline were purchased in California. During this period, the volume of gasoline purchased ranged from a minimum of approximately 710 million gallons in April 2020, due to the effects of Covid-19, to a maximum of approximately 1.51 billion gallons in July 2019 (California Department of Tax and Fee Administration 2025).

In 2023, approximately 34 million gallons of gasoline were sold in Nevada County, while approximately 7 million gallons of diesel fuel were sold in Nevada County in the same year (CEC 2024b).

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less-than-significant impact. Energy would be required to construct, operate, and maintain construction equipment and to produce and transport construction materials associated with construction of the project. As described in Chapter 2, "Project Description," construction of the project would last approximately 24 months beginning in spring or summer of 2026, with soil-disturbing activities generally taking place between May 1 and October 15 of each year due to snow and ground freezing conditions. The number of construction workers on-site would vary; however, approximately 15 to 30 workers are anticipated to be on-site during construction, and there may be several deliveries for materials each day with a few additional delivery trips during construction start-up and the end of construction.

The one-time energy expenditure required to construct the new building and infrastructure associated with the project would be nonrecoverable. Most energy consumption would result from the operation of construction equipment and vehicle trips associated with commutes by construction workers and haul trucks supplying materials (Table 3.6-1). Construction-related fuel consumption was estimated using off-model calculations in conjunction with model-defaults for the construction schedule and equipment estimations (e.g., equipment type, number of equipment, hours of use, emissions factors).

Table 3.6-1 Annual Construction Energy Consumption of the Project

Phase	Diesel (Gallons)[1]	Gasoline (Gallons)[2]
Offroad Equipment	16,418	—
Deliveries and Haul Trucks	278	—
Worker Commute	—	3,116
Total	**16,695**	**3,116**

[1] Gasoline gallons include on-road gallons from worker trips.

[2] Diesel gallons include off-road equipment and on-road gallons from hauling and vendor trips.

Source: Calculations by Ascent in 2025. See Appendix A.

Overall, the project would increase energy consumption for temporary construction activities related to vehicle use and material transport. However, construction activities would be temporary and would not increase long-term energy or fuel demand. Construction activities would consume the necessary amount of fuel/energy to complete work in an efficient and timely manner.

Operation of the project would involve routine maintenance activities for the newly constructed facilities. Routine maintenance and associated energy consumption would be similar to or less than existing maintenance and would occur for all new facilities. Maintenance would generally include preventative maintenance and daily, weekly, monthly, quarterly, and annual inspections. Maintenance would occur periodically or annually depending on the specific facility and associated energy consumption would be similar to that consumed during existing maintenance activities. Operation of the project would not require additional employees to operate and maintain the new facilities; therefore, operation of the project would not result in an increase in energy consumption related to vehicle trips. Further, while the project proposes installation of a generator, the type of generator proposed converts linear motion directly into electricity using chemical energy, without combustion, making them highly efficient and avoiding the use of fossil fuels to generate power. Additionally, operation of the project would result in greater energy efficiency relative to existing conditions as the project proposes to replace existing steam boilers with a new heating and energy recovery system that is more efficient and reliable, reducing long-term operations and maintenance and associated energy consumption.

Because the expenditure of energy would aid in improving the operational efficiency of the project, the use of energy during construction and operation of the project would not be considered wasteful, inefficient, or unnecessary. This impact would be **less than significant**, and no mitigation is required.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

Less-than-significant impact. The plans applicable to the project that pertain to the efficient use of energy are the 2022 Scoping Plan to Achieve Carbon Neutrality (2022 Scoping Plan) and the Climate Action Plan (CAP) included as Appendix C of the Town of Truckee 2040 GPU.

The 2022 Scoping Plan focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs. The electricity sector is identified as one of the largest contributors to greenhouse gas (GHG) emissions in the state (CARB 2022: 182). The 2022 Scoping Plan identifies actions needed to achieve the AB 1279 target of 85 percent below 1990 levels by 2045. Appendix D, "Local Actions," of the 2022 Scoping Plan identifies priority areas to reduce VMT, electrify the transportation sector, and decarbonize buildings. The criteria of these priorities are primarily concerned with project design features that exceed the minimum requirements of the California Green Building Code (CalGreen) (e.g., features such as renewable energy generation systems, electric vehicle chargers, and energy efficiency standards that meet the Tier 2 requirements of CalGreen). Therefore, improving energy efficiency and transitioning to all-electric in the built environment and transportation sectors is a crucial component to achieving the state's GHG reduction and carbon neutrality goals.

The project would not result in operational vehicle trips above existing conditions and does not propose new parking facilities. Therefore, the project would not impede the VMT reduction or transportation electrification goals of the 2022 Scoping Plan.

Further, as discussed in the preceding impact, the project would result in efficiency improvements to the existing process and comfort heating facilities. For example, the project would involve replacing existing steam boilers at the end of their useful life with a new heating and energy recovery system that is more efficient and reliable, reducing operations- and maintenance-related energy consumption. Additionally, the project would include converting the existing heating system from steam, electricity, and natural gas to hot water in most buildings. By replacing existing natural gas heating systems, the project would align with the goal of the 2022 Scoping Plan to reduce fossil fuel consumption.

The 2040 GPU includes multiple policies related to improving energy efficiency and increasing use of alternative fuel sources. 2040 GPU Policy CAP-9.2, "Alternative Fuel Sources," encourages the use of alternative fuel sources including local anaerobic digestion, biofuel, biodiesel, methane capture from wastewater processing, and forest biomass. Because the project would result in improvements to the facilities involved in the anaerobic digestion process, the project would support Policy CAP-9.2. Additionally, because the project would include converting the existing heating system from steam, electricity, and natural gas to hot water in most buildings, it would support Policy CAP-7.F, "Town Facility Retrofits," which involves retrofits to existing municipal facilities and phasing out natural gas use to the greatest degree possible.

For these reasons, the project would not conflict with the 2022 Scoping Plan nor the 2040 GPU. This impact would be **less than significant**, and no mitigation is required.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. Geology and Soils. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Environmental Setting

GEOLOGY AND SOILS

The project site lies on an abandoned terrace of the Truckee River and has been mapped by the California Geological Survey (CGS) as Tahoe age Outwash Deposits. CGS describes this unit as unconsolidated, polymict boulder to cobble gravel, sand and silt; distinguished from Tioga outwash deposits by higher terrace position and greater degree and

depth of soil development. This geologic unit may include jokülhlaup deposits in the Truckee area. The soils encountered during geologic exploration on-site are consistent with the geologic map (Black Eagle Consulting 2025).

The site's soils consist exclusively of granular, non-plastic silty sand with gravel to silty gravel. Minor existing areas of fill are present at the western edge of the project site. The remainder of the soils encountered are undisturbed native materials (Black Eagle Consulting 2025).

The fill soils consist of silty gravel with sand and are about 5 feet thick, though no distinct contact was encountered during drilling exploration. The areas of fill are described as moist, medium dense, and as containing 16 percent non-plastic fines, 41 percent sand, and 43 percent subrounded to rounded gravel. The native materials at the building site and beneath the areas of fill consist of silty sand with gravel. The native soils are described as slightly moist to moist, loose to very dense, and as containing 15 to 21 percent non-plastic fines and 18 to 41 percent gravel (Black Eagle Consulting 2025). Many cobbles and boulders can be found throughout the site.

Groundwater was not encountered during geologic exploration at the site and is expected to lie at a depth below that which would affect design or construction (Black Eagle Consulting 2025).

SEISMICITY

Truckee lies within an area with a potential for strong earthquake shaking because of its proximity to the eastern margin of the Sierra Nevada. Recurrence intervals for earthquakes along faults that have been studied in western Nevada are estimated to be in the range of 6,000 to 18,000 years (Black Eagle Consulting 2025). The eastern boundary faults of the Sierra Nevada are active and have a recurrence interval of 1,000 to 2,000 years.

The Alquist-Priolo Earthquake Fault Zoning Act (1993) was originally signed into law in 1972 as the Alquist-Priolo Geologic Hazard Zones Act to prohibit the location of structures for human occupancy across the traces of active faults and thereby mitigate the hazard of fault rupture (Black Eagle Consulting 2025). Under this act, the State Geologist is required to delineate Earthquake Fault Zones (EFZs) and counties affected by the zones must withhold development permits for sites within the zones until geologic investigations demonstrate that the sites are not threatened by surface displacement from future faulting. As defined by this act, a fault is a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side; a fault zone has significant width, ranging from a few feet to several miles; an active fault is one that has had surface displacement within Holocene time (about the last 11,000 years); and a potentially active fault is one with evidence of displacement during Quaternary time (within the last 1.6 million years) and that exhibits a relatively high potential for ground rupture (i.e., it is sufficiently active and well defined).

Nevada County does not include any established Alquist-Priolo EFZs as defined by CGS in their publication titled Fault-Rupture Hazard Zones in California (Black Eagle Consulting 2025). The nearest active (Holocene age) fault is the Polaris fault, which is mapped approximately 1,400 feet west of the project site. The Polaris fault trends north-northwest to south-southeast.

LIQUEFACTION

The US Geological Survey seismic design maps indicate that there is a 2 percent probability that bedrock ground acceleration during an earthquake would be high in the project vicinity. Only localized amplification of ground motion would be expected during an earthquake. Some amplification of ground motion could result from the site's location on the margin of the Great Basin physiographic province. Because the site is underlain by dense granular soils and groundwater is relatively deep, liquefaction potential is negligible (Black Eagle Consulting 2025).

TOPOGRAPHY

Overall site topography slopes northwest towards the Truckee River and is generally flat. The access road crosses an approximately 30 percent slope in its western portion and then rises gradually back up to the boiler building site (Black Eagle Consulting 2025). Based on information in CGS's Landslide Inventory, the Town of Truckee and areas

immediately surrounding the Town have not experienced historic landslide events (DOC 2025). There are no steep slopes within the project site or surrounding area.

PALEONTOLOGICAL RESOURCES

Significant nonrenewable vertebrate and invertebrate fossils and unique geologic units have been documented throughout California. The fossil yielding potential of a particular area is highly dependent on the geologic age and origin of the underlying rocks. Paleontological potential refers to the likelihood that a rock unit will yield a unique or significant paleontological resource. Pleistocene or older (older than 11,000 years) continental sedimentary deposits are considered as having a high paleontological potential while Holocene-age deposits (less than 10,000 years old) are generally considered to have a low paleontological potential because they are geologically immature and are unlikely to have fossilized the remains of organisms.

The project site is located in the Truckee Basin. The Truckee Basin's bedrock consists primarily of Triassic period (230–190 million years ago) and Jurassic period (190–135 million years ago) metamorphic rock. On top of the bedrock sits a sequence of volcanic flows, glacial deposits, and stream and lake deposits from the late Tertiary period (from 63–2 million years ago).

A search of the University of California Museum of Paleontology (UCMP) database was conducted for the Town of Truckee on March 28, 2022 for the Town of Truckee 2040 GPU. Records of paleontological finds maintained by the UCMP (2017) state that the resources closest to the Town of Truckee were located approximately 4 miles southwest of downtown Truckee and approximately 5 miles northeast of Truckee near Boca Reservoir. The two resources near Boca Reservoir were from the Quaternary period and the Pleistocene epoch, whereas the resource to the southwest of downtown Truckee is from the Quaternary period and the Holocene epoch. Forty-two other resources have been found throughout the county (Town of Truckee 2022: 4.7-11). None of these sites are within the project vicinity.

3.7.2 Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

No impact. As stated above, there is a potential for strong earthquake shaking in the Truckee region and consequently the project site, and the Polaris fault is approximately 1,400 feet west of the project site. However, Nevada County does not include any established Alquist-Priolo EFZs and no faults transect the project site. In addition, the project would not include any buildings for human occupancy. Therefore, there would be no impact, and no mitigation is required.

ii) Strong seismic ground shaking?

Less-than-significant impact. As stated above, the Polaris Fault is approximately 1,400 feet west of the project site. Due to this setback, the potential for surface rupture within the project site is considered low (Black Eagle Consulting 2025). Only localized amplification of ground motion would be expected during an earthquake.

The new building and associated facilities would be constructed in accordance with the California Building Code (CBC), which provides minimum standards for building design in the State of California. Chapter 16 of the CBC (Structural Design Requirements) includes regulations and building standards governing seismically resistant construction and construction techniques to protect people and property from hazards associated with excavation cave-ins and falling debris/construction materials. Chapter 18 of the CBC provides regulations regarding site

excavations, foundations, retaining walls, and grading, including requirements for seismically resistant design, foundation investigation, stable cut and fill slopes, and excavation, shoring, and trenching. Because the project would be designed in accordance with the most recent provisions of the CBC, the project's seismic hazard impacts would be less than significant, and no mitigation is required.

iii) Seismic-related ground failure, including liquefaction?

Less-than-significant impact. The project site is underlain by dense granular soils and groundwater is relatively deep. Liquefaction is possible in areas of loose, sandy soils with a high-water content. Therefore, liquefaction potential is negligible for the project site (Black Eagle Consulting 2025). As discussed above in Impact 3.7.2aii, the new building and associated facilities would be constructed in accordance with the CBC, which provides regulations and building standards governing seismically resistant construction. Because the project would be designed in accordance with the most recent provisions of the CBC, the project's seismic hazard impacts related to liquefaction would be less than significant, and no mitigation is required.

iv) Landslides?

Less-than-significant impact. Based on information in CGS's Landslide Inventory, the Town of Truckee and areas immediately surrounding the town have not experienced historic landslide events (DOC 2025). There are no steep slopes within the project site or surrounding area. In general, landslide susceptibility is low in areas where slopes are low, even in weak ground material. Because there are no steep slopes within the project site, landslide susceptibility for the project would be low. Therefore, this impact would be less than significant, and no mitigation is required.

b) Result in substantial soil erosion or the loss of topsoil?

Less-than-significant impact. Grading and excavation during project construction would result in exposure of soil to potential wind and water erosion until the project site and staging area are effectively stabilized and revegetated. The project would disturb approximately 1 acre that is not currently paved, and construction projects disturbing 1 acre or more need to obtain coverage under the State Water Resources Control Board's (SWRCB's) Construction General Permit. The Construction General Permit requires the development and implementation of a stormwater pollution prevention plan (SWPPP). The SWPPP would include best management practices (BMPs) to protect stormwater runoff; a visual monitoring program, and a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs.

Runoff from the project site and staging area flows into the storm drainage system within the T-TSA WRP site. The project would be required to be designed and constructed to provide proper stormwater conveyance and treatment to minimize erosion on- or off-site. The small increase of impervious surface would not be expected to contribute additional substantial sources of polluted runoff. Compliance with these regulations for construction and operation of the project would minimize impacts related to runoff. This impact would be less than significant, and no mitigation is required.

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

Less-than-significant impact. Based on information in CGS's Landslide Inventory, the town and areas immediately surrounding the town have not experienced historic landslide events (DOC 2025). Because of the nature of the soils and groundwater conditions, the risk of lateral spreading, subsidence, liquefaction, and collapse occurring within the town is considered to be minimal (Town of Truckee 2022).

As stated above, the site is on a slightly sloping grade towards the Truckee River with a maximum change in elevation of 15 feet over the project site and there are no steep slopes on-site. Liquefaction potential is negligible for the project site (Black Eagle Consulting 2025).

Subsidence is commonly associated with severe, long-term withdrawal of groundwater in excess of recharge that eventually leads to overdraft of the aquifer. Groundwater at the site is relatively deep; therefore, dewatering during construction is not anticipated. In addition, no long-term groundwater withdrawal would occur.

Therefore, project-related impacts related to unstable soils would be less than significant, and no mitigation is required.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less-than-significant impact. Soils at the project site are dense sands and gravels that include cobbles and boulders (Black Eagle Consulting 2025). Generally, these coarse-grained soils contain less clay and, therefore, have a low potential for expansion or shrink-swell (Town of Truckee 2022).

Substantial risk to life or property would generally occur to habitable buildings, which could experience compromised structural integrity because of expansive soils. The project does not include construction of any habitable buildings. However, if expansive soils are encountered on-site, damage to building foundations, underground utilities, and other subsurface facilities could occur if these facilities are not designed and constructed to resist the changing soil conditions. The project would comply with the CBC and geotechnical recommendations, which includes provisions for construction on unstable and expansive soils. Therefore, expansive soils would be addressed through standardized foundation engineering practices, and the project would be constructed in compliance with applicable CBC regulations and other County and state requirements to address expansive soils. Therefore, this impact would be less than significant, and no mitigation is required.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less-than-significant impact. The proposed project includes improvements at an existing wastewater treatment plant; however, no new septic tanks or wastewater disposal systems would be constructed as part of the project. Therefore, this impact would be less than significant, and no mitigation is required.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less-than-significant impact. The closest known paleontological sites are located approximately 4 miles northeast of the project site near Boca Reservoir. The two resources near Boca Reservoir are from the Quaternary period and the Pleistocene epoch. However, test borings at the project site did not encounter paleontological resources (Black Eagle Consulting 2025). In addition, the project would be located in an area that has been previously disturbed by the construction of the existing WRP. Therefore, the project would occur in the vicinity of previously disturbed sediment that is unlikely to contain significant fossil remains. This impact would be less than significant, and no mitigation is required.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. Greenhouse Gas Emissions. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Environmental Setting

THE PHYSICAL SCIENTIFIC BASIS OF GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the atmosphere from space. A portion of the radiation is absorbed by the earth's surface, and a smaller portion of this radiation is reflected toward space. The absorbed radiation is then emitted from the earth as low-frequency infrared radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead "trapped," resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of these GHGs in excess of natural ambient concentrations are found to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is very likely that human-induced GHG increases were the main driver of tropospheric warming since comprehensive satellite observations started in 1979, and virtually certain that the human-induced GHG increase is the primary driver of the observed changes in hot and cold extremes on the global scale (IPCC 2023).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas most pollutants with localized air quality effects have relatively short atmospheric lifetimes (approximately 1 day), GHGs have long atmospheric lifetimes (1 year to several thousand years). GHGs persist in the atmosphere long enough to be dispersed around the globe. Although the lifetime of any GHG molecule depends on multiple variables and cannot be determined with any certainty, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration.

The quantity of GHGs in the atmosphere responsible for climate change is not precisely known, but it is considered to be enormous. No single project alone would measurably contribute to an incremental change in the global average temperature or to global or local climates or microclimates. From the standpoint of CEQA, GHG impacts relative to global climate change are inherently cumulative.

Greenhouse Gas Emissions Sources and Sinks

Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices, landfills, and forest fires. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water) and are two of the most common processes for removing CO_2 from the atmosphere.

Effects of Climate Change on the Environment

The Intergovernmental Panel on Climate Change (IPCC) predicts that the global mean surface temperature increase could range from 0.5 to 8.7 degrees Fahrenheit (°F) by the end of the 21st century (2081–2100), relative to 1986–2005. Additionally, IPCC projects that global mean sea level rise will continue during the 21st century, very likely at a faster rate than observed from 1901 to 2015. By 2100, the rise will likely range from 11 to 22 inches (0.28 to 0.55 meters) (IPCC 2023).

According to *California's Fourth Climate Change Assessment*, with global GHGs reduced at a moderate rate, California will experience average daily high temperatures that are warmer than the historic average by 2.5°F from 2006 to 2039, by 4.4°F from 2040 to 2069, and by 5.6°F from 2070 to 2100; if GHG emissions continue at current rates, California will experience average daily high temperatures that are warmer than the historic average by 2.7°F from 2006 to 2039, by 5.8°F from 2040 to 2069, and by 8.8°F from 2070 to 2100 (LCI et al. 2018, formerly OPR et al.).

Since its previous climate change assessment in 2012, California has experienced several of the most extreme natural events in its recorded history: a severe drought from 2012 to 2016, an almost nonexistent Sierra Nevada winter snowpack in 2014-2015, increasingly large and severe wildfires, and back-to-back years of the warmest average temperatures (LCI et al. 2018). According to California Natural Resource Agency's *Safeguarding California Plan: 2018 Update*, California experienced the driest 4-year statewide precipitation on record from 2012 through 2015; the warmest years on average in 2014, 2015, and 2016; and the smallest and second-smallest Sierra snowpack on record in 2015 and 2014 (CNRA 2018). The year 2023 was the warmest year since global records began in 1850 at 1.18 degrees Celsius (°C) (or 2.12°F) above the 20th century average of 13.9°C (57.0°F). This value is 0.15°C (0.27°F) more than the previous record set in 2016. The year 2024 was the warmest year since global records began in 1850 at 1.29 degrees Celsius (°C, or 2.32°F) above the 20th century average of 13.9°C (57.0°F). This value is 0.10°C (0.18°F) more than the previous record set in 2023. The 10 warmest years in the 174-year record have all occurred during the last decade (2014–2024) (NOAA 2025). In contrast, the northern Sierra Nevada experienced one of its wettest years on record during the 2016-2017 water year (CNRA 2018).

These changes in precipitation exacerbate wildfires throughout California through a cycle of high vegetative growth coupled with dry, hot periods, which lowers the moisture content of fuel loads. As a result, the frequency, size, and devastation of forest fires have increased. In November 2018, the Camp Fire destroyed the town of Paradise in Butte County and caused 85 fatalities, becoming the state's deadliest fire in recorded history, and the largest fires in the state's history have occurred in the 2018–2020 period. Moreover, changes in the intensity of precipitation events following wildfires can also result in devastating landslides. In January 2018, following the Thomas Fire, 0.5 inches of rain fell in 5 minutes in Santa Barbara causing destructive mudslides formed from the debris and loose soil left behind by the fire.

Greenhouse Gas Emission Sources

Per capita GHG emissions in California have dropped from a 2001 peak of 13.8 metric tons per person to 9.7 metric tons per person in 2021, a 30.0 percent decrease. In 2014, statewide GHG emissions dropped below the 2020 GHG limit and have remained below the limit since that time. In 2021, emissions from GHG emitting activities statewide were 381.3 million metric tons of carbon dioxide equivalent ($MMTCO_2e$). This is 12.6 $MMTCO_2e$ (3.4 percent) higher than 2020 (368.7 $MMTCO_2e$), but 23.1 $MMTCO_2e$ (5.7 percent) lower than 2019 levels (404.4 $MMTCO_2e$). Both the 2019 to 2020 decrease and the 2020 to 2021 increase in emissions are likely due in large part to the impacts of the Covid-19 pandemic that were felt globally. Emissions levels in 2020 are anomalous to the long-term trend, and the 1-year increase from 2020 to 2021 should be considered in the broader context of the pandemic and subsequent economic recovery that took place over 2021. In 2022, emissions from statewide emitting activities were 371.1 million

$MMTCO_2e$, 10.2 $MMTCO_2e$ lower than 2021 levels and 59.9 $MMTCO_2e$ below the 2020 GHG limit of 431 $MMTCO_2e$ (EPA 2024). Overall trends in the AB 32 (Global Warming Solutions Act of 2006 to reduce GHG emissions to 1990 levels by 2020) GHG inventory also continue to demonstrate that the carbon intensity of California's economy (the amount of carbon pollution per million dollars of gross domestic product) is declining.

As discussed previously, GHG emissions are attributable in large part to human activities. Table 3.8-1 summarizes the statewide GHG inventory for California; transportation, industry, and electricity generation are the largest GHG emission sectors.

Table 3.8-1 Statewide GHG Emissions by Economic Sector (2022)

Sector	Percent
Transportation	39
Industrial	23
Electricity generation (in State)	11
Electricity generation (imports)	5
Agriculture	8
Residential	8
Commercial	6
Not specified	<1

Notes: GHG = greenhouse gas.

Source: CARB 2024.

Town of Truckee Greenhouse Gas Inventory

In 2016, the Town of Truckee prepared baseline GHG emissions inventories for the year 2008 for both community activities and the Town of Truckee's municipal operations (Town of Truckee 2018). In 2018, the Town prepared a GHG emissions inventory update for the year 2016 (Table 3.8-2) for both community activities and the Town of Truckee's municipal operations.

Table 3.8-2 Town of Truckee 2016 GHG Inventory (Community-Wide and Municipal Operations)

Emissions Sector	2016 GHG Emissions ($MTCO_2e$)[1]	Percent of Total (2016)
Community-Wide Emissions		
Residential Energy Use	64,679	42%
Non-Residential Energy Use	25,216	16%
Community Transportation	56,428	37%
Community-Generated Solid Waste	3,804	2%
Wastewater Treatment and Potable Water Service	3,140	2%
Total Community-Wide[2]	153,267	100%
Municipal Operations		
Buildings and Facilities	796	36%
Vehicle Fleet	960	43%
Government-Generated Solid Waste	6	0%
Employee Commute	447	20%
Total Municipal Operations[1]	2,209	100%

Notes: GHG = greenhouse gas; $MTCO_2e$ = metric tons of carbon dioxide equivalent. Totals may not sum due to rounding.

Source: Town of Truckee 2023.

Municipal Operations GHG Emissions

Municipal operations include a variety of activities conducted by the Town that result in the generation of GHG emissions. These include energy use (electricity and natural gas combustion) in municipal buildings and facilities, operation of the Town's municipal vehicle fleet, solid waste generated by municipal operations, and vehicle emissions from commute trips made by Town employees. In 2008, the Town's municipal operations generated 2,519 $MTCO_2e$. In 2016, these emissions decreased by 12 percent to 2,209 $MTCO_2e$. In both 2008 and 2016, the largest source of municipal operations emissions was associated with the use of the municipal vehicle fleet, followed by energy use in buildings and facilities.

The 12 percent decrease in municipal operation emissions between 2008 and 2016 is attributable to several changes over this period. Similar to the decrease in community-wide emissions, the largest decrease in municipal operations emissions is attributed to the increase in the percent of renewable energy sources within TDPUD's energy portfolio, which provides electricity for the municipal buildings and facilities. As a result, emissions associated with electricity use in municipal buildings and facilities decreased by 55 percent between 2008 and 2016. Between 2008 and 2016, operation of the municipal vehicle fleet resulted in an emissions decrease of 13 percent, largely attributed to increases in the fuel efficiency of vehicles within the municipal vehicle fleet. However, between 2008 and 2016, municipal employee commute emissions increased by 26 percent largely because of a 34 percent increase in municipal employees.

3.8.2 Discussion

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

Less-than-significant impact. State CEQA Guidelines Appendix G provides a set of example questions for consideration when evaluating impacts to the environment, including the evaluation of GHG emissions, under CEQA. Lead agencies are under no obligation to use these inquiries in fashioning thresholds of significance on these subjects, or on any subject addressed in the checklist. (*Save Cuyama Valley v. County of Santa Barbara* (2013) 213 Cal.App.4th 1059, 1068.) Rather, with few exceptions, "CEQA grants agencies discretion to develop their own thresholds of significance." (*Ibid*.) Even so, it is a common practice for lead agencies to take the language from the inquiries set forth in Appendix G and to use that language in fashioning thresholds.

The Town of Truckee adopted its Town of Truckee 2040 GPU in May 2023 which included a CAP element. Policy CAP-11.D, "CAP Development Review Checklist," directs the town to develop a CAP Development Review Checklist to be used for CEQA streamlining process. At the time of preparing this analysis, a CEQA streamlining checklist has not yet been developed for use for projects proposed within the town. Moreover, the project's emissions would be generated during the construction phase of project implementation and would not generate new operational emissions. CAPs are also typically designed to target GHG reductions in the building and transportation sector rather than industrial use construction emissions. While CAPs may include measures that target construction-generated emissions (e.g., measures that require the recycling of construction waste or the use of alternative building materials), the majority of CAP measures and the reductions achieved are from implementation of operation-specific actions.

NSAQMD has not adopted numerical GHG thresholds for the purpose of assessing potential project-related GHG impacts. Because NSAQMD has not adopted numerical thresholds, numerical thresholds from other air districts may be used to assess project related GHG impacts. SMAQMD, the air district charged with regulating air quality within the Sacramento Valley Air Basin, has published guidance for addressing GHG emissions in CEQA documents (SMAQMD 2022). SMAQMD is an air district near Nevada County with guidance pertaining to evaluating the significance of GHG emissions; therefore, in lieu of available guidance provided by NSAQMD, this analysis uses the guidance and thresholds of SMAQMD to determine the significance of GHG emissions that would result from implementation of the project.

SMAQMD has adopted a numeric threshold for construction activities of 1,100 $MTCO_2e$ per year. Accordingly, annual construction emissions would be considered significant if they exceeded 1,100 $MTCO_2e$ per year. SMAQMD also

promotes various project design features to reduce operational emissions from land use development projects, including meeting the Tier 2 requirements of the most recent version of CalGreen and the prohibition of natural gas. Operational emissions from land use development projects that implement these design features are then measured against an 1,100 $MTCO_2e$ per year numeric screening level. Projects that exceed this level must then demonstrate that the project's incremental increase in VMT to the region meet the VMT reduction targets established by the California Office of Land Use and Innovation (formerly the Governor's Office of Planning and Research) pursuant to SB 743. The project does not propose any new parking spaces or propose natural gas infrastructure, nor is the project considered a land use development project. Therefore, this threshold is not applied to the project's operational emissions (SMAQMD 2022).

SMAQMD has also adopted a bright-line threshold of significance for assessing impacts from stationary sources of pollution of 10,000 $MTCO_2e$ per year (SMAQMD 2022). The project is not characterized as a stationary source of GHGs. Therefore, this threshold is not applied to the project's operational emissions.

Construction of the project would generate emissions of GHG emissions from site preparation (e.g., excavation, clearing), off-road equipment, material delivery, worker commute trips, and other miscellaneous activities (e.g., building construction, asphalt paving, application of architectural coatings). Equipment used for construction would include one or more of the following: excavator, backhoe, crane, dump truck/haul trucks, vibratory compactor, paver, and sheepsfoot and/or loader.

As described in Chapter 2, "Project Description," construction of the project would last approximately 24 months beginning in spring or summer of 2026, with soil-disturbing activities generally taking place between May 1 and October 15 of each year due to snow and ground freezing conditions. The number of construction workers on-site would vary; however, approximately 15 to 30 workers are anticipated to be on-site during construction, and there may be several deliveries for materials each day with a few additional delivery trips during construction start-up and the end of construction.

Table 3.8-3 summarizes modeled construction emissions estimates. For detailed modeling assumptions, see Appendix A.

Table 3.8-3 Annual Construction Emissions of GHGs from the Project

Year	$MTCO_2e$/yr
2026	87
2027	174
2028	77
SMAQMD Threshold ($MTCO_2e$/yr)	1,100
Exceeds Threshold?	No

Note: values may not sum due to rounding. $MTCO_2e$ = metric tons of carbon dioxide equivalent.

Source: Modeled by Ascent in 2025.

As shown in Table 3.8-3, annual emissions of GHGs associated with construction of the project would not exceed the SMAQMD's threshold of 1,100 $MTCO_2e$ per year for any year that construction would occur.

The project consists solely of infrastructure improvements and would not result in a change in land use, increased development intensity, or the generation of new long-term operational trips. Upon completion of construction, ongoing operational activities would be limited to routine maintenance and monitoring, which would result in operational GHG emissions equal to or less than existing levels. As such, the project would not lead to a measurable increase in operational GHG emissions as compared to baseline conditions.

The project would result in a **less-than-significant** impact, and no mitigation is required.

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

Less-than-significant impact. The plans applicable to the project that pertain to GHG reductions are the 2022 Scoping Plan and the 2040 GPU.

As described under Impact 3.6.2b in Section 3.6, "Energy," the 2022 Scoping Plan identifies necessary actions to achieve the AB 1279 target of 85 percent below 1990 levels by 2045. Appendix D, "Local Actions," of the 2022 Scoping Plan identifies VMT reduction, electrification of the transportation sector, and building decarbonization, as key GHG reduction areas that local governments should prioritize to reduce GHG emissions. The criteria of these priorities are primarily concerned with project design features that exceed the minimum requirements of CalGreen (e.g., features such as renewable energy generation systems, electric vehicle chargers, and energy efficiency standards that meet the Tier 2 requirements of CalGreen). Therefore, improving energy efficiency and transitioning to all-electric in the built environment and transportation sectors is a crucial component to achieving the state's GHG reduction and carbon neutrality goals.

The project would not result in operational vehicle trips above existing conditions and does not propose new parking facilities. Therefore, the project would not impede the VMT reduction or transportation electrification goals of the 2022 Scoping Plan.

The project's efficiency improvements to the existing process and comfort heating facilities would involve replacing existing steam boilers at the end of their useful life with a new heating and energy recovery system that is more efficient and reliable, reducing operations- and maintenance-related energy consumption. Additionally, the project would include converting the existing heating system from steam, electricity, and natural gas to hot water in most buildings. By replacing existing natural gas heating systems, the project would align with the goal of the 2022 Scoping Plan to reduce fossil fuel consumption and associated GHG emissions.

As detailed above, the 2040 GPU includes a CAP element, which includes policies intended to reduce GHG emissions and mitigate the worst impacts of climate change. A number of these policies relate to reducing GHG emissions by improving energy efficiency and increasing the use of alternative fuel sources to shift away from fossil fuel consumption. 2040 GPU Policy CAP-9.2, "Alternative Fuel Sources," encourages the utilization of alternative fuel sources including local anaerobic digestion, biofuel, biodiesel, methane capture from wastewater processing, and forest biomass. Because the project would result in improvements to the facilities involved in the anaerobic digestion process, the project would support Policy CAP-9.2. Additionally, because the project would include converting the existing heating system from steam, electricity, and natural gas to hot water in most buildings, it would support Policy CAP-7.F, "Town Facility Retrofits," which involves retrofits to existing municipal facilities and phasing out natural gas use to the greatest degree possible.

For these reasons, the project would not conflict with the 2022 Scoping Plan nor the 2040 GPU. This impact would be less than significant, and no mitigation is required.

3.9 HAZARDS AND HAZADOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. Hazards and Hazardous Materials. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
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?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☐	☒

3.9.1 Environmental Setting

There are no sites identified by the SWRCB GeoTracker database on the project site or within 1 mile the project site (SWRCB 2025). In addition, the California Department of Toxic Substance Control (DTSC) EnviroStor database does not list any cleanup sites on or surrounding the project site (DTSC 2025). The project site is not located within 0.25 miles of an existing or proposed school. The nearest schools, Glenshire Elementary School and Truckee Pines Head Start (a day care facility), are located approximately 2 miles northeast and southwest of the project site, respectively. The project site is located approximately 1.5 miles northeast of the Truckee Tahoe Airport. The project site is not located within a designated very high fire hazard severity zone (FHSZ) identified by the California Department of Forestry and Fire Protection (CAL FIRE). The nearest very high FHSZ is located approximately 3,000 feet to the east (CAL FIRE 2024).

The Town of Truckee's *Emergency Operations Plan* addresses the Town's responsibilities in emergencies associated with natural disaster and human-caused emergencies (Town of Truckee 2024). It provides a framework for coordination of response and recovery efforts within the town in coordination and with local, state, and federal agencies. The plan establishes an emergency organization to direct and control operations during an emergency by assigning responsibilities to specific personnel. There are no formal evacuation routes established in the adopted plan because the appropriate routes could vary widely based on the emergency conditions. However, the Town of Truckee has established primary evaluation routes by neighborhood that would lead to I-80, State Route (SR) 267, and SR 89 (Town of Truckee 2020).

3.9.2 Discussion

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. The project could result in a significant hazard to the public or the environment if the project would include the routine transport, use, or disposal of hazardous materials. The routine use, transport, or disposal of hazardous materials is primarily associated with industrial uses that require such materials for operations or produce hazardous wastes as by-products of production application. The project would include replacing the existing steam boilers with new hydronic boilers, construction of a new boiler building and a new access road, new digester gas conditioning equipment for the new boiler systems, and replacing existing facilities associated with T-TSA's existing process and comfort heating system. The project does not include any activities that involve significant use, routine transport, or disposal of hazardous substances. Construction equipment and vehicles would use limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, and lubricants. Gasoline and diesel fuel would be stored in small quantities on-site.

As discussed in Sections 3.7, "Geology and Soils," and 3.10, "Hydrology and Water Quality," the project is required to comply with the National Pollutant Discharge Elimination System (NPDES) Construction General Permit to implement a project-specific SWPPP and associated BMPs if disturbance would occur on 1 acre or more. The project-specific SWPPP and BMPs would include spill response and control measures. In addition, precautionary measures including adherence to mandated safety standards, such as federal Occupational Safety and Health Administration (OSHA) regulations (29 CFR 1910.120) and California OSHA regulations (8 CCR 5192) during construction would minimize effects associated with use of hazardous wastes and emergency response. Once constructed, the project would not require the routine transport, use, or disposal of hazardous materials beyond that which occurs under existing conditions. Given the minimal amount of hazardous materials used during construction and requirement of compliance with applicable regulations, the risk to the public and environment from the routine transport, use, or disposal of hazardous materials would be less than significant, and no mitigation is required.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

Less-than-significant impact. As discussed under Impact 3.9.2a above, a minimal amount of hazardous materials (e.g., gasoline, diesel fuel, and lubricants) would be used during construction. Once constructed, the project would not involve the use of hazardous materials. The project would implement a drainage and erosion control plan that would include spill response and control BMPs. Compliance with the spill control and response BMPs would ensure potential impacts from spills would be less than significant, and no mitigation is required.

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

No impact. The project site is not located within 0.25 miles of an existing or proposed school. The nearest schools, Glenshire Elementary School and Truckee Pines Head Start (a day care facility), are located approximately 2 miles northeast and southwest of the project site, respectively. Therefore, the project would not emit hazardous emissions

or handle hazardous or acutely hazardous materials, substances, or water within 0.25 miles of an existing or proposed school. No impact would occur, and no mitigation is required.

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. The project site and surrounding areas are not included on a compiled list of hazardous materials sites, including the DTSC's EnviroStor database and SWRCB's GeoTracker database (DTSC 2025; SWRCB 2025). Implementation of the project would not create a significant hazard to the public or the environment due to being located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur, and no mitigation is required.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 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?

Less-than-significant impact. The project site is located approximately 1.5 miles northeast of the Truckee Tahoe Airport. People working on the project site may be exposed to aircraft noise or hazards associated with the operation of the airport. The *Truckee Tahoe Airport Land Use Compatibility Plan* was adopted in 2016 to prevent incompatible uses in areas of high aircraft hazard potential. The project site is in the airport's Compatibility Zone D and outside the 60-decibel Community Noise Equivalent Level noise contour. Within Compatibility Zone D, non-residential uses are limited to a maximum of 600 people per single acre and structures are limited to 100 feet in height (TTALUC 2016). Project construction would require up to 30 workers on-site. Once constructed, no new employees would be required for project operation. The new boiler building would be approximately 20 feet in height. Therefore, construction and operation of the project would be within the use and height limits of Compatibility Zone D for the Truckee Tahoe Airport. The project would not result in safety hazards or excessive noise for people working in the project area due to being within an airport land use plan or within 2 miles of a public or public use airport. This impact would be less than significant, and no mitigation is required.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No impact. The project site is located within the WRP property. Construction activities would occur within the WRP and would not require closure of or work within public right-of-way. All roadways would remain accessible to emergency vehicles during construction and operation of the project. The project would not physically impair or interfere with emergency evacuation routes, I-80, SR 267, and SR 89. No impact would occur, and no mitigation is required.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No impact. The project site is not located in a very high FHSZ according to CAL FIRE (CAL FIRE 2024). The project would involve replacing the existing steam boilers with new hydronic boilers, construction of a new boiler building and a new access road, new digester gas conditioning equipment for the new boiler systems, and replacing existing facilities associated with T-TSA's existing process and comfort heating system. The project would not construct structures for human occupancy that could increase wildfire risk. Therefore, the construction and operation of the project would not exacerbate any existing wildfire risk or create new conditions for fire hazard severity. No impact would occur, and no mitigation is required.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial on- or off-site erosion or siltation;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.10.1 Environmental Setting

The project site is located along the Truckee River (Figure 2-1). Overall site topography slopes northwest towards the Truckee River. The WRP is located within the Truckee River Hydrologic Unit. Discharge activities occur within the California portion of the Truckee River Watershed. The Truckee River Watershed is a unique system that spans the jurisdiction of two states, California and Nevada, and a federally recognized tribe (T-TSA 2022). The project site spans two subwatersheds, the Trout Creek-Truckee River Subwatershed (HUC 160501020206) and the Martis Creek Subwatershed (HUC 160501020204) (USGS 2025). Trout Creek-Truckee River Subwatershed is approximately 12,432 acres (EPA 2025a). Martis Creek Subwatershed is approximately 26,765 acres (EPA 2025b)

The project site is within the jurisdiction of the SWRCB Region 6, Lahontan Regional Water Quality Control Board (RWQCB) (SWRCB 2022). The *Water Quality Control Plan* for the Lahontan Region (Basin Plan) is the Lahontan RWQCB's master water quality control planning document (Lahontan RWQCB 2021). The current waste discharge requirements for the WRP were adopted on May 9, 2002 (WDR Order No. R6T-2002-0030, WDID No. CA6A290011000) (Lahontan RWQCB 2002).

The project site is located within the Martis Valley Groundwater Basin, which is a very low priority basin identified by the California Department of Water Resources (DWR) pursuant to the Sustainable Groundwater Management Act (DWR 2025). The project site is located in Flood Zone X designated by the Federal Emergency Management Agency (FEMA) in Flood Insurance Rate Map No. 06057C0534E (FEMA 2010).

3.10.2 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Less-than-significant impact. Project construction activities (e.g., excavation and grading) would expose and disturb soil resulting in a potential increase in erosion and siltation in the vicinity of the project site. During precipitation events, soil erosion and siltation could impact the surface runoff by increasing the amount of silt and debris carried by runoff. Erosion and siltation from construction would have the potential to affect the Truckee River resulting in adverse impacts to water quality. In addition, parking of construction equipment and other vehicles on-site during construction may result in spills of oil, grease, or related pollutants that may discharge into nearby surface water (e.g., Truckee River).

If the project would disturb more than 1 acre of soil, it is required to obtain coverage under the SWRCB's NPDES Construction General Permit. The NPDES Construction General Permit requires development and implementation of a project-specific SWPPP that includes BMPs for erosion and sediment control. Potential BMPs could include covering exposed soils, installing filter fabric to prevent erosion, using secondary containment to contain spills, and maintaining spill kits in high-risk areas. Implementation of the project-specific SWPPP and associated BMPs in compliance with the NPDES Construction General Permit would minimize the effects on water quality.

Once constructed, the treatment capacity of the WRP would not change. The WRP would be required to meet the waste discharge requirements of Order No. R6T-2002-0030 during project operation. Therefore, the project would not violate any waste discharge requirements.

Compliance with the NPDES Construction General Permit and WDR Order No. R6T-2002-0030 would minimize potential impacts related to water quality and waste discharges. Impacts would be less than significant, and no mitigation is required.

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

Less-than-significant impact. Geotechnical investigations performed for the project indicate that groundwater is expected to be below levels affected by construction; therefore, project construction is not expected to require dewatering. In addition, there would be no new long-term sources of groundwater extraction. The project site is located within the Martis Valley Groundwater Basin, which is a very low priority basin identified by DWR pursuant to the Sustainable Groundwater Management Act (DWR 2025). The project would not interfere substantially with groundwater recharge nor impede sustainable groundwater management of the basin. This impact would be less than significant, and no mitigation is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or off-site erosion or siltation;

Less-than-significant impact. Ground-disturbing activities would be restricted to the project footprint, which would be located within the existing WRP property. The project would not alter the course of a stream or river. As discussed in Impact 3.10.2a above, the project is required to comply with the NPDES Construction General Permit requirements to implement project-specific SWPPP and BMPs to control erosion and stormwater runoff. Once constructed, the project

would increase the impervious surface by approximately 1 acre as a result of the new boiler building and access road. However, the project would be designed and constructed to provide stormwater conveyance and treatment to minimize erosion on- or off-site. Therefore, the project would not substantially alter the existing drainage pattern of the project site and would not result in substantial erosion or siltation. This impact would be less than significant, and no mitigation is required.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

Less-than-significant impact. The project would not alter the course of a stream or river. As discussed under Impact 3.10.2ci above, the project would implement BMPs to control erosion and stormwater during construction, which would prevent surface runoff. Once constructed, the project would increase the impervious surface by approximately 1 acre as a result of the new boiler building and access road. The increase in impervious surface would be negligible compared to the 12,432-acre Trout Creek-Truckee River Subwatershed and the 26,765-acres Martis Creek Subwatershed. In addition, stormwater collection facilities would be constructed for the project that would allow new impervious surfaces to drain into the existing stormwater system. Therefore, the increase in impervious surfaces would not substantially increase the rate or amount of surface runoff, which could result in flood on- or off-site. This impact would be less than significant, and no mitigation is required.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Less-than-significant impact. The project would not alter the course of a stream or river. As discussed under Impact 3.10.2ci above, the project would implement BMPs to control erosion during construction, which would prevent polluted runoff. Once constructed, the project would increase the impervious surface by approximately 1 acre as a result of the new boiler building and access road. However, stormwater collection facilities would be constructed for the project that would allow new impervious surfaces to drain into the existing stormwater system to minimize erosion on- or off-site. The small increase of impervious surface would not be expected to contribute additional substantial sources of polluted runoff. This impact would be less than significant, and no mitigation is required.

iv) Impede or redirect flood flows?

No impact. According to the FEMA Flood Insurance Rate Map No. 06057C0534E, the project site is located in Flood Zone X, outside of the FEMA 100-year flood zone (FEMA 2010). The project would not impede or redirect flood flows. No impact would occur, and no mitigation is required.

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

No impact. According to the FEMA Flood Insurance Rate Map No. 06007C0485E, the project site is located in Flood Zone X, outside of the FEMA 100-year flood zone (FEMA 2010). The project site is not located in a coastal area that is subject to tsunami or near a body of water that is subject to seiche. Therefore, the project is not located in flood hazard, tsunami, or seiche zones that would risk release of pollutants due to project inundation. No impact would occur, and no mitigation is required.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

No impact. As discussed in Impact 3.10.2a above, the project would not substantially degrade water quality with the implementation of a project-specific SWPPP and associated BMPs and compliance with WDR Order No. R6T-2002-0030. The project would not interfere substantially with groundwater recharge nor impede sustainable groundwater management of the basin as discussed in Impact 3.10.2b above. Therefore, the project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur, and no mitigation is required.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. Land Use and Planning. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

3.11.1 Environmental Setting

The project site is within the existing T-TSA WRP property in the Town of Truckee. The project facilities would be surrounded by the existing water treatment facilities at the WRP.

The Town of Truckee's 2040 GPU designates and zones the project site as Public/Public Facilities. This land use designation is primarily for public facilities, government offices, and educational facilities (Town of Truckee 2022; Town of Truckee n.d.).

3.11.2 Discussion

a) Physically divide an established community?

No impact. The project site is located within an existing wastewater treatment plant site and construction of the boilers and digester facilities would be compatible with the surrounding wastewater treatment facilities. Therefore, the project would not divide an established community. There would be no impact, and no mitigation is required.

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

No impact. The proposed project would upgrade existing facilities and construct new facilities for comfort heating. The project would be entirely within the T-TSA WRP property, and the associated land use designation/zoning for the project site is Public/Public Facilities, which is compatible with the existing WRP and the proposed facilities (Town of Truckee 2022). The project does not propose any changes to land use. Thus, no impact would occur, and no mitigation is required.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☒	☐
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

3.12.1 Environmental Setting

According to the Town of Truckee 2040 GPU, the project site is within an area identified as having an important mineral resource (Town of Truckee 2022: 4.12-4). More than half of the construction aggregate reserves in Nevada County are in the Truckee-Martis Valley Region. Alluvial aggregates consist of gravel, sand, silts, and clay deposits that are used in production of concrete, asphalt, and brick; cinders are also used for building and road construction materials. Sand, gravel, silt, and clay deposits, classified as Mineral Resource Zone Category (MRZ) MRZ-2b and MRZ-3a deposits under the Surface Mining and Reclamation Act are located within Truckee. MRZ-2b are areas where geologic data indicates that significant mineral resources may be present. MRZ-3a are areas containing mineral deposits, the significance of which cannot be deduced from the available data. These resources are chiefly associated with alluvial deposits along the length of the Truckee River Valley, although some mineral resources are associated with volcanic features, such as the Hirschdale cinder cone (Town of Truckee 2022). MRZ-2b deposits consisting of sands, gravels, silts, and clays extend from SR 89 to the eastern edge of Martis Valley along the course of the Truckee River, which is adjacent to the project site. Alluvial aggregate deposits within Truckee are presently mined for use as construction aggregate. Teichert Aggregates, located approximately 1,000 feet southeast of the project site, produces construction aggregate from exposed deposits. Portions of this mineral deposit are within the project vicinity. In addition to the Truckee River alluvial deposits, Tioga-stage glacial outwash MRZ-3a deposits occur southwest of the I-80 and SR 89 intersection, which is more than 4 miles from the project site.

3.12.2 Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Less-than-significant impact. The project is located in an area of known mineral resource deposits (MRZ-2b) and is approximately 1,000 feet northwest of an active aggregate mine. The Town of Truckee 2040 GPU aims to protect economically viable mineral resources while avoiding land use conflicts. The project expands existing facilities at the T-TSA WRP and does not expand the property or boundary of the WRP. The proposed project is within an area that was not planned to be mined due to the designated zoning and existing facilities at the site. Therefore, the addition of facilities at the existing WRP would not result in the loss of availability of minerals that would otherwise be available for extraction. This impact would be less than significant, and no mitigation is required.

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

No impact. There are no locally important mineral resource recovery sites delineated on a local general plan, specific plan, or other land use plan that include the project site. Although the Town of Truckee 2040 GPU includes a map of mineral resources, as mapped by the California Department of Conservation, there are no locally important mineral resource recovery sites delineated in the Town of Truckee 2040 GPU or other applicable land use plan. Therefore, development of the project would have no effect on the availability of locally important mineral resources. No impact would occur, and no mitigation is required.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII.Noise. 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, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 2 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?	☐	☐	☒	☐

3.13.1 Environmental Setting

Prior to providing the environmental setting, some fundamental definitions of commonly used noise terms are provided in this section. Various noise descriptors have been developed to describe time-varying noise levels. The following are the noise descriptors used throughout this section.

COMMON NOISE DESCRIPTORS

Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013: 2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period and is the basis for noise abatement criteria used by Caltrans and the Federal Transit Administration (FTA) (Caltrans 2013: 2-47; FTA 2018).

- **Maximum Sound Level (L_{max}):** L_{max} is the highest instantaneous sound level measured during a specified period (Caltrans 2013: 2-48; FTA 2018).
- **Day-Night Level (L_{dn}):** L_{dn} is the energy average of A-weighted sound levels occurring over a 24-hour period, with a 10-dB "penalty" applied to sound levels occurring during nighttime hours between 10:00 p.m. and 7:00 a.m. (Caltrans 2013: 2-48; FTA 2018).
- **Community Noise Equivalent Level (CNEL):** CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10:00 p.m. and 7:00 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7:00 p.m. and 10:00 p.m. (Caltrans 2013: 2-48).
- **Vibration Decibels (VdB):** VdB is the vibration velocity level in decibel scale (FTA 2018: Table 5-1).

- **Peak Particle Velocity (PPV):** PPV is the peak signal value of an oscillating vibration waveform. Usually expressed in inches/second (FTA 2018: Table 5-1).

Existing Noise- and Vibration-Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for nighttime noise to result in sleep disruption. The Town of Truckee 2040 GPU considers residences, schools, senior living facilities, parks, lodging, places of worship, libraries, sensitive habitats, and recreation areas to be noise sensitive uses, and all noise-sensitive uses, structures, and vibration-sensitive equipment, as described in the Caltrans *Transportation and Construction Vibration Guidance Manual* are considered vibration sensitive uses.

The project is located within the Town of Truckee at T-TSA's WRP at 13720 Butterfield Drive. The nearest sensitive receptor, a single-family residential home, is approximately 1,600 feet northwest of the project site.

Existing Noise Sources

The Union Pacific railroad line is a freight and passenger rail line that crosses through the Town of Truckee and is located approximately 1,200 feet northwest of the project site. Glenshire Drive is the nearest major roadway and is located approximately 1,200 northwest of the project site. The project site remains outside the 60 dBA contour of both the Union Pacific railroad line and Glenshire Drive (Town of Truckee 2023).

The closest airport to the project site would be Tahoe Truckee Airport approximately 1 mile south of the project site.

FEDERAL

US Environmental Protection Agency Office of Noise Abatement and Control

EPA Office of Noise Abatement and Control was originally established to coordinate federal noise control activities. In 1981, EPA administrators determined that subjective issues such as noise would be better addressed at more local levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to state and local governments. However, documents and research completed by the EPA Office of Noise Abatement and Control continue to provide value in the analysis of noise effects.

Federal Transit Administration

To address the human response to ground vibration, FTA has set forth guidelines for maximum-acceptable vibration criteria for various types of land uses. These guidelines are presented in Table 3.13-1. FTA has also established construction vibration damage criteria, shown in Table 3.13-2.

Table 3.13-1 Ground-Borne Vibration Impact Criteria for General Assessment

Land Use Category	GVB Impact Levels (VdB, 1 micro-inch/second)		
	Frequent Events[1]	Occasional Events[2]	Infrequent Events[3]
Category 1: Buildings where vibration would interfere with interior operations.	65[4]	65[4]	65[4]
Category 2: Residences and buildings where people normally sleep.	72	75	80
Category 3: Institutional land uses with primarily daytime uses.	75	78	83

Notes: GVB = ground-borne vibration; VdB, -1 micro-inch/second = vibration decibels referenced to 1 micro-inch per second and based on the root mean square velocity amplitude.

[1] "Frequent Events" is defined as more than 70 vibration events of the same source per day.

[2] "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

[3] "Infrequent Events" is defined as fewer than 30 vibration events of the same source per day.

[4] This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research would require detailed evaluation to define acceptable vibration levels.

Source: FTA 2018: 6-3.

Table 3.13-2 Federal Transit Administration Construction Vibration Damage Criteria

Land Use Category	PPV in/sec
Reinforced-concrete, steel or timber (no plaster)	0.5
Engineered concrete and masonry (no plaster)	0.3
Non-engineered timber and masonry buildings	0.2
Buildings extremely susceptible to vibration damage	0.12

Notes: PPV = peak particle velocity, in/sec = inches per second.

Source: FTA 2018: Table 7-5.

STATE

At the state level, the State of California establishes general guidance and regulatory frameworks related to noise and vibration through various codes and publications, including but not limited to the California Building Code (CBC) transmission standards, the California General Plan Guidelines (Governor's Office of Land Use and Climate Innovation), and Caltrans' *Transportation and Construction Vibration Guidance Manual*. While these documents provide overarching guidance, the analysis in this document primarily relies on noise and vibration standards adopted at the local level, as local jurisdictions are typically responsible for establishing and enforcing specific noise ordinances and land use compatibility standards.

LOCAL

Town of Truckee General Plan

The Safety and Noise Element in the Town of Truckee General Plan outlines policies and implementation measures to achieve the Town's goals to minimize the community's exposure to excessive noise and maintain Truckee's peaceful mountain environment by ensuring that the siting of land uses is compatible with surrounding noise sources and levels (Town of Truckee 2023).

The following policies would apply to the project:

- SN-8.13 Construction Hours: Continue to restrict construction hours in Truckee to reduce impacts to adjacent existing noise-sensitive uses.
- Policy SN-8.14 Construction Noise Control Measures: Require the following standard construction noise control measures to be included as requirements at construction sites in order to minimize construction noise impacts:
  - equip all internal combustion engine–driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment;
  - locate stationary noise generating equipment as far as possible from noise-sensitive uses when noise-sensitive uses adjoin or are near a construction project area;
  - use "quiet" air compressors and other stationary noise-generating equipment where appropriate technology exists; and
  - require the project sponsor to designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler) and will require that reasonable measures warranted to correct the problem be implemented. The project sponsor shall also post a telephone number for excessive noise complaints in conspicuous locations in the vicinity of the project site and send a notice to neighbors in the project vicinity with information on the construction schedule and the telephone number for noise complaints.

- **SN-8.19 Additional Construction Noise Control Measures:** Require the following additional construction noise control measures at construction sites where construction activity, excluding single-family construction, would take place outside of the timeframes exempt from the noise standards established in the Town Development Code and is anticipated to generate exterior noise levels at sensitive receptors that exceed the applicable nighttime noise standards of 50 L_{eq} or 70 L_{max} (Table 3.13-3).
  - Temporary noise barriers, such as curtains, piled snow, or hay bales.
  - Noise-reducing enclosures and techniques around stationary noise generating equipment (e.g., concrete mixers, generators, compressors) to break the line of sight between the noise source and receiver.
  - Operation of heavy-duty construction equipment at the lowest operating power possible.
- **SN-8.20 Construction Vibration:** Require construction projects involving pile driving, within 920 feet of vibration sensitive uses when considering VdB for human annoyance and 100 feet of vibration sensitive buildings when considering PPV for structural damage, and construction projects not involving pile driving, within 45 feet of vibration sensitive uses and 15 feet of vibration sensitive buildings when considering VdB and PPV, respectively, to evaluate all potential vibration-inducing activities with the potential to result in structural damage or exposure of sensitive receptors to excessive groundborne vibration. Include various measures such as setback distances, phasing ground-impacting operations, monitoring programs, and alternative methods to traditional construction activities (i.e., predrilling holes and other alternatives to traditional pile driving) to reduce potential effects.

Table 3.13-3 Exterior Noise Compatibility Standards for Community Noise Environment

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low-Density Single Family, Duplex, Mobile Homes	50-60	60-70	70-75	75-85
Residential – Mult-Family (including mixed-use development)	50-65	65-70	70-75	75-85
Transient Lodging – Motels, Hotels	50-70	70-75	75-80	80-85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-65	65-70	70-75	75-85
Auditoriums, Concert Halls	NA	50-70	70-85	NA
Sports Arenas, Outdoor Spectator Sports	NA	50-75	75-85	NA
Playgrounds, Neighborhood Parks	50-65	65-75	NA	75-85
Community and Regional Parks, Golf Courses, Riding Stables, Water Recreation, Other Recreation, Cemeteries	50-70	70-75	75-80	80-85
Offices, Industrial, Manufacturing, Utilities, Agriculture	50-70	70-75	75-80	80-85

Notes: CNEL = Community Equivalent Noise Level; dBA = A-weighted decibel; L_{dn} = day-night average noise level.

Source: Town of Truckee General Plan 2025: Table SN-1.

Town of Truckee Municipal Code

The Town of Truckee Noise Ordinance is contained in Chapter 18.44 of the Town of Truckee Development Code with the purpose of establishing standards for the elimination and regulation of noise disturbances to protect the health, safety, welfare, and living/working environments of those living and working in the town. Key provisions of the ordinance that apply to the project include:

- **18.44.040 Exterior noise levels.** Exterior noise levels, when measured at any receiving church, commercial, hospital, public library, residential, or school property, do not conform to the provisions of this Section when they exceed the noise level standards established by Table 3-6 [presented as Table 3.13.4].
- **Section 18.44.070 Construction.** The provisions of this Chapter shall not apply to noise sources associated with non-single-family residential construction, provided the activities do not take place before 7:00 a.m. or after 9:00 p.m. on any day except Sunday, or before 9:00 a.m. or after 6:00 p.m. on Sunday. The review authority may

impose further limitations on the hours and day of construction or other measures to mitigate significant noise impacts on sensitive uses.

Table 3.13-4 Noise Standard by Receiving Land Use

Cumulative number of minutes in any hour	Noise Level Standard, dBA Daytime (7:00 a.m. to 10:00 p.m.)	Noise Level Standard, dBA Nighttime (10:00 p.m. to 7:00 a.m.)
Hospital, Library, Religious Institution, Residential, or School Uses		
30[1]	55	50
15	60	55
5	65	60
1	70	65
0	75	70
Commercial Uses		
30	65	60
15	70	65
5	75	70
1	80	75
0	85	80

Notes:

[1] "For example, this means the measured noise level may not exceed 55 dBA for more than 30 minutes out of any 1-hour time period.

Source: Town of Truckee Municipal Code – Title 18, Development Code 2025: Table 3-6.

3.13.2 Discussion

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, or a substantial temporary or permanent increase in noise levels above existing ambient levels that could result in an adverse effect on humans?

Less-than-significant impact. The project would involve upgrading existing facilities and infrastructure to improve the T-TSA WRP. This impact includes an analysis of short-term construction noise and long-term operational noise.

Construction Noise

Construction of the project would involve noise-generating activities. Short-term construction noise levels on and near the project site would fluctuate depending on the type, number, and duration of usage for the varying types of heavy-duty equipment. The effects of construction noise largely depend on the type of construction activities being performed, noise levels generated by those activities, distances to noise-sensitive receptors, the relative locations of noise attenuating features such as vegetation and existing structures, and existing ambient noise levels.

Noise-generating activities occurring during the more noise-sensitive evening and nighttime hours are of increased concern. Because exterior ambient noise levels typically decrease during the late evening and nighttime hours as typical levels of community activities (e.g., industrial activities, vehicle traffic) decrease, construction activities performed during the more noise-sensitive evening and nighttime hours could result in increased annoyance and potential sleep disruption for occupants of nearby residential land uses.

Based on the types of construction activities assumed for the project (e.g., site clearing, grading, excavation, underslab piping/electrical, footings, pouring, backfill, and the demolition and replacement of existing piping), it is

expected that the primary sources of noise would include excavators, dump trucks/haul trucks, vibratory compactors, pavers, and loaders. Noise levels generated by common types of construction equipment are shown in Table 3.13-5.

Table 3.13-5 Noise Emission Levels from Construction Equipment

Equipment Type	Typical Noise Level (dBA) @ 50 feet
Dump Truck	76
Drill Rig Truck	79
Concrete Mixer	85
Crane	85
Dozer	85
Grader	85
Excavator	85
Front End Loader/Backhoe	80
Paver	89
Roller	85
Scraper	89

Notes: dBA = A-weighted decibel. Assumes all equipment is fitted with a properly maintained and operational noise control device, per manufacturer specifications. Noise levels listed are manufacturer-specified noise levels for each piece of heavy construction equipment.

Source: FTA 2018.

The nearest sensitive receptor is approximately 1,600 feet from the center of construction activity. Construction noise was analyzed using the data methodologies from FTA's Transit Noise and Vibration Impact Assessment Manual (FTA 2018), which predicts average noise levels at nearby receptors by analyzing equipment types, distance from source to receptor, usage factor, and the presence or absence of intervening shielding between the source and receptor. This methodology calculates the composite average noise levels for the two loudest pieces of construction equipment operating simultaneously. The combined predicted noise level at the nearest sensitive receptor is presented in Table 3.13-6. Detailed calculations can be found in Appendix C. Construction noise would attenuate to 38.8 dBA L_{eq} and 44.4 dBA L_{max}, which would not exceed the applicable nighttime noise standards of 50 dBA L_{eq} and 70 dBA L_{max}.

Table 3.13-6 Noise Exposure at Off-Site Noise-Sensitive Receptors from Typical Construction Activity

Sensitive Receptor	Distance to Project Site (feet)	Construction Noise Exposure Level at Sensitive Receptor[1]	
		L_{eq} (dBA)	L_{max} (dBA)
Residence northwest of the center of construction activity	1,600	38.8	44.4

Notes:
[1] As measured from approximate construction activity locations to nearest noise sensitive receptor's outdoor activity area.

Source: Data modeled by Ascent in 2025.

Construction work would generally be between 7:00 a.m. and 9:00 p.m., Monday through Friday consistent with the Town of Truckee Development Code Section 18.44070. If deemed necessary, construction activity would only occur outside of permitted hours with T-TSA approval. Additionally, if construction were to occur during nighttime hours, it would be consistent with the Town of Truckee's the nighttime noise standard of 50 dBA L_{eq} and 70 dBA L_{max}; therefore, the project would not result in a substantial increase in noise during construction. Although nighttime construction is not proposed, if it were required, it would not exceed nighttime standards at the nearest sensitive receptor, as shown in Table 3.13-6 above.

Operational Noise

The project would include both the replacement of existing infrastructure such as steam boilers, hot water loops, heat exchangers, comfort heating systems, exhaust capture equipment, gas conditioning equipment, and the digester gas candlestick flare and new additions including an access road, boiler building, and a linear generator. The Town of Truckee exterior noise standard for residential land uses is 55 dBA L_{50} and 75 dBA L_{max} for daytime and 50 dBA L_{50} and 70 L_{max} for nighttime.

The proposed upgrades at the T-TSA WRP, including the boiler and comfort heating system, would introduce new or unique noise sources and would potentially generate operational noise levels different from existing conditions. Furthermore, the operation of the project would introduce new stationary noise sources such as a linear generator, hydronic boiler, and waste heat radiator. The T-TSA WRP would continue to operate 24 hours per day, every day. Assuming equipment would operate for the entirety of the hour, sound levels would be equivalent to L_{50}. Table 3.13-7 summarizes the noise levels of new stationary noise sources.

Table 3.13-7 New Stationary Noise Sources Associated with the Project

Noise Source(s)	Noise Level at 50 feet (dBA, L_{50})
Linear Generator	52
Hydronic Boiler	52
Waste Heat Radiator	64
Comfort Heating System	87
Combined Noise Level	87

Notes: dBA = A-weighted Decibels; L_{eq} = Equivalent Continuous Sound Level

Source: Modeled by Ascent 2025.

New stationary sources would be located approximately 1,700 feet from the façade of the nearest sensitive receptor, as measured from the closest potential equipment location. At this location, operational noise is anticipated to attenuate to 47.2 dBA L_{50}. The detailed calculations can be found in Appendix C. These noise levels would not exceed the Town of Truckee exterior noise standard for residential land uses of 55 dBA L_{50} and 75 dBA L_{max} for daytime and 50 dBA L_{50} and 70 L_{max} for nighttime. Therefore, the project would not result in a substantial increase in noise during operations.

Summary

Construction activities would primarily occur within exempted hours established in Section 18.44070 of the Town of Truckee Development Code (i.e., 7:00 a.m. to 9:00 p.m. Monday through Friday) and would only occur outside of permitted hours under special circumstances. Additionally, construction noise modeling determined that noise levels at the nearest sensitive receptor would not exceed the applicable daytime and nighttime thresholds of 55 dBA L_{50} and 75 dBA L_{max} for daytime and 50 dBA L_{50} and 70 L_{max} for nighttime. The project's implementation of new stationary noise sources would not exceed the Town of Truckee noise thresholds for residential uses. Therefore, the project would not result in a substantial temporary or permanent increase in construction or operational noise. This impact would be less than significant, and no mitigation is required.

b) Generation of excessive groundborne vibration or groundborne noise levels?

No impact. Project operation would not result in any new major sources of noise vibration such as transit, rail, or highways and would not locate any new sensitive receptors near existing sources of vibration. Construction of the project would not involve the use of ground vibration-intensive activities such as pile driving or blasting. Construction would include the use of equipment such as excavators, dump truck/haul trucks, vibratory compactors, paver, and loaders, which would not generate substantial levels of ground vibration that could result in structural damage, except at extremely close distances (i.e. within at least 10 feet of activity). The nearest sensitive receptor is approximately 1,600 feet northwest of construction activity. At this distance typical construction equipment and

activities would not result in the generation of excessive groundborne vibration or groundborne noise levels. Therefore, there would be no impact, and no mitigation is 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 2 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?

Less-than-significant impact. The project site is located approximately 1.5 miles northeast of the Truckee Tahoe Airport. People working on the project site may be exposed to aircraft noise or hazards associated with the operation of the airport. The *Truckee Tahoe Airport Land Use Compatibility Plan* was adopted in 2016 to prevent incompatible uses in areas of high aircraft hazard potential. The project site is in the airport's Compatibility Zone D and outside the 60-decibel Community Noise Equivalent Level noise contour. Therefore, the project would not expose people working in the project area to excessive aircraft-related noise levels. This impact would be less than significant, and no mitigation is required.

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. Population and Housing. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Environmental Setting

The project area is located in the Town of Truckee in Nevada County. As of January 2025, the population in the town was estimated to be 16,928 (DOF 2025). No housing units are located within the WRP property or adjacent to the WRP property. The closest residences are approximately 1,600 feet north of the project site across the Truckee River.

3.14.2 Discussion

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

No impact. The purpose of the proposed project is to upgrade the comfort heating facilities at the existing WRP. The project would not increase the wastewater treatment capacity of the WRP. In addition, the project would not include construction of new housing or commercial businesses that would directly induce population growth in the area. The proposed project would not extend roadways or other infrastructure into new areas that could lead to indirect growth. The new access road would provide improved circulation and emergency access for T-TSA and emergency personnel within the WRP. The access road would not provide public access. Therefore, there would be no impact on population growth, and no mitigation is required.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No impact. No housing units are located within the WRP property or adjacent to the WRP property. The proposed project does not propose removal of housing or business. Implementation of the proposed project would not displace people or housing. No impact would occur, and no mitigation is required.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.15.1 Environmental Setting

FIRE PROTECTION SERVICES

The Truckee Fire Protection District provides fire protection services to the project site. The nearest fire station is Fire Station #96 located approximately 2.5 miles southwest of the project site near the Truckee Tahoe Airport.

POLICE PROTECTION SERVICES

The Truckee Police Department provides law enforcement services to the project site; it primarily operates out of the headquarters located at 10183 Truckee Airport Road, about 2.5 miles southwest of the project site. The Truckee Police Department has a patrol division and an operations division, which, if required, would serve the project site.

SCHOOLS

The project site is not located within 0.25 miles of an existing or proposed school. The nearest schools, Glenshire Elementary School and Truckee Pines Head Start (a day care facility), are located approximately 2 miles northeast and southwest of the project site, respectively.

PARKS AND OTHER PUBLIC FACILITIES

No public access is provided to the T-TSA WRP property and there are no recreation facilities on-site. The Truckee River Legacy Trail is along the Truckee River just north of the existing T-TSA WRP. The nearest park is Riverview Sport Park located approximately 2 miles from the project site, which is maintained by the Truckee Donner Recreation and Park District. Waddle Ranch Trailhead, which has publicly accessible trails and a campground, is approximately

1.4 miles south of the project site and is maintained by the Truckee Donner Land Trust. The project site is located approximately 1.5 miles northeast of the Truckee Tahoe Airport.

3.15.2 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

No impact. Implementation of the project would not increase the demand for fire protection services because the project would upgrade the existing facilities at the T-TSA WRP and would not generate new residences or businesses that would increase demand for fire protection services. Because the project would not increase demand for fire protection services, no construction of new or expanded fire service facilities would be required. Therefore, the project would have no impact on fire protection services, and no mitigation is required.

Police protection?

No impact. Implementation of the project would not increase the demand for police protection services because the project would not generate new residences or businesses that would increase demand for police protection services. Because the project would not increase demand for police protection services, no construction of new or expanded police service facilities would be required. Therefore, the project would have no impact on police services, and no mitigation is required.

Schools?

No impact. The project would not provide any new housing that would generate new students in the community nor result in an increase in employment opportunities that could indirectly contribute new students to the local school district. Therefore, the project would have no impact on school services or facilities, and no mitigation is required.

Parks?

No impact. The project would not result in any additional residents/employees that would increase the demand for recreational facilities, necessitating new or expanded park facilities. The new facilities proposed for the project would remain on T-TSA property and would not interfere with public access or operations of the Truckee River Legacy Trail, north of the project site. Therefore, the project would have no impact on parks, and no mitigation is required.

Other public facilities?

No impact. The project would be an upgrade to the existing T-TSA WRP, which is addressed throughout this Initial Study. No other public facilities exist in the project vicinity that could be affected by implementation of the project. Therefore, the project would have no impact on other public facilities, and no mitigation is required.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. Recreation. Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

3.16.1 Environmental Setting

No public access is provided to the T-TSA property and there are no recreation facilities on-site. The Truckee River Legacy Trail is along the Truckee River approximately 100 feet north of the existing T-TSA WRP. The nearest park is Riverview Sport Park located approximately 2 miles from the project site, which is maintained by Truckee Donner Recreation and Park District. Waddle Ranch Trailhead, which has publicly accessible trails and a campground, is approximately 1.4 miles south of the project site and is maintained by the Truckee Donner Land Trust.

3.16.2 Discussion

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

No impact. The project would not include any new housing or businesses that would increase the population in the project vicinity. In addition, the proposed project would not increase the capacity of the T-TSA WRP or increase demand for recreation facilities or programs. The project would have no effect on population growth; therefore, use of existing neighborhood and regional parks or other recreational facilities would not change as a result of the project. Because the project would not result in the physical deterioration of public recreational facilities, no impact would occur, and no mitigation is required.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

No impact. The project would not require construction of new homes or infrastructure, including parks and recreational facilities. No impact would occur, and no mitigation is required.

3.17 TRANSPORTATION

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

3.17.1 Environmental Setting

ROADWAY NETWORK

Access to the project site is provided by the surrounding roadway network which includes SR 267, Joerger Drive, and Butterfield Drive.

SR 267 is a two-lane highway generally running northwest-southeast between the I-80/SR 267 interchange in Truckee and SR 28 in Kings Beach. SR 267 provides access to residential, industrial, commercial, and recreational land uses. It serves as one of two major routes between the I-80 corridor in Truckee and the North Lake Tahoe communities of Kings Beach and Incline Village, Nevada. SR 267 provides regional access to the project site and can be accessed via the Soaring Way and SR 267 intersection southwest of the project site.

Joerger Drive is a two-lane roadway located south of the project site. There are no sidewalks or bicycle facilities present along Joerger Drive.

Butterfield Drive provides direct access to the project site and is a two-lane roadway; however, there are no lane markings present. There are no sidewalks or bicycle facilities present along Butterfield Drive.

BICYCLE AND PEDESTRIAN FACILITIES

Pedestrian facilities include sidewalks, paths, trails, curb ramps, and crossings. The bicycle transportation system in the Town of Truckee is composed of the following facility types as described in the *Truckee Trails and Bikeways Master Plan* (Town of Truckee 2015):

- **Paved Trail (Class I):** Paved trails are used exclusively by bicyclists, pedestrians, and other nonmotorized users (including e-bikes), with minimal cross-flow by motor vehicles. Paved trails have a hard surface (asphalt or concrete) and are usually located in an exclusive right-of-way.
- **Bike Lane (Class II):** Bike lanes are areas within paced streets that are identified with striping, stencils, and signs for preferential (semi-exclusive) bicycle use.

- **Bike Route (Class III):** Bike routes are on-street routes intended to provide continuity to the bikeway system. They are designed by signs or permanent marking and are shared with motorists. Many bike routes have shoulders that can be used by bicyclists or pedestrians.
- **Separated Bikeway/Cycle Track (Class IV):** Separated bikeways are on-street facilities for the exclusive use of bicycles. They are physically separated from motorized vehicle traffic with concrete curbs, bollards, or other vertical elements and can allow for one-way or two-way bike travel. However, they are a challenge to maintain during the winter because of snow removal operations.
- **Dirt Trail:** Dirt trails are facilities for use exclusively by nonmotorized users, such as bicyclists, pedestrians, equestrians, and other nonmotorized users, with minimal cross-flow by motor vehicles.

The only bicycle or pedestrian facility present in the project vicinity is the Truckee River Legacy Trail that is approximately 100 feet north of the WRP property. The Truckee River Legacy Trail is a Class I trail that connects Truckee River Regional Park and the Glenshire subdivision.

TRANSIT SYSTEM AND SERVICES

Truckee is served by Tahoe Truckee Area Regional Transit (TART), holiday and special event shuttles, dial-a-ride service, Greyhound, Amtrak throughway bus and rail, and the North Lake Tahoe Express airport shuttle. There are no transit stops in the vicinity of the project site.

Tahoe Truckee Area Regional Transit Program

The Town of Truckee and Placer County both operate elements of the TART system, as discussed below.

Truckee Tahoe Truckee Area Regional Transit Program

The Town of Truckee's program consists of both fixed-route service, referred to as the Truckee Local, and complementary paratransit service known as dial-a-ride operating within the Truckee area. These services offer a range of options for travelers to access recreational, employment, shopping, and social service opportunities.

Truckee TART provides daily transit service along Donner Pass Road and Brockway Road from 6:30 a.m. to 6:30 p.m., year-round. This local route connects passengers at the Truckee train depot with Placer County's Regional TART, linking Truckee to North Lake Tahoe communities like Tahoe City, Kings Beach, and Incline Village. Truckee TART also operates a regional night service from the train depot to the Northstar California and Palisades Tahoe resort base areas. Night service runs from 6:00 p.m. to 11:30 p.m. during peak winter and summer seasons and ends an hour earlier during spring and fall. Transfers between Truckee and Placer TART services at the resorts are fare-free.

A year-round dial-a-ride service is also available during the same hours as the local route, with priority given to seniors and individuals with disabilities. This service operates within the town limits and requires reservations at least 24 hours in advance.

Placer Tahoe Truckee Area Regional Transit Program

Placer County operates a separate but coordinated element of the TART program, consisting of transit services in the North Tahoe region in both California and Nevada. This program also connects the North Lake Tahoe area to Truckee via SR 89 and SR 267. Placer TART operates hourly route service between Tahoe City, Olympic Valley, and Truckee along SR 89, with additional runs during the winter and summer months for peak commute periods.

In addition, TART Connect offers free on-demand night service in the North Lake Tahoe area with service in and around Tahoe City, Kings Beach, and Incline Village. Riders use a mobile application to request on-demand service between 6:00 p.m. and 10:00 p.m. daily and in the Incline Village zone until midnight on weekends.

Intercity and Seasonal Transportation Services

Truckee is served by several intercity and seasonal transit options. During select holiday periods and special events, the Town partners with local agencies to provide free shuttle service connecting local neighborhoods, downtown Truckee, and nearby resorts such as Northstar California and Palisades Tahoe. Greyhound offers daily regional and

long-distance bus service at the Truckee Train Depot, with westbound routes to Sacramento and the Bay Area, and eastbound service to Reno and beyond. Amtrak's California Zephyr line provides daily passenger rail service between the Bay Area and Chicago, though delays—particularly westbound—are common. The rail route is also heavily used for freight service, providing a vital transcontinental route for transportation of all types of cargo. The North Lake Tahoe Express connects Truckee with the Reno-Tahoe International Airport, with stops at Village at Northstar, Truckee Train Depot, and Truckee Tahoe Airport.

3.17.2 Discussion

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

Less-than-significant impact. As detailed in Chapter 2, "Project Description," routine maintenance would be similar or less than existing conditions and no additional employees would be needed long-term. There are no transit, bicycle, or pedestrian facilities located within the WRP property. Therefore, the project would not disrupt existing bicycle, pedestrian, or transit facilities nor would it result in additional demand for such facilities. Although the project would involve implementation of a new internal access road, the project would not include the construction of any public roadways or modification of any external roadway network. For these reasons, the project would not adversely affect an existing or planned roadway, transit, bicycle, or pedestrian facility; and would not conflict with any adopted plans, policies, or standards related to such facilities. This impact would be less than significant, and no mitigation is required.

b) Conflict or be inconsistent with State CEQA Guidelines Section 15064.3(b), which pertains to vehicle miles travelled?

Less-than-significant impact. The Town of Truckee adopted the updated *Town of Truckee California Environmental Quality Act VMT Thresholds of Significance* for determining vehicle miles travelled (VMT) impacts under CEQA (Town of Truckee 2022). These thresholds are generally intended to evaluate the long-term operational impacts of land use projects that generate new vehicle trips.

The project consists solely of infrastructure improvements and would not result in a change in land use, increased development intensity, or the generation of new long-term operational trips. Upon completion of construction, ongoing operational activities would be limited to routine maintenance and monitoring, which would be equal to or less than existing levels. As such, the project would not lead to a measurable increase in trips and, therefore, VMT during operations.

As detailed in Chapter 2, "Project Description," it is anticipated that approximately 15 to 30 construction workers would be on-site each day. For a conservative estimate, this analysis assumes that construction personnel would not carpool and would generate two trips per worker per day. Thus, construction workers would be expected to generate a total of 30 to 60 average daily trips during construction. Therefore, the number of daily trips associated with construction worker commutes would be less than 110 trips per day, which is the screening threshold for small projects as detailed in the OPR Technical Advisory (OPR 2018). In addition, project construction activities would not result in long-term increases in vehicular trips because the construction would be temporary and intermittent in nature. Furthermore, the VMT of construction personnel is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites in which workers travel to each day. Therefore, construction personnel are not generating new VMT each day, only redistributing it, and this redistribution would be nominal and temporary. For these reasons, construction activity associated with the project is not expected to significantly increase VMT in the region. The project would result in a less-than-significant impact related to VMT, and no mitigation is required.

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

Less-than-significant impact. A discussion of the project's impacts related to transportation hazards during construction and operations is detailed below.

Construction

As detailed in Chapter 2, "Project Description," project construction would occur over a 24-month period with an anticipated start date in the spring or summer of 2026. The project would replace existing steam boilers with new hydronic boilers, a new boiler building, a new access road, new digester gas conditioning equipment, and replacement of existing facilities associated with T-TSA's existing process and comfort heating system, including piping systems, electrical equipment, and instrumentation and controls. The project site is situated in a relatively undeveloped area, away from major activity centers and established transportation networks, and vehicle traffic is limited. The only bicycle facility in the area is the Truckee River Legacy Trail that is north of the WRP fence line. There are no other bicycle facilities, pedestrian sidewalks, or transit stops in the vicinity of the project site. Given that the Truckee River Legacy Trail would not be affected by the project and the absence of alternative transportation infrastructure and users in the area, construction activities would not result in transportation safety risks to bicyclists, pedestrians, or transit riders. Therefore, project construction would not substantially increase transportation hazards due to a design feature or incompatible use.

Operations

As discussed in Chapter 2, "Project Description," the project would make improvements to the WRP. All improvements would occur within the project site and would not require the construction or redesign of any public roadways or bikeways. In addition, the types of vehicles accessing the project site during operations would be the same as those operating under existing conditions. For these reasons, the project would not substantially increase hazards due to a design feature or incompatible uses.

Summary

Project construction would be temporary and intermittent. The project site is located in a sparsely developed area of Truckee with only one bicycle facility in the vicinity. Additionally, the project would not require the redesign or construction of any public roadways or bikeways. In addition, implementation of the project would not change the types of vehicles accessing the project site, as the site is limited to upgrades to an existing facility. For these reasons, the project would not substantially increase transportation-related hazards due to a design feature or incompatible use. This impact would be less than significant, and no mitigation is required.

d) Result in inadequate emergency access?

Less-than-significant impact. The project would not require the construction, redesign, or alteration of any public roadways and construction activities would occur within the project site, which is not open to the public. As detailed under Section 3.15, "Public Services," the Truckee Fire Protection District provides fire protection and emergency response services to the project site. The project would be required to comply with the 2022 California Fire Code, as adopted by reference in Ordinance No. 01-2022 of the Truckee Fire Protection District. The California Fire Code establishes standards for emergency access during construction and design standards for fire apparatus access (e.g., turning radii, minimum widths) during operation. Therefore, the project would not result in inadequate emergency access. This impact would be less than significant, and no mitigation is required.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVIII. Tribal Cultural Resources. Has a California Native American Tribe requested consultation in accordance with Public Resources Code Section 21080.3.1(b)?				
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:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

3.18.1 Environmental Setting

On February 27, 2025, T-TSA sent a notification letter that the project was being addressed under CEQA, as required by PRC 21080.3.1 (AB 52), to 11 tribal representatives from the Colfax-Todds Valley Consolidated Tribe, Nevada City Rancheria Nisenan Tribe, Susanville Indian Rancheria, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of Nevada and California, and Wilton Rancheria. No responses were received from the 11 tribal representatives. Therefore, no known tribal resources within the project site have been identified as tribal cultural resources as defined in PRC Section 21074.

The cultural resources study prepared for the project included a request for a NAHC Sacred Lands File (SLF) search. On November 4, 2024, the NAHC search indicated that the Sacred Lands File results were negative for the presence of Native American resources within the project site (Ascent 2025).

3.18.2 Discussion

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:

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)?

No impact. The project site contains no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. There would be no impact, and no mitigation is required.

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 impact with mitigation incorporated. The NAHC SLF results were negative for the presence of potential tribal cultural resources. As detailed above, an AB 52 notification letter was sent to Colfax-Todds Valley Consolidated Tribe, Nevada City Rancheria Nisenan Tribe, Susanville Indian Rancheria, United Auburn Indian Community of the Auburn Rancheria, Washoe Tribe of Nevada and California, and Wilton Rancheria. No responses were received from the six tribes. No tribal cultural resources as defined by PRC Section 21074 have been identified on the project site. Nevertheless, because of the previously identified precontact archaeological site, the possibility remains that tribal cultural resources could be encountered during construction-related ground-disturbing activities. Therefore, this impact would be potentially significant.

Mitigation Measure 3.18-1: Protect Unanticipated Discoveries of Potential Tribal Cultural Resources

If any suspected tribal cultural resources, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, are discovered during ground-disturbing construction activities, all work will cease within 100 feet of the find. Appropriate tribal representative(s) will be immediately notified and will determine whether the find is a tribal cultural resource (pursuant to PRC Section 21074). If the find is determined to be a tribal cultural resource, the appropriate tribal representative(s) will make recommendations for further evaluation and treatment, as necessary. If the find is determined not to be a tribal cultural resource as defined in PRC Section 21074, construction may proceed.

Preservation in place is the preferred alternative under CEQA and the tribes' protocols, and every effort must be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, or returning objects to a location within the project vicinity where they will not be subject to future impacts. Tribes do not consider curation of tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated unless approved by the tribal representative. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil (soils containing and surrounding the discovery).

Significance after Mitigation

Implementation of Mitigation Measure 3.18-1 would reduce impacts on tribal cultural resources by requiring appropriate treatment and proper care of significant tribal cultural resources, in the case of a discovery. This impact would be less than significant with mitigation incorporated.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. Utilities and Service Systems. Would the project:				
a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☐	☒
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Environmental Setting

Wastewater service for the project site is provided by T-TSA. T-TSA owns and operates the regional wastewater conveyance system and the WRP and provides municipal wastewater collection and treatment for the North Lake Tahoe and Truckee region. The WRP has a capacity of 9.6 million gallons per day (MGD) but currently receives an average annual flow of 4.02 MGD with a maximum month flow of 5.88 MGD. Wastewater is conveyed to the WRP from Tahoe City via the Truckee River Interceptor (TRI), which collects flows from T-TSA's service area and five member districts. Wastewater from the WRP property is captured by the general sanitary sewer drainage system, which is routed to the WRP for treatment.

Drinking water, or potable water, is used at the WRP in all domestic water supplies (i.e., sinks, toilets, hot water heaters, eyewashes, and safety showers). TDPUD provides water service to portions of the town including the WRP property. TDPUD obtains all water supplies from the Martis Valley Groundwater Basin, which encompasses approximately 57 square miles and lies within the Middle Truckee River Watershed. Groundwater basin recharge occurs during the winter season from snowfall and snowmelt. The Martis Valley Groundwater Basin has operated within sustainable yield for at least 25 years, despite several periods of drought (TDPUD 2018)

No solid waste disposal facilities exist or are proposed in the town. Commercial and residential solid waste is collected and processed by Truckee Tahoe Sierra Disposal (TTSD) at the Eastern Regional Landfill Material Recovery Facility (MRF). The Eastern Regional Landfill MRF separates and recycles marketable materials, such as wood waste,

cardboard, scrap metal, plastics, rock, and mixed recycled items. Once recyclables are removed, the remaining solid waste is hauled to the Lockwood Regional Landfill for direct burial (TTSD 2025). The Lockwood Regional Landfill is located in Storey County (approximately 10 miles east of Reno), Nevada. Lockwood Regional Landfill has a remaining capacity of 264.5 million cubic yards as of 2020 and an estimated closure year of 2139 (NDEP 2022).

3.19.2 Discussion

a) Require or result in the relocation or construction of construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

Less-than-significant impact. The project would upgrade the WRP by replacing the existing steam boilers with new hydronic boilers, constructing a new boiler building and a new access road, adding new digester gas conditioning equipment for the new boiler system, and replacing the existing facilities associated with T-TSA's existing process and comfort heating system. The proposed improvements would not require or result in the relocation or construction of new or expanded water, stormwater drainage, electric power, natural gas, or telecommunications facilities. Based on the analysis of this Initial Study, the proposed improvements at the WRP would not result in significant impacts with mitigation incorporated. Impacts would be less than significant, and no further mitigation is required.

b) Have insufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

No impact. The project would not increase population or water demand, nor would it generate impacts relative to water supply. No impact would occur, and no mitigation is required.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

No impact. The objectives of the project are to provide a safe, reliable, and efficient heating source for the WRP; minimize maintenance needs; incorporate system features for easy monitoring, control, and maintenance; and minimize disruption to existing operations during construction. The proposed improvements would not increase the population, nor would it generate new wastewater treatment demand. The project would not include any uses that would require increased wastewater treatment. No impact would occur, and no mitigation is required.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less-than-significant impact. Solid waste, such as debris, soil, and rock fragments, would be generated during construction of the project. Cut and fill would be balanced on-site to the extent possible; however, there are large boulders on site that may need to be removed. Approximately 400 cubic yards of debris resulting from excavation and grading would be exported during construction. Solid waste and construction debris would be transported to the Eastern Regional Landfill MRF for removal of recyclables. The remaining solid waste would be hauled to the Lockwood Regional Landfill. Solid waste would be accommodated by the Lockwood Regional Landfill, which is estimated to have a remaining capacity of approximately 264.5 million cubic yards in 2020 and an estimated closure year of 2139 (NDEP 2022). The project would not increase WRP's treatment capacity, which would not increase the biosolids generated during the treatment process. Therefore, the project would not generate solid waste during operation. The project would not generate solid waste in excess of state or local standards, or the capacity of local infrastructure, or impair the attainment of solid waste reduction goals. This impact would be less than significant, and no mitigation is required.

e) Fail to comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less-than-significant impact. As discussed above in Impact 3.19.2d above, implementation of the project would result in solid waste during construction. However, the Lockwood Regional Landfill would have adequate remaining capacity to accommodate the solid waste generated during project construction. Disposal and recycling of materials generated by construction of the project would be handled and disposed of in accordance with federal, state, and local requirements. The project would not result in a long-term increase in solid waste that would need disposal. Impacts would be less than significant, and no mitigation is required.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Wildfire. Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones? If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

3.20.1 Environmental Setting

The project site is not located in a State Responsibility Area (SRA) and is not located within a designated very high FHSZ identified by CAL FIRE. The nearest very high FHSZ in SRA is located approximately 3,000 feet to the east (CAL FIRE 2024).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No impact. As discussed under Impact 3.9.2f, the project is within the T-TSA WRP property and construction activities would not require closure of public right-of-way. The project would include a new access road at the project site to increase ease of accessibility to facilities at the WRP. The project would not physically impair or interfere with emergency evacuation routes, I-80, SR 267, or SR 89. No impact would occur, and no mitigation is required.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

No impact. The project would not exacerbate wildfire risks or include construction of structures that would be inhabited. In addition, the project site is gently sloping and is not located within a wildfire hazard zone. Therefore, the project would not exacerbate wildfire risks in the project vicinity. There would be no impact, and no mitigation is required.

c) Require the installation 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. The project would include construction of new hydronic boilers to replace the WRP's existing steam boilers, a new boiler building, a new access road, new digester gas conditioning equipment, and replacement of existing facilities associated with T-TSA's existing process and comfort heating system. There are several components of the project that would alter the energy systems and utility infrastructure at the project site. Additionally, a new access road to the new boiler building would be constructed that generally follows the alignment of the existing unimproved access road extending along the northern border of the project site. The new road would be paved with asphalt and several trees would need to be removed for construction of the road. A fire hydrant would be installed along the new access road near the new boiler building.

Existing regulations, such as the CBC and California Fire Code, would reduce risks to people and structures associated with wildland fires. The new building and associated facilities would be constructed in accordance with the CBC, which provides minimum standards for building design in California. The project is isolated from residences and businesses, it is adjacent to the Truckee River, and the nearest very high FHSZ in SRA is located approximately 3,000 feet to the east (CAL FIRE 2024). Therefore, the potential for the project to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment is unlikely. Therefore, this impact would be less than significant, and no mitigation is required.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No impact. The project is in an area of gentle slopes and would not involve changing slopes on the project site, which could expose people to risks of post-fire slope instability. Implementation of the project would result in a small increase in impervious surfaces within the project site. However, the additional impervious surfaces would not result in substantial runoff or drainage changes that would expose people or structures to significant risks that would increase the likelihood of flooding. Therefore, there would be no impact, and no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. Mandatory Findings of Significance.				
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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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.)	☐	☒	☐	☐
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Environmental Setting

3.21.2 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 an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less-than-significant impact with mitigation incorporated. As discussed in the biological resources and cultural resources sections of this Initial Study, the project would result in potentially significant impacts and could degrade the quality of the environment. However, adoption and implementation of mitigation measures described in this Initial Study would reduce these individual impacts to less-than-significant levels.

The project area provides potentially suitable habitat for special-status plants, special-status birds and raptors, western bumble bee and monarch, ringtail, and native wildlife nursery sites, which could be affected by the project. However, implementation of Mitigation Measures 3.4-1 through 3.4-8 would reduce potential impacts on these sensitive biological resources to a less-than-significant level by requiring preconstruction surveys and worker awareness training, maintaining buffers, and providing mitigation for sensitive resources that cannot be avoided.

One previously recorded resource (P-29-000238), a sparce lithic scatter was located within the project site. However, this site was destroyed during construction of WRP facilities and buildings and no longer exists. Although no documented archaeological resources are currently located within the project site, the potential exists to encounter previously undiscovered archaeological resources during construction-related ground disturbing activities. However, adoption and implementation of Mitigation Measures 3.5-1 and 3.5-2 would reduce this potential impact to a less-than-significant level because these measures would require worker awareness training and implementation of preservation options and proper curation if significant artifacts are recovered.

Although there are no known tribal cultural resources within the project area, it is possible that yet-undiscovered tribal cultural resources could be encountered or damaged during ground-disturbing construction activities. Implementation of Mitigation Measure 3.18-1 would reduce impacts to tribal cultural resources to a less-than-significant level by requiring appropriate treatment and proper care of significant tribal cultural resources, in the case of a discovery.

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 impact with mitigation incorporated. Cumulative environmental effects are multiple individual effects that, when considered together, would be considerable or compound or increase other environmental impacts. Individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time. The purpose of the project is to upgrade the comfort heating system at the existing WRP. The project would not increase population growth either directly or indirectly beyond what has been planned for in the Town of Truckee 2040 GPU or Nevada County General Plan. Implementation of the mitigation measures proposed in this Initial Study would reduce the project's impacts to a less-than-significant level. The project's contribution to environmental impacts would be less than cumulatively considerable.

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

Less-than-significant impact with mitigation incorporated. As identified in this Initial Study, the project could have impacts associated with air quality, biological resources, cultural resources, and tribal cultural resources. Impacts to biological resources, cultural resources, and tribal cultural resources would not directly affect human beings. All other impacts would be temporary and would be mitigated to a less-than-significant level. Therefore, implementation of the proposed project would not result in substantial adverse effects on human beings, either directly or indirectly. With implementation of mitigation, this impact would be less than significant.

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There are no references cited in this section.

2 Project Description

There are no references cited in this section.

3 Environmental Checklist

There are no references cited in this section.

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T-TSA Digestion Improvement Project Detailed Report

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1.1. Basic Project Information

Data Field	Value
Project Name	T-TSA Digestion Improvement Project
Construction Start Date	6/1/2026
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.00
Precipitation (days)	2.20
Location	39.33954644682848, -120.12751118277794
County	Nevada
City	Truckee
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-H
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

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
Unrefrigerated Warehouse-No Rail	3.00	1000sqft	1.00	3,000	0.00	—	—	Boiler Building
Road Construction	0.14	Mile	0.41	0.00	—	—	—	Access Road

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	1.85	1.57	12.9	19.3	0.03	0.58	2.84	3.42	0.53	1.35	1.89	—	3,359	3,359	0.14	0.04	0.71	3,374
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.93	2.90	9.26	13.4	0.02	0.36	0.10	0.46	0.33	0.02	0.35	—	2,443	2,443	0.10	0.02	0.01	2,453
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.50	0.42	3.74	5.66	0.01	0.12	0.05	0.17	0.11	0.01	0.12	—	1,045	1,045	0.04	0.01	0.09	1,050
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.08	0.68	1.03	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	173	173	0.01	< 0.005	0.02	174

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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.85	1.57	12.9	19.3	0.03	0.58	2.84	3.42	0.53	1.35	1.89	—	3,359	3,359	0.14	0.04	0.71	3,374

2027	1.41	1.19	10.4	16.4	0.03	0.36	0.16	0.52	0.33	0.04	0.37	—	2,895	2,895	0.12	0.03	0.69	2,907
2028	0.90	0.76	6.59	10.3	0.02	0.20	0.09	0.28	0.18	0.02	0.20	—	1,955	1,955	0.08	0.02	0.35	1,963
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	2.93	2.90	9.26	13.4	0.02	0.36	0.10	0.46	0.33	0.02	0.35	—	2,443	2,443	0.10	0.02	0.01	2,453
2027	0.93	0.78	6.95	10.3	0.02	0.22	0.09	0.31	0.20	0.02	0.22	—	1,950	1,950	0.08	0.02	0.01	1,958
2028	0.90	0.75	6.61	10.3	0.02	0.20	0.09	0.28	0.18	0.02	0.20	—	1,949	1,949	0.08	0.02	0.01	1,957
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.31	0.27	2.00	2.71	< 0.005	0.08	0.04	0.12	0.07	0.01	0.08	—	525	525	0.02	0.01	0.04	527
2027	0.50	0.42	3.74	5.66	0.01	0.12	0.05	0.17	0.11	0.01	0.12	—	1,045	1,045	0.04	0.01	0.09	1,050
2028	0.21	0.18	1.56	2.44	< 0.005	0.05	0.02	0.07	0.04	< 0.005	0.05	—	462	462	0.02	< 0.005	0.04	464
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.06	0.05	0.37	0.49	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.02	—	86.8	86.8	< 0.005	< 0.005	0.01	87.2
2027	0.09	0.08	0.68	1.03	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	—	173	173	0.01	< 0.005	0.02	174
2028	0.04	0.03	0.29	0.44	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01	—	76.4	76.4	< 0.005	< 0.005	0.01	76.8

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (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	0.11	0.09	0.82	1.02	< 0.005	0.02	—	0.02	0.02	—	0.02	—	142	142	0.01	< 0.005	—	142

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.94	1.94	< 0.005	< 0.005	—	1.95
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.32	0.32	< 0.005	< 0.005	—	0.32
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.08	20.3

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
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. Linear, Grading & Excavation (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	1.22	1.02	8.57	13.6	0.02	0.36	—	0.36	0.33	—	0.33	—	2,075	2,075	0.08	0.02	—	2,082
Dust From Material Movement	—	—	—	—	—	—	0.21	0.21	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.06	0.49	0.78	< 0.005	0.02	—	0.02	0.02	—	0.02	—	119	119	< 0.005	< 0.005	—	120
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	19.8	19.8	< 0.005	< 0.005	—	19.8
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.09	0.05	0.85	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	140	140	0.01	0.01	0.58	142
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	21.8	21.8	< 0.005	< 0.005	0.06	22.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.55	7.55	< 0.005	< 0.005	0.01	7.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.31
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
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. Linear, Drainage, Utilities, & Sub-Grade (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	0.28	0.23	2.32	4.03	0.01	0.08	—	0.08	0.07	—	0.07	—	615	615	0.02	< 0.005	—	617
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.28	0.23	2.32	4.03	0.01	0.08	—	0.08	0.07	—	0.07	—	615	615	0.02	< 0.005	—	617

Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.01	0.01	0.12	0.21	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.0	32.0	< 0.005	< 0.005	—	32.1
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.30	5.30	< 0.005	< 0.005	—	5.32
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.02	0.36	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	59.8	59.8	< 0.005	< 0.005	0.25	60.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.03	0.33	0.00	0.00	0.06	0.06	0.00	0.01	0.01	—	55.5	55.5	< 0.005	< 0.005	0.01	56.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.93	2.93	< 0.005	< 0.005	0.01	2.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Linear, Paving (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	0.48	5.00	8.01	0.01	0.20	—	0.20	0.19	—	0.19	—	1,229	1,229	0.05	0.01	—	1,233
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	0.01	0.01	0.11	0.18	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	26.9	26.9	< 0.005	< 0.005	—	27.0
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	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.46	4.46	< 0.005	< 0.005	—	4.47
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.05	0.56	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	92.4	92.4	0.01	< 0.005	0.01	93.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.05	2.05	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
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

3.9. Demolition (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	0.55	0.46	4.43	7.56	0.01	0.12	—	0.12	0.11	—	0.11	—	1,115	1,115	0.05	0.01	—	1,119
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.55	0.46	4.43	7.56	0.01	0.12	—	0.12	0.11	—	0.11	—	1,115	1,115	0.05	0.01	—	1,119
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.26	0.22	2.12	3.62	0.01	0.06	—	0.06	0.05	—	0.05	—	535	535	0.02	< 0.005	—	536
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—

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	0.05	0.04	0.39	0.66	< 0.005	0.01	—	0.01	0.01	—	0.01	—	88.5	88.5	< 0.005	< 0.005	—	88.8
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.05	0.05	0.03	0.45	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.5	78.5	< 0.005	< 0.005	0.31	79.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.42	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	72.8	72.8	< 0.005	< 0.005	0.01	73.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	35.4	35.4	< 0.005	< 0.005	0.06	35.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.86	5.86	< 0.005	< 0.005	0.01	5.95
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

3.11. Demolition (2028) - 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	0.53	0.44	4.30	7.56	0.01	0.10	—	0.10	0.09	—	0.09	—	1,115	1,115	0.05	0.01	—	1,119
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.53	0.44	4.30	7.56	0.01	0.10	—	0.10	0.09	—	0.09	—	1,115	1,115	0.05	0.01	—	1,119
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.13	0.10	1.02	1.79	< 0.005	0.02	—	0.02	0.02	—	0.02	—	264	264	0.01	< 0.005	—	265

Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.02	0.02	0.19	0.33	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	43.7	43.7	< 0.005	< 0.005	—	43.9
Demolition	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.05	0.05	0.03	0.43	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	77.3	77.3	< 0.005	< 0.005	0.29	78.6
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	0.05	0.04	0.03	0.39	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	71.6	71.6	< 0.005	< 0.005	0.01	72.7
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	0.01	0.01	0.01	0.09	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.2	17.2	< 0.005	< 0.005	0.03	17.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.85	2.85	< 0.005	< 0.005	< 0.005	2.89

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Site Preparation - Boiler Building (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	0.12	0.10	1.03	1.91	< 0.005	0.03	—	0.03	0.03	—	0.03	—	290	290	0.01	< 0.005	—	291
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.80	0.80	< 0.005	< 0.005	—	0.80
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.13	0.13	< 0.005	< 0.005	—	0.13
Dust From Material Movement	—	—	—	—	—	—	0.00	0.00	—	0.00	0.00	—	—	—	—	—	—	—
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	0.01	0.01	0.01	0.12	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	19.9	19.9	< 0.005	< 0.005	0.08	20.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
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

3.15. Grading - Boiler Building (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	1.70	1.42	12.9	14.0	0.02	0.58	—	0.58	0.53	—	0.53	—	2,455	2,455	0.10	0.02	—	2,463
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.5	13.5	< 0.005	< 0.005	—	13.5
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.23	2.23	< 0.005	< 0.005	—	2.23

Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.48	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	79.8	79.8	< 0.005	< 0.005	0.33	81.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.41	0.41	< 0.005	< 0.005	< 0.005	0.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
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

3.17. Building Construction - Boiler Building (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	0.53	0.45	4.18	4.75	0.01	0.16	—	0.16	0.14	—	0.14	—	1,102	1,102	0.04	0.01	—	1,106
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	0.53	0.45	4.18	4.75	0.01	0.16	—	0.16	0.14	—	0.14	—	1,102	1,102	0.04	0.01	—	1,106
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	1.17	1.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	308	308	0.01	< 0.005	—	309
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	0.21	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.0	51.0	< 0.005	< 0.005	—	51.2
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	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.1	10.1	< 0.005	< 0.005	0.04	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.03	11.2
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	0.01	0.01	0.01	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.32	9.32	< 0.005	< 0.005	< 0.005	9.46
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	< 0.005	11.2
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.64	2.64	< 0.005	< 0.005	0.01	2.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	3.00	3.00	< 0.005	< 0.005	< 0.005	3.14
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.50	0.50	< 0.005	< 0.005	< 0.005	0.52
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

3.19. Eqpt Install (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	0.33	0.27	2.46	2.29	0.01	0.10	—	0.10	0.09	—	0.09	—	743	743	0.03	0.01	—	745

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	0.33	0.27	2.46	2.29	0.01	0.10	—	0.10	0.09	—	0.09	—	743	743	0.03	0.01	—	745
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	0.16	0.13	1.18	1.10	< 0.005	0.05	—	0.05	0.04	—	0.04	—	356	356	0.01	< 0.005	—	357
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	0.22	0.20	< 0.005	0.01	—	0.01	0.01	—	0.01	—	58.9	58.9	< 0.005	< 0.005	—	59.1
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	0.01	0.01	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.89	9.89	< 0.005	< 0.005	0.04	10.1
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	0.03	11.0
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	0.01	0.01	0.01	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.17	9.17	< 0.005	< 0.005	< 0.005	9.30
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.5	10.5	< 0.005	< 0.005	< 0.005	11.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.46	4.46	< 0.005	< 0.005	0.01	4.53
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.03	5.03	< 0.005	< 0.005	0.01	5.25
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
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

3.21. Eqpt Install (2028) - 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	0.31	0.26	2.25	2.29	0.01	0.09	—	0.09	0.09	—	0.09	—	743	743	0.03	0.01	—	746
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	0.31	0.26	2.25	2.29	0.01	0.09	—	0.09	0.09	—	0.09	—	743	743	0.03	0.01	—	746
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	0.07	0.06	0.53	0.54	< 0.005	0.02	—	0.02	0.02	—	0.02	—	176	176	0.01	< 0.005	—	177
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.10	0.10	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	29.1	29.1	< 0.005	< 0.005	—	29.2
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	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.74	9.74	< 0.005	< 0.005	0.04	9.90
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	0.02	10.7
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	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.03	9.03	< 0.005	< 0.005	< 0.005	9.16
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.2	10.2	< 0.005	< 0.005	< 0.005	10.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.17	2.17	< 0.005	< 0.005	< 0.005	2.20
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.53
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.36	0.36	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.40	0.40	< 0.005	< 0.005	< 0.005	0.42
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

3.23. Paving - whole site (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	0.40	0.34	3.48	5.59	0.01	0.14	—	0.14	0.12	—	0.12	—	860	860	0.03	0.01	—	863
Paving	0.02	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.41	0.66	< 0.005	0.02	—	0.02	0.01	—	0.01	—	101	101	< 0.005	< 0.005	—	102

Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.8	16.8	< 0.005	< 0.005	—	16.8
Paving	< 0.005	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.03	0.45	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	78.5	78.5	< 0.005	< 0.005	0.31	79.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.69	8.69	< 0.005	< 0.005	0.02	8.83
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.44	1.44	< 0.005	< 0.005	< 0.005	1.46
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

3.25. Architectural Coating - Boiler Building (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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.78	2.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.83	1.83	< 0.005	< 0.005	—	1.84
Architectural Coatings	0.04	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.30	0.30	< 0.005	< 0.005	—	0.30

Architectural	0.01	0.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.73	3.73	< 0.005	< 0.005	< 0.005	3.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	8/4/2026	8/10/2026	5.00	5.00	—
Linear, Grading & Excavation	Linear, Grading & Excavation	8/11/2026	9/8/2026	5.00	21.0	—
Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	9/9/2026	10/5/2026	5.00	19.0	—
Linear, Paving	Linear, Paving	10/6/2026	10/15/2026	5.00	8.00	—
Demolition	Demolition	5/1/2027	4/30/2028	5.00	260	—
Site Preparation - Boiler Building	Site Preparation	6/1/2026	6/1/2026	5.00	1.00	—
Grading - Boiler Building	Grading	6/2/2026	6/3/2026	5.00	2.00	—
Building Construction - Boiler Building	Building Construction	6/4/2026	10/23/2026	5.00	102	—
Eqpt Install	Building Construction	5/1/2027	4/30/2028	5.00	260	—
Paving - whole site	Paving	5/1/2027	6/30/2027	5.00	43.0	—
Architectural Coating - Boiler Building	Architectural Coating	10/24/2026	10/30/2026	5.00	5.00	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

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

Linear, Grubbing & Land Clearing	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Linear, Grubbing & Land Clearing	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Average	1.00	8.00	148	0.41
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Average	1.00	8.00	150	0.36
Linear, Grading & Excavation	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Linear, Paving	Tractors/Loaders/Back hoes	Diesel	Average	2.00	8.00	84.0	0.37
Linear, Paving	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Tractors/Loaders/Back hoes	Diesel	Average	3.00	8.00	84.0	0.37
Site Preparation - Boiler Building	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading - Boiler Building	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading - Boiler Building	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading - Boiler Building	Tractors/Loaders/Back hoes	Diesel	Average	2.00	7.00	84.0	0.37

Building Construction - Boiler Building	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction - Boiler Building	Tractors/Loaders/Back hoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction - Boiler Building	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Eqpt Install	Cranes	Diesel	Average	1.00	6.00	367	0.29
Paving - whole site	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving - whole site	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving - whole site	Tractors/Loaders/Back hoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving - whole site	Plate Compactors	Diesel	Average	1.00	8.00	8.00	0.43
Architectural Coating - Boiler Building	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation - Boiler Building	—	—	—	—
Site Preparation - Boiler Building	Worker	2.50	10.5	LDA,LDT1,LDT2
Site Preparation - Boiler Building	Vendor	—	7.02	HHDT,MHDT
Site Preparation - Boiler Building	Hauling	0.00	20.0	HHDT
Site Preparation - Boiler Building	Onsite truck	—	—	HHDT
Grading - Boiler Building	—	—	—	—
Grading - Boiler Building	Worker	10.0	10.5	LDA,LDT1,LDT2
Grading - Boiler Building	Vendor	—	7.02	HHDT,MHDT
Grading - Boiler Building	Hauling	0.00	20.0	HHDT
Grading - Boiler Building	Onsite truck	—	—	HHDT

Building Construction - Boiler Building	—	—	—	—
Building Construction - Boiler Building	Worker	1.26	10.5	LDA,LDT1,LDT2
Building Construction - Boiler Building	Vendor	0.49	7.02	HHDT,MHDT
Building Construction - Boiler Building	Hauling	0.00	20.0	HHDT
Building Construction - Boiler Building	Onsite truck	—	—	HHDT
Architectural Coating - Boiler Building	—	—	—	—
Architectural Coating - Boiler Building	Worker	0.50	10.5	LDA,LDT1,LDT2
Architectural Coating - Boiler Building	Vendor	—	7.02	HHDT,MHDT
Architectural Coating - Boiler Building	Hauling	0.00	20.0	HHDT
Architectural Coating - Boiler Building	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	17.5	10.5	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	7.02	HHDT,MHDT
Linear, Grading & Excavation	Hauling	0.00	20.0	HHDT
Linear, Grading & Excavation	Onsite truck	—	—	HHDT
Linear, Drainage, Utilities, & Sub-Grade	—	—	—	—
Linear, Drainage, Utilities, & Sub-Grade	Worker	7.50	10.5	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	7.02	HHDT,MHDT
Linear, Drainage, Utilities, & Sub-Grade	Hauling	0.00	20.0	HHDT

Linear, Drainage, Utilities, & Sub-Grade	Onsite truck	—	—	HHDT
Linear, Paving	—	—	—	—
Linear, Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	7.02	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT
Paving - whole site	—	—	—	—
Paving - whole site	Worker	10.0	10.5	LDA,LDT1,LDT2
Paving - whole site	Vendor	—	7.02	HHDT,MHDT
Paving - whole site	Hauling	0.00	20.0	HHDT
Paving - whole site	Onsite truck	—	—	HHDT
Demolition	—	—	—	—
Demolition	Worker	10.0	10.5	LDA,LDT1,LDT2
Demolition	Vendor	—	7.02	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	2.50	10.5	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	7.02	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT
Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Eqpt Install	—	—	—	—
Eqpt Install	Worker	1.26	10.5	LDA,LDT1,LDT2
Eqpt Install	Vendor	0.49	7.02	HHDT,MHDT
Eqpt Install	Hauling	0.00	20.0	HHDT
Eqpt Install	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)
Architectural Coating - Boiler Building	0.00	0.00	4,500	1,500	—

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)
Linear, Grubbing & Land Clearing	—	—	0.41	0.00	—
Linear, Grading & Excavation	—	—	0.41	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	—	—	0.41	0.00	—
Demolition	0.00	0.00	0.00	—	—
Site Preparation - Boiler Building	—	—	0.00	0.00	—
Grading - Boiler Building	—	—	2.00	0.00	—
Paving - whole site	0.00	0.00	0.00	0.00	0.41

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Road Construction	0.41	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00	453	0.03	< 0.005
2027	0.00	453	0.03	< 0.005
2028	0.00	453	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

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)

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	31.3	annual days of extreme heat
Extreme Precipitation	8.60	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	18.2	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	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	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	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	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
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	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	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 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	57.8
AQ-PM	10.6
AQ-DPM	11.0
Drinking Water	20.5
Lead Risk Housing	6.98
Pesticides	0.00
Toxic Releases	50.9
Traffic	56.2
Effect Indicators	—
CleanUp Sites	0.00
Groundwater	4.42
Haz Waste Facilities/Generators	0.00
Impaired Water Bodies	33.2
Solid Waste	66.9
Sensitive Population	—
Asthma	19.9
Cardio-vascular	1.98
Low Birth Weights	3.21
Socioeconomic Factor Indicators	—
Education	1.46
Housing	2.62
Linguistic	0.00
Poverty	7.83
Unemployment	7.77

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	92.51892724
Employed	77.24881304
Median HI	75.56781727
Education	—
Bachelor's or higher	76.49172334
High school enrollment	100
Preschool enrollment	47.13204158
Transportation	—
Auto Access	98.98626973
Active commuting	23.71358912
Social	—
2-parent households	95.52162197
Voting	89.58039266
Neighborhood	—
Alcohol availability	92.2751187
Park access	17.9006801
Retail density	5.941229308
Supermarket access	2.399589375
Tree canopy	95.8039266
Housing	—
Homeownership	91.03041191
Housing habitability	89.41357629
Low-inc homeowner severe housing cost burden	65.76414731
Low-inc renter severe housing cost burden	73.36070833
Uncrowded housing	92.9038881
Health Outcomes	—

Insured adults	61.8760426
Arthritis	0.0
Asthma ER Admissions	99.0
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	92.5
Cognitively Disabled	98.4
Physically Disabled	95.1
Heart Attack ER Admissions	98.9
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	53.1
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	75.4
SLR Inundation Area	0.0
Children	40.5
Elderly	92.4

English Speaking	98.1
Foreign-born	0.8
Outdoor Workers	9.5
Climate Change Adaptive Capacity	—
Impervious Surface Cover	95.0
Traffic Density	33.3
Traffic Access	0.0
Other Indices	—
Hardship	14.2
Other Decision Support	—
2016 Voting	84.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	0.00
Healthy Places Index Score for Project Location (b)	86.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Boiler building size and project acreage based on project-specific data. Access road size approximated using google earth and site plan overlay. Sand gravel soil type identified for project site in geotechnical assessment prepared for project.
Construction: Construction Phases	land use development construction phase duration adjusted off-model to accommodate expected construction duration. phase lengths sourced from Basis of Design report prepared for project. Boiler Building and access road construction constrained to 5.5 months as advised in BOD report in accordance with TRPA ground disturbance rules
Construction: Architectural Coatings	VOC content limits adjusted to reflect limits outlined in NSAQMD Rule 230
Construction: Off-Road Equipment	equipment types based on project-specific equipment list (i.e., excavator, backhoe, crane, dump truck/haul trucks, vibratory compactor, paver, and sheepsfoot and/or loader). Default equipment numbers used

CalEEMod Construction Phase Inputs*

5-Day Work Week/8 hours per day

Boiler Building

Adjusted Phasing

	Default	Adjusted
Site Preparation	2	1
Grading	4	2
Building Constructi	200	102
Arch Coating	10	5
Construction Start D	6/1/2026	
Construction End D	10/30/2026	
Total Work Days	110.00	

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	T-TSA Digestion Improvement Project
Construction Start D	6/1/2026
Lead Agency	
Land Use Scale	Project/site
Analysis Level for De	County
Windspeed (m/s)	2
Precipitation (days)	2.2
Location	39.33954644682848, -120.12751118277794
County	Nevada
City	Truckee
Air District	Northern Sierra AQMD
Air Basin	Mountain Counties
TAZ	262
EDFZ	0-H
Electric Utility	Truckee Donner Public Utilities District
Gas Utility	Southwest Gas Corp.
App Version	2022.1.1.29

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Ar	Landscape	Special Lar	Population	Description
Unrefrigerated Ware	3	1000sqft	1	3000	0			Boiler Building
Road Construction	0.14	Mile	0.41	0				Access Road

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Unmit.	1.85	1.57	12.9	19.3	0.03	0.58	2.84	3.42	0.53	1.35	1.89		3359	3359	0.14	0.04	0.71	3374
Daily, Winter (Max)																		
Unmit.	2.93	2.9	9.26	13.4	0.02	0.36	0.1	0.46	0.33	0.02	0.35		2443	2443	0.1	0.02	0.01	2453
Average Daily (Max)																		
Unmit.	0.5	0.42	3.74	5.66	0.01	0.12	0.05	0.17	0.11	0.01	0.12		1045	1045	0.04	0.01	0.09	1050
Annual (Max)																		
Unmit.	0.09	0.08	0.68	1.03	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02		173	173	0.01	< 0.005	0.02	174

2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily - Summer (Max)																		
2026	1.85	1.57	12.9	19.3	0.03	0.58	2.84	3.42	0.53	1.35	1.89		3359	3359	0.14	0.04	0.71	3374
2027	1.41	1.19	10.4	16.4	0.03	0.36	0.16	0.52	0.33	0.04	0.37		2895	2895	0.12	0.03	0.69	2907
2028	0.9	0.76	6.59	10.3	0.02	0.2	0.09	0.28	0.18	0.02	0.2		1955	1955	0.08	0.02	0.35	1963
Daily - Winter (Max)																		
2026	2.93	2.9	9.26	13.4	0.02	0.36	0.1	0.46	0.33	0.02	0.35		2443	2443	0.1	0.02	0.01	2453
2027	0.93	0.78	6.95	10.3	0.02	0.22	0.09	0.31	0.2	0.02	0.22		1950	1950	0.08	0.02	0.01	1958
2028	0.9	0.75	6.61	10.3	0.02	0.2	0.09	0.28	0.18	0.02	0.2		1949	1949	0.08	0.02	0.01	1957
Average Daily																		
2026	0.31	0.27	2	2.71	< 0.005	0.08	0.04	0.12	0.07	0.01	0.08		525	525	0.02	0.01	0.04	527
2027	0.5	0.42	3.74	5.66	0.01	0.12	0.05	0.17	0.11	0.01	0.12		1045	1045	0.04	0.01	0.09	1050
2028	0.21	0.18	1.56	2.44	< 0.005	0.05	0.02	0.07	0.04	< 0.005	0.05		462	462	0.02	< 0.005	0.04	464
Annual																		
2026	0.06	0.05	0.37	0.49	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.02		86.8	86.8	< 0.005	< 0.005	0.01	87.2
2027	0.09	0.08	0.68	1.03	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02		173	173	0.01	< 0.005	0.02	174
2028	0.04	0.03	0.29	0.44	< 0.005	0.01	< 0.005	0.01	0.01	< 0.005	0.01		76.4	76.4	< 0.005	< 0.005	0.01	76.8

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.11	0.09	0.82	1.02	< 0.005	0.02		0.02	0.02		0.02		142	142	0.01	< 0.005		142
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.94	1.94	< 0.005	< 0.005		1.95
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.32	0.32	< 0.005	< 0.005		0.32
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.01	0.01	0.01	0.12	0	0	0.02	0.02	0	< 0.005	< 0.005		19.9	19.9	< 0.005	< 0.005	0.08	20.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.26	0.26	< 0.005	< 0.005	< 0.005	0.26
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.04	0.04	< 0.005	< 0.005	< 0.005	0.04
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.3. Linear, Grading & Excavation (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	1.22	1.02	8.57	13.6	0.02	0.36		0.36	0.33		0.33		2075	2075	0.08	0.02		2082
Dust From Material Movement							0.21	0.21		0.02	0.02							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Equipment	0.07	0.06	0.49	0.78	< 0.005	0.02		0.02	0.02		0.02		119	119	< 0.005	< 0.005		120
Dust From Material Movement							0.01	0.01		< 0.005	< 0.005							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.01	0.01	0.09	0.14	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		19.8	19.8	< 0.005	< 0.005		19.8
Dust From Material Movement							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.09	0.09	0.05	0.85	0	0	0.13	0.13	0	0.03	0.03		140	140	0.01	0.01	0.58	142
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005		21.8	21.8	< 0.005	< 0.005	0.06	22.8
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	0.01	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		7.55	7.55	< 0.005	< 0.005	0.01	7.67
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		1.25	1.25	< 0.005	< 0.005	< 0.005	1.31
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		1.25	1.25	< 0.005	< 0.005	< 0.005	1.27
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		0.21	0.21	< 0.005	< 0.005	< 0.005	0.22
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.5. Linear, Drainage, Utilities, & Sub-Grade (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.28	0.23	2.32	4.03	0.01	0.08		0.08	0.07		0.07		615	615	0.02	< 0.005		617
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.28	0.23	2.32	4.03	0.01	0.08		0.08	0.07		0.07		615	615	0.02	< 0.005		617
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.01	0.01	0.12	0.21	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		32	32	< 0.005	< 0.005		32.1
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005	0.02	0.04	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		5.3	5.3	< 0.005	< 0.005		5.32
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.04	0.04	0.02	0.36	0	0	0.06	0.06	0	0.01	0.01		59.8	59.8	< 0.005	< 0.005	0.25	60.9
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.04	0.03	0.03	0.33	0	0	0.06	0.06	0	0.01	0.01		55.5	55.5	< 0.005	< 0.005	0.01	56.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		2.93	2.93	< 0.005	< 0.005	0.01	2.98
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.48	0.48	< 0.005	< 0.005	< 0.005	0.49
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.7. Linear, Paving (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Equipment	0.58	0.48	5	8.01	0.01	0.2		0.2	0.19		0.19		1229	1229	0.05	0.01		1233
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.01	0.01	0.11	0.18	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		26.9	26.9	< 0.005	< 0.005		27
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		4.46	4.46	< 0.005	< 0.005		4.47
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		

Worker	0.06	0.06	0.05	0.56	0	0	0.09	0.09	0	0.02	0.02	92.4	92.4	0.01	< 0.005	0.01	93.8
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																	
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	2.05	2.05	< 0.005	< 0.005	< 0.005	2.09
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	0.34	0.34	< 0.005	< 0.005	< 0.005	0.35
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.9. Demolition (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.55	0.46	4.43	7.56	0.01	0.12		0.12	0.11		0.11		1115	1115	0.05	0.01		1119
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.55	0.46	4.43	7.56	0.01	0.12		0.12	0.11		0.11		1115	1115	0.05	0.01		1119
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.26	0.22	2.12	3.62	0.01	0.06		0.06	0.05		0.05		535	535	0.02	< 0.005		536
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.05	0.04	0.39	0.66	< 0.005	0.01		0.01	0.01		0.01		88.5	88.5	< 0.005	< 0.005		88.8
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.05	0.05	0.03	0.45	0	0	0.07	0.07	0	0.02	0.02		78.5	78.5	< 0.005	< 0.005	0.31	79.9
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.05	0.04	0.04	0.42	0	0	0.07	0.07	0	0.02	0.02		72.8	72.8	< 0.005	< 0.005	0.01	73.8
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.02	0.02	0.02	0.2	0	0	0.04	0.04	0	0.01	0.01		35.4	35.4	< 0.005	< 0.005	0.06	35.9
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.04	0	0	0.01	0.01	0	< 0.005	< 0.005		5.86	5.86	< 0.005	< 0.005	0.01	5.95
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.11. Demolition (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.53	0.44	4.3	7.56	0.01	0.1		0.1	0.09		0.09		1115	1115	0.05	0.01		1119
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.53	0.44	4.3	7.56	0.01	0.1		0.1	0.09		0.09		1115	1115	0.05	0.01		1119
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.13	0.1	1.02	1.79	< 0.005	0.02		0.02	0.02		0.02		264	264	0.01	< 0.005		265
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.02	0.02	0.19	0.33	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		43.7	43.7	< 0.005	< 0.005		43.9
Demolition							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.05	0.05	0.03	0.43	0	0	0.07	0.07	0	0.02	0.02		77.3	77.3	< 0.005	< 0.005	0.29	78.6
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.05	0.04	0.03	0.39	0	0	0.07	0.07	0	0.02	0.02		71.6	71.6	< 0.005	< 0.005	0.01	72.7
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	0.01	0.01	0.01	0.09	0	0	0.02	0.02	0	< 0.005	< 0.005		17.2	17.2	< 0.005	< 0.005	0.03	17.5
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		2.85	2.85	< 0.005	< 0.005	< 0.005	2.89
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.13. Site Preparation - Boiler Building (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e

Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.12	0.1	1.03	1.91	< 0.005	0.03		0.03	0.03		0.03		290	290	0.01	< 0.005		291
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.8	0.8	< 0.005	< 0.005		0.8
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.13	0.13	< 0.005	< 0.005		0.13
Dust From Material Movement							0	0		0	0							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.01	0.01	0.01	0.12	0	0	0.02	0.02	0	< 0.005	< 0.005		19.9	19.9	< 0.005	< 0.005	0.08	20.3
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.15. Grading - Boiler Building (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	1.7	1.42	12.9	14	0.02	0.58		0.58	0.53		0.53		2455	2455	0.1	0.02		2463
Dust From Material Movement							2.76	2.76		1.34	1.34							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Equipment	0.01	0.01	0.07	0.08	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		13.5	13.5	< 0.005	< 0.005		13.5
Dust From Material Movement							0.02	0.02		0.01	0.01							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005		0.01	0.01	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		2.23	2.23	< 0.005	< 0.005		2.23
Dust From Material Movement							< 0.005	< 0.005		< 0.005	< 0.005							
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.05	0.05	0.03	0.48	0	0	0.07	0.07	0	0.02	0.02		79.8	79.8	< 0.005	< 0.005	0.33	81.2
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.41	0.41	< 0.005	< 0.005	< 0.005	0.42
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.07	0.07	< 0.005	< 0.005	< 0.005	0.07
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

3.17. Building Construction - Boiler Building (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.53	0.45	4.18	4.75	0.01	0.16		0.16	0.14		0.14		1102	1102	0.04	0.01		1106
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.53	0.45	4.18	4.75	0.01	0.16		0.16	0.14		0.14		1102	1102	0.04	0.01		1106
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.15	0.13	1.17	1.33	< 0.005	0.04		0.04	0.04		0.04		308	308	0.01	< 0.005		309
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.03	0.02	0.21	0.24	< 0.005	0.01		0.01	0.01		0.01		51	51	< 0.005	< 0.005		51.2
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.01	0.01	< 0.005	0.06	0	0	0.01	0.01	0	< 0.005	< 0.005		10.1	10.1	< 0.005	< 0.005	0.04	10.2
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.7	10.7	< 0.005	< 0.005	0.03	11.2
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.01	0.01	0.01	0.06	0	0	0.01	0.01	0	< 0.005	< 0.005		9.32	9.32	< 0.005	< 0.005	< 0.005	9.46
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.7	10.7	< 0.005	< 0.005	< 0.005	11.2
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		2.64	2.64	< 0.005	< 0.005	0.01	2.68
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		3	3	< 0.005	< 0.005	< 0.005	3.14
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005		0	0	< 0.005	< 0.005		0	< 0.005	< 0.005		0.44	0.44	< 0.005	< 0.005	< 0.005	0.44
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		0.5	0.5	< 0.005	< 0.005	< 0.005	0.52
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.19. Eqpt Install (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.33	0.27	2.46	2.29	0.01	0.1		0.1	0.09		0.09		743	743	0.03	0.01		745
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.33	0.27	2.46	2.29	0.01	0.1		0.1	0.09		0.09		743	743	0.03	0.01		745
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.16	0.13	1.18	1.1	< 0.005	0.05		0.05	0.04		0.04		356	356	0.01	< 0.005		357
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.03	0.02	0.22	0.2	< 0.005	0.01		0.01	0.01		0.01		58.9	58.9	< 0.005	< 0.005		59.1
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.01	0.01	< 0.005	0.06	0	0	0.01	0.01		0	< 0.005	< 0.005		9.89	9.89	< 0.005	< 0.005	0.04	10.1
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.5	10.5	< 0.005	< 0.005		0.03	11
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.01	0.01	0.01	0.05	0	0	0.01	0.01		0	< 0.005	< 0.005		9.17	9.17	< 0.005	< 0.005	< 0.005	9.3
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.5	10.5	< 0.005	< 0.005	< 0.005	11
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005		4.46	4.46	< 0.005	< 0.005	0.01	4.53
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		5.03	5.03	< 0.005	< 0.005		0.01	5.25
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005		0	0	< 0.005	< 0.005		0	< 0.005	< 0.005		0.74	0.74	< 0.005	< 0.005	< 0.005	0.75
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		0.83	0.83	< 0.005	< 0.005	< 0.005	0.87
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.21. Eqpt Install (2028) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.31	0.26	2.25	2.29	0.01	0.09		0.09	0.09		0.09		743	743	0.03	0.01		746
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Off-Road Equipment	0.31	0.26	2.25	2.29	0.01	0.09		0.09	0.09		0.09		743	743	0.03	0.01		746
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	0.07	0.06	0.53	0.54	< 0.005	0.02		0.02	0.02		0.02		176	176	0.01	< 0.005		177
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.01	0.01	0.1	0.1	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		29.1	29.1	< 0.005	< 0.005		29.2
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Worker	0.01	0.01	< 0.005	0.05	0	0	0.01	0.01		0	< 0.005	< 0.005		9.74	9.74	< 0.005	< 0.005	0.04	9.9
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.2	10.2	< 0.005	< 0.005		0.02	10.7
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																		
Worker	0.01	0.01	< 0.005	0.05	0	0	0.01	0.01		0	< 0.005	< 0.005		9.03	9.03	< 0.005	< 0.005	< 0.005	9.16
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		10.2	10.2	< 0.005	< 0.005	< 0.005		10.7
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005		0	< 0.005	< 0.005		2.17	2.17	< 0.005	< 0.005	< 0.005	2.2
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		2.42	2.42	< 0.005	< 0.005	< 0.005		2.53
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005		0	0	< 0.005	< 0.005		0	< 0.005	< 0.005		0.36	0.36	< 0.005	< 0.005	< 0.005	0.36
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		0.4	0.4	< 0.005	< 0.005	< 0.005	0.42
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.23. Paving - whole site (2027) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Off-Road Equipment	0.4	0.34	3.48	5.59	0.01	0.14		0.14	0.12		0.12		860	860	0.03	0.01		863
Paving	0.02	0.02																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Daily, Winter (Max)																		
Average Daily																		
Off-Road Equipment	0.05	0.04	0.41	0.66	< 0.005	0.02		0.02	0.01		0.01		101	101	< 0.005	< 0.005		102
Paving	< 0.005	< 0.005																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	0.01	0.01	0.07	0.12	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		16.8	16.8	< 0.005	< 0.005		16.8
Paving	< 0.005	< 0.005																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		

Daily, Summer (Max)																	
Worker	0.05	0.05	0.03	0.45	0	0	0.07	0.07	0	0.02	0.02	78.5	78.5	< 0.005	< 0.005	0.31	79.9
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily, Winter (Max)																	
Average Daily																	
Worker	0.01	0.01	< 0.005	0.05	0	0	0.01	0.01	0	< 0.005	< 0.005	8.69	8.69	< 0.005	< 0.005	0.02	8.83
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual																	
Worker	< 0.005	< 0.005	< 0.005	0.01	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005	1.44	1.44	< 0.005	< 0.005	< 0.005	1.46
Vendor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

3.25. Architectural Coating - Boiler Building (2026) - Unmitigated

Location	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Onsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Off-Road Equipment	0.15	0.12	0.86	1.13	< 0.005	0.02		0.02	0.02		0.02		134	134	0.01	< 0.005		134
Architectural Coatin	2.78	2.78																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		1.83	1.83	< 0.005	< 0.005		1.84
Architectural Coatin	0.04	0.04																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Off-Road Equipment	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		< 0.005	< 0.005		< 0.005		0.3	0.3	< 0.005	< 0.005		0.3
Architectural Coatin	0.01	0.01																
Onsite truck	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Offsite																		
Daily, Summer (Max)																		
Daily, Winter (Max)																		
Worker	< 0.005	< 0.005	< 0.005	0.02	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		3.73	3.73	< 0.005	< 0.005	< 0.005	3.78
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Average Daily																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.05	0.05	< 0.005	< 0.005	< 0.005	0.05
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Annual																		
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0	0	< 0.005	< 0.005	0	< 0.005	< 0.005		0.01	0.01	< 0.005	< 0.005	< 0.005	0.01
Vendor	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
Hauling	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Vegetation	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

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

Land Use	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
Daily, Summer (Max)																		
Total																		
Daily, Winter (Max)																		
Total																		
Annual																		
Total																		

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	CO	SO_2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO_2	$NBCO_2$	CO_2T	CH_4	N_2O	R	CO_2e
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 W	Work Days	Phase Description
Linear, Grubbing & L	Linear, Gru	8/4/2026	8/10/2026	5	5	
Linear, Grading & Ex	Linear, Gra	8/11/2026	9/8/2026	5	21	
Linear, Drainage, Uti	Linear, Dra	9/9/2026	10/5/2026	5	19	
Linear, Paving	Linear, Pav	10/6/2026	10/15/2026	5	8	
Demolition	Demolition	5/1/2027	4/30/2028	5	260	
Site Preparation - Bo	Site Prepar	6/1/2026	6/1/2026	5	1	
Grading - Boiler Buil	Grading	6/2/2026	6/3/2026	5	2	
Building Constructio	Building Co	6/4/2026	10/23/2026	5	102	
Eqpt Install	Building Co	5/1/2027	4/30/2028	5	260	
Paving - whole site	Paving	5/1/2027	6/30/2027	5	43	
Architectural Coatin	Architectu	10/24/2026	10/30/2026	5	5	

5.2. Off-Road Equipment
5.2.1. Unmitigated

Phase Name	Equipment	Fuel Type	Engine Tier	Number pe	Hours Per I	Horsepow	Load Factor
Linear, Grubbing & L	Excavators	Diesel	Average	1	8	36	0.38
Linear, Grubbing & L	Signal Boa	Electric	Average	0	8	6	0.82
Linear, Grading & Ex	Excavators	Diesel	Average	3	8	36	0.38
Linear, Grading & Ex	Graders	Diesel	Average	1	8	148	0.41
Linear, Grading & Ex	Rubber Tire	Diesel	Average	1	8	150	0.36
Linear, Grading & Ex	Tractors/Lo	Diesel	Average	2	8	84	0.37
Linear, Drainage, Uti	Plate Com	Diesel	Average	1	8	8	0.43
Linear, Drainage, Uti	Tractors/Lo	Diesel	Average	2	8	84	0.37
Linear, Paving	Pavers	Diesel	Average	1	8	81	0.42
Linear, Paving	Paving Equ	Diesel	Average	1	8	89	0.36
Linear, Paving	Tractors/Lo	Diesel	Average	2	8	84	0.37
Linear, Paving	Plate Com	Diesel	Average	1	8	8	0.43
Demolition	Concrete/I	Diesel	Average	1	8	33	0.73
Demolition	Tractors/Lo	Diesel	Average	3	8	84	0.37
Site Preparation - Bo	Tractors/Lo	Diesel	Average	1	8	84	0.37
Grading - Boiler Buil	Graders	Diesel	Average	1	8	148	0.41
Grading - Boiler Buil	Rubber Tire	Diesel	Average	1	8	367	0.4
Grading - Boiler Buil	Tractors/Lo	Diesel	Average	2	7	84	0.37
Building Constructio	Cranes	Diesel	Average	1	6	367	0.29
Building Constructio	Tractors/Lo	Diesel	Average	1	6	84	0.37
Building Constructio	Excavators	Diesel	Average	1	8	36	0.38
Eqpt Install	Cranes	Diesel	Average	1	6	367	0.29
Paving - whole site	Pavers	Diesel	Average	1	6	81	0.42
Paving - whole site	Paving Equ	Diesel	Average	1	8	89	0.36
Paving - whole site	Tractors/Lo	Diesel	Average	1	8	84	0.37
Paving - whole site	Plate Com	Diesel	Average	1	8	8	0.43
Architectural Coatin	Air Compre	Diesel	Average	1	6	37	0.48

5.3. Construction Vehicles
5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Tri	Miles per Trip	Vehicle Mix
Site Preparation - Boiler Building				
Site Preparation - Bo	Worker	2.5	10.5	LDA,LDT1,LDT2
Site Preparation - Bo	Vendor		7.02	HHDT,MHDT
Site Preparation - Bo	Hauling	0	20	HHDT
Site Preparation - Bo	Onsite truck			HHDT
Grading - Boiler Building				
Grading - Boiler Buil	Worker	10	10.5	LDA,LDT1,LDT2
Grading - Boiler Buil	Vendor		7.02	HHDT,MHDT
Grading - Boiler Buil	Hauling	0	20	HHDT
Grading - Boiler Buil	Onsite truck			HHDT
Building Construction - Boiler Building				
Building Constructio	Worker	1.26	10.5	LDA,LDT1,LDT2
Building Constructio	Vendor	0.49	7.02	HHDT,MHDT
Building Constructio	Hauling	0	20	HHDT
Building Constructio	Onsite truck			HHDT
Architectural Coating - Boiler Building				
Architectural Coatin	Worker	0.5	10.5	LDA,LDT1,LDT2
Architectural Coatin	Vendor		7.02	HHDT,MHDT
Architectural Coatin	Hauling	0	20	HHDT
Architectural Coatin	Onsite truck			HHDT
Linear, Grading & Excavation				
Linear, Grading & Ex	Worker	17.5	10.5	LDA,LDT1,LDT2
Linear, Grading & Ex	Vendor	1	7.02	HHDT,MHDT
Linear, Grading & Ex	Hauling	0	20	HHDT
Linear, Grading & Ex	Onsite truck			HHDT
Linear, Drainage, Utilities, & Sub-Grade				
Linear, Drainage, Uti	Worker	7.5	10.5	LDA,LDT1,LDT2
Linear, Drainage, Uti	Vendor	0	7.02	HHDT,MHDT
Linear, Drainage, Uti	Hauling	0	20	HHDT
Linear, Drainage, Uti	Onsite truck			HHDT
Linear, Paving				
Linear, Paving	Worker	12.5	10.5	LDA,LDT1,LDT2
Linear, Paving	Vendor	0	7.02	HHDT,MHDT
Linear, Paving	Hauling	0	20	HHDT
Linear, Paving	Onsite truck			HHDT

Paving - whole site				
Paving - whole site	Worker	10	10.5	LDA,LDT1,LDT2
Paving - whole site	Vendor		7.02	HHDT,MHDT
Paving - whole site	Hauling	0	20	HHDT
Paving - whole site	Onsite truck			HHDT
Demolition				
Demolition	Worker	10	10.5	LDA,LDT1,LDT2
Demolition	Vendor		7.02	HHDT,MHDT
Demolition	Hauling	0	20	HHDT
Demolition	Onsite truck			HHDT
Linear, Grubbing & Land Clearing				
Linear, Grubbing & L	Worker	2.5	10.5	LDA,LDT1,LDT2
Linear, Grubbing & L	Vendor	0	7.02	HHDT,MHDT
Linear, Grubbing & L	Hauling	0	20	HHDT
Linear, Grubbing & L	Onsite truck			HHDT
Eqpt Install				
Eqpt Install	Worker	1.26	10.5	LDA,LDT1,LDT2
Eqpt Install	Vendor	0.49	7.02	HHDT,MHDT
Eqpt Install	Hauling	0	20	HHDT
Eqpt Install	Onsite truck			HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies A	PM10 Redu	PM2.5 Reduction

5.5. Architectural Coatings

Phase Name	Residentia	Residential	Non-Residen	Non-Residı	Parking Area Coated (sq ft)
Architectural Coatin	0	0	4500	1500	

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Im	Material Exp	Acres Grade	Material D	Acres Paved (acres)
Linear, Grubbing & Land Clearing			0.41	0	
Linear, Grading & Excavation			0.41	0	
Linear, Drainage, Utilities, & Sub-Grade			0.41	0	
Demolition	0	0	0		
Site Preparation - Boiler Building			0	0	
Grading - Boiler Building			2	0	
Paving - whole site	0	0	0	0	0.41

5.6.2. Construction Earthmoving Control Strategies

Control Strategies A	Frequency	PM10 Redu	PM2.5 Reduction
Water Exposed Area	2	61	61

5.7. Construction Paving

Land Use	Area Paved	% Asphalt
Unrefrigerated Ware	0	0
Road Construction	0.41	100

5.8. Construction Electricity Consumption and Emissions Factors

Year	kWh per Ye	CO2	CH4	N2O
2026	0	453	0.03	< 0.005
2027	0	453	0.03	< 0.005
2028	0	453	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Vegetation	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acre	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity S	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 F	Unit
Temperature and Ex	31.3	annual days of extreme heat
Extreme Precipitatio	8.6	annual days with precipitation above 20 mm
Sea Level Rise		meters of inundation depth
Wildfire	18.2	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 potenti

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 tempe

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure S	Sensitivity S	Adaptive Cap	Vulnerability Score
Temperature and Ex	N/A	N/A	N/A	N/A
Extreme Precipitatio	1	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	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 Reductior	0	0	0	N/A
Air Quality Degradati	N/A	N/A	N/A	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 S	Sensitivity S	Adaptive Cap	Vulnerability Score
Temperature and Ex	N/A	N/A	N/A	N/A
Extreme Precipitatio	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reductior	1	1	1	2
Air Quality Degradati	N/A	N/A	N/A	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 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	57.8
AQ-PM	10.6
AQ-DPM	11
Drinking Water	20.5
Lead Risk Housing	6.98
Pesticides	0
Toxic Releases	50.9
Traffic	56.2
Effect Indicators	
CleanUp Sites	0
Groundwater	4.42
Haz Waste Facilities	0
Impaired Water Bodi	33.2
Solid Waste	66.9
Sensitive Population	
Asthma	19.9
Cardio-vascular	1.98
Low Birth Weights	3.21
Socioeconomic Factor Indicators	
Education	1.46
Housing	2.62
Linguistic	0
Poverty	7.83
Unemployment	7.77

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	92.51893
Employed	77.24881
Median HI	75.56782
Education	
Bachelor's or higher	76.49172
High school enrollme	100
Preschool enrollmer	47.13204
Transportation	
Auto Access	98.98627
Active commuting	23.71359
Social	
2-parent households	95.52162
Voting	89.58039
Neighborhood	
Alcohol availability	92.27512
Park access	17.90068
Retail density	5.941229
Supermarket access	2.399589
Tree canopy	95.80393
Housing	
Homeownership	91.03041
Housing habitability	89.41358
Low-inc homeowner	65.76415
Low-inc renter sever	73.36071
Uncrowded housing	92.90389
Health Outcomes	
Insured adults	61.87604
Arthritis	0
Asthma ER Admissio	99
High Blood Pressure	0
Cancer (excluding sk	0
Asthma	0

Coronary Heart Dise	0
Chronic Obstructive	0
Diagnosed Diabetes	0
Life Expectancy at Bi	92
Cognitively Disabled	98
Physically Disabled	95
Heart Attack ER Adm	99
Mental Health Not G	0
Chronic Kidney Dise	0
Obesity	0
Pedestrian Injuries	53
Physical Health Not	0
Stroke	0
Health Risk Behaviors	
Binge Drinking	0
Current Smoker	0
No Leisure Time for I	0
Climate Change Exposures	
Wildfire Risk	75
SLR Inundation Area	0
Children	41
Elderly	92
English Speaking	98
Foreign-born	0.8
Outdoor Workers	9.5
Climate Change Adaptive Capacity	
Impervious Surface	95
Traffic Density	33
Traffic Access	0
Other Indices	
Hardship	14
Other Decision Support	
2016 Voting	85

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0	0
Healthy Places Index	86
Project Located in a	No
Project Located in a	No
Project Located in a	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

Measure Title	Co-Benefits Achieved

7.5. Evaluation Scorecard

Category	Number of	Total Points	Max Possible Weighted Score

7.6. Health & Equity Custom Measures

Measure Title	Sponsor

8. User Changes to Default Data

Screen	Justification
Land Use	Boiler building size and project acreage based on project-specific data. Access road size approximated using google earth and site plan overlay. Sand gravel soil type identified for project site in geotechnical assessment prepared for project.
Construction: Const	land use development construction phase duration adjusted off-model to accommodate expected construction duration. phase lengths sourced from Basis of Design report prepared for project. Boiler Building and access road construction constrained to 5.5 months as advised in BOD report in accordance with TRPA ground disturbance rules
Construction: Archit	VOC content limits adjusted to reflect limits outlined in NSAQMD Rule 230
Construction: Off-Rc	equipment types based on project-specific equipment list (i.e., excavator, backhoe, crane, dump truck/haul trucks, vibratory compactor, paver, and sheepsfoot and/or loader). Default equipment numbers used

Construction AQ Emissions

Year	ROG (lb/day)[1]	NO_x (lb/day)	PM_{10} (lb/day)
2026	3	13	3
2027	1	10	1
2028	1	7	<1
NSAQMD's Level A Range [2]	*0–24*	*0–24*	*0–79*
Project Status?	**Within**	**Within**	**Within**
NSAQMD's Level B Range [3]	*24–136*	*24–136*	*79–136*
Project Status?	**Below**	**Below**	**Below**
NSAQMD's Level C Threshold [4]	*>136*	*>136*	*>136*
Project Status?	**Below**	**Below**	**Below**

Construction GHG Emissions

Year	$MTCO_2e/yr$
2026	87
2027	174
2028	77
SMAQMD Threshold ($MTCO_2e/yr$)	**1,100**
Exceeds Threshold?	**No**

Energy Calculations Summary Page

Operations

Source	Gas (gal)	Diesel (gal)	Kwh	kBTU
Mobile Sources	0	0		
Electricity			0	
Natural Gas				0

Construction

Phase Name	Gas (gal)	Diesel (gal)
Offroad		16,418
Trucks		278
Worker Commute	3,116	
Total	**3,116**	**16,695**

User Input Page

orange cells denote cells for user to input data

Operations

User note: If modeling construction only, delete the values in these calls

Annual Project VMT	0	From Traffic Engineer or CalEEMod output
Project Operational Year	2029	Note: Has to be between 2000 and 2050. If buildout is beyond 2050, input 2050 here.
Annual kWh	0	From PD or CalEEMod output
Annual kBTU	0	From PD or CalEEMod output

Construction

Construction Start Year	2026

User

User Needs to paste 3 tables from Caleemod output

These tables are in Section 3.0 Construction Detail

1. Construction Phase
2. Trips and VMT
3. Offroad Equipment

In section **3.0 Construction Detail from CalEEMod output,** paste three tables: the *Construction Phase* , *Trips and VMT* and *Offroad Equipment* tables

Best practice. Save the CalEEMout output as PDF, then, open the PDF in the Adobe App, highlight the tables, right click "copy formatting", then paste below.

See example to the right.

Note that this "copy formatting" function only works in the Adobe app. It does not work if viewing the PDF directly in Chrome or Edge. Download the PDF to your computer, if necessary.

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days We	Num Days	Phase Description
1	Linear, Grubbing & Land Clearing	Linear, Gru	8/4/2026	8/10/2026	5.00	5.00	
2	Linear, Grading & Excavation	Linear, Gra	8/11/2026	9/8/2026	5.00	21.0	
3	Linear, Drainage, Utilities, & Sub-Grade	Linear, Dra	9/9/2026	10/5/2026	5.00	19.0	
4	Linear, Paving	Linear, Pav	10/6/2026	10/15/2026	5.00	8.00	
5	Demolition	Demolition	5/1/2027	4/30/2028	5.00	260	
6	Site Preparation - Boiler Building	Site Prepar	6/1/2026	6/1/2026	5.00	1.00	
	Grading - Boiler Building	Grading	6/2/2026	6/3/2026	5.00	2.00	
	Building Construction - Boiler Building	Building Co	6/4/2026	10/23/2026	5.00	102	
	Eqpt Install	Building Co	5/1/2027	4/30/2028	5.00	260	
	Paving - whole site	Paving	5/1/2027	6/30/2027	5.00	43.0	
	Architectural Coating - Boiler Building	Architectur	10/24/2026	10/30/2026	5.00	5.00	

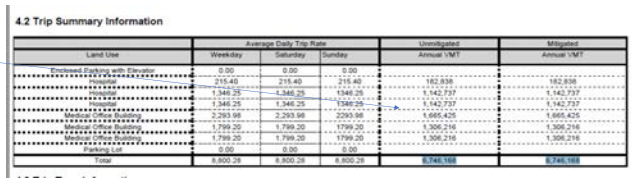
Daily Trips and VMT

Phase Name	Offroad Equipment Count	Daily Worker Trip Number	Daily Vendor Trip Number	Daily Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Linear, Grubbing & Land Clearing	1	2.50	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Linear, Grading & Excavation	7	17.50	1.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Linear, Drainage, Utilities, & Sub	3	7.50	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Linear, Paving	5	12.50	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	4	10.00	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation - Boiler Building	1	2.50	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Grading - Boiler Building	4	10.00	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction - Boiler Bu	3	1.26	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Eqpt Install	1	1.26	0.49	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Paving - whole site	4	10.00	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Boiler Bu	1	0.50	0.00	0.00	10.50	7.02	20.00	LD_Mix	HDT_Mix	HHDT

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Linear, Grubbing & Land Clearing	Excavators	1	8	36	0.38
Linear, Grubbing & Land Clearing	Signal Boards	0	8	6	0.82
Linear, Grading & Excavation	Excavators	3	8	36	0.38
Linear, Grading & Excavation	Graders	1	8	148	0.41
Linear, Grading & Excavation	Rubber Tired Loaders	1	8	150	0.36
Linear, Grading & Excavation	Tractors/Loaders/Back hoes	2	8	84	0.37
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	1	8	8	0.43
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Back hoes	2	8	84	0.37
Linear, Paving	Pavers	1	8	81	0.42
Linear, Paving	Paving Equipment	1	8	89	0.36
Linear, Paving	Tractors/Loaders/Back hoes	2	8	84	0.37
Linear, Paving	Plate Compactors	1	8	8	0.43
Demolition	Concrete/Industrial Saws	1	8	33	0.73
Demolition	Tractors/Loaders/Back hoes	3	8	84	0.37
Site Preparation - Boiler	Tractors/Loaders/Back hoes	1	8	84	0.37
Grading - Boiler Building	Graders	1	8	148	0.41
Grading - Boiler Building	Rubber Tired Dozers	1	8	367	0.4
Grading - Boiler Building	Tractors/Loaders/Back hoes	2	7	84	0.37
Building Construction - Boiler	Cranes	1	6	367	0.29
Building Construction - Boiler	Tractors/Loaders/Back hoes	1	6	84	0.37
Building Construction - Boiler	Excavators	1	8	36	0.38
Eqpt Install	Cranes	1	6	367	0.29
Paving - whole site	Pavers	1	6	81	0.42
Paving - whole site	Paving Equipment	1	8	89	0.36
Paving - whole site	Tractors/Loaders/Back hoes	1	8	84	0.37
Paving - whole site	Plate Compactors	1	8	8	0.43
Architectural Coating - Boiler	Air Compressors	1	6	37	0.48

Operational VMT

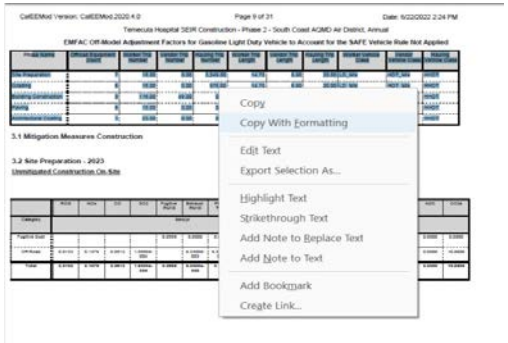


4.2 Trip Summary Information

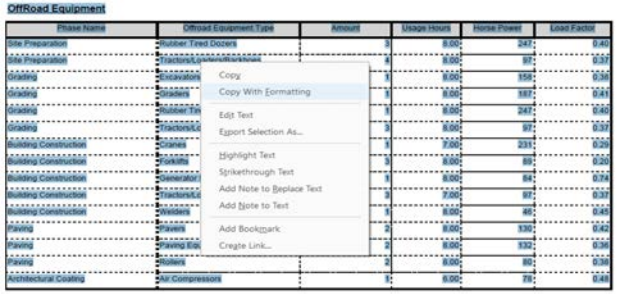
Land Use	Average Daily Trip Rate: Weekday	Saturday	Sunday	Unmitigated: Annual VMT	Mitigated: Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Hospital	215.40	215.40	215.40	182,838	182,838
Hospital	1,346.25	1,346.25	1,346.25	1,142,737	1,142,737
Hospital	1,346.25	1,346.25	1,346.25	1,142,737	1,142,737
Hospital	1,346.25	1,346.25	1,346.25	1,142,737	1,142,737
Assisted Living	2,293.98	2,293.98	2293.98	1,665,425	1,665,425
Medical Office Building	1,799.20	1,799.20	1799.20	1,306,216	1,306,216
Medical Office Building	1,799.20	1,799.20	1799.20	1,306,216	1,306,216
Parking Lot	0.00	0.00	0.00		
Total	8,800.28	8,800.28	8,800.28	6,746,165	6,746,165

Construction Phase (construction schedule)

Trips and VMT



Offroad Equipment



OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Back hoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tire	1	8.00	247	0.40
Grading	Tractors/Lo	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator	1	8.00	84	0.74
Building Construction	Tractors/Lo	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equ	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Energy Calculations Summary Page

Construction

Phase Name	Gas (gal)	Diesel (gal)
Offroad		16,418
Trucks		278
Worker Commute	3,116	
Total	**3,116**	**16,695**

Construction Offroad Calculations

Nothing for the user to do here.

This tab calculates fuel consumption from offroad equipment and schedule input in the USER INPUT tab

Fuel consumption calculated from OFFROAD based on fuel consumption divided by horsepower hours to generate an average for all epuipment output

Total =	16,418

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Days	total hp-hrs	Gallons per hp-hr	Gallons
Linear, Grubbing & Land Clearing	Excavators	1	8	36	0.38	5	547.2	0.027	15
Linear, Grubbing & Land Clearing	Signal Boards	0	8	6	0.82	5	0	0.027	0
Linear, Grading & Excavation	Excavators	3	8	36	0.38	21	6894.72	0.027	189
Linear, Grading & Excavation	Graders	1	8	148	0.41	21	10194.24	0.027	280
Linear, Grading & Excavation	Rubber Tired Loader	1	8	150	0.36	21	9072	0.027	249
Linear, Grading & Excavation	Tractors/Loaders/Ba	2	8	84	0.37	21	10442.88	0.027	287
Linear, Drainage, Utilities, & Sub-Grad	Plate Compactors	1	8	8	0.43	19	522.88	0.027	14
Linear, Drainage, Utilities, & Sub-Grad	Tractors/Loaders/Ba	2	8	84	0.37	19	9448.32	0.027	260
Linear, Paving	Pavers	1	8	81	0.42	8	2177.28	0.027	60
Linear, Paving	Paving Equipment	1	8	89	0.36	8	2050.56	0.027	56
Linear, Paving	Tractors/Loaders/Ba	2	8	84	0.37	8	3978.24	0.027	109
Linear, Paving	Plate Compactors	1	8	8	0.43	8	220.16	0.027	6
Demolition	Concrete/Industrial	1	8	33	0.73	260	50107.2	0.027	1,377
Demolition	Tractors/Loaders/Ba	3	8	84	0.37	260	193939.2	0.027	5,328
Site Preparation - Boiler Building	Tractors/Loaders/Ba	1	8	84	0.37	1	248.64	0.027	7
Grading - Boiler Building	Graders	1	8	148	0.41	2	970.88	0.027	27
Grading - Boiler Building	Rubber Tired Dozers	1	8	367	0.4	2	2348.8	0.027	65
Grading - Boiler Building	Tractors/Loaders/Ba	2	7	84	0.37	2	870.24	0.027	24
Building Construction - Boiler Building	Cranes	1	6	367	0.29	102	65135.16	0.027	1,789
Building Construction - Boiler Building	Tractors/Loaders/Ba	1	6	84	0.37	102	19020.96	0.027	523
Building Construction - Boiler Building	Excavators	1	8	36	0.38	102	11162.88	0.027	307
Eqpt Install	Cranes	1	6	367	0.29	260	166030.8	0.027	4,561
Paving - whole site	Pavers	1	6	81	0.42	43	8777.16	0.027	241
Paving - whole site	Paving Equipment	1	8	89	0.36	43	11021.76	0.027	303
Paving - whole site	Tractors/Loaders/Ba	1	8	84	0.37	43	10691.52	0.027	294
Paving - whole site	Plate Compactors	1	8	8	0.43	43	1183.36	0.027	33
Architectural Coating - Boiler Building	Air Compressors	1	6	37	0.48	5	532.8	0.027	15
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0
0	0	0	0	0	0	0	0	0.027	0

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Linear, Grubbing & Land Clearing	Linear, Grubbing & Land Clearing	8/4/2026	8/10/2026	5	5	0
2	Linear, Grading & Excavation	Linear, Grading & Excavation	8/11/2026	9/8/2026	5	21	0
3	Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	9/9/2026	10/5/2026	5	19	0
4	Linear, Paving	Linear, Paving	10/6/2026	10/15/2026	5	8	0
5	Demolition	Demolition	5/1/2027	4/30/2028	5	260	0
6	Site Preparation - Boiler Building	Site Preparation	6/1/2026	6/1/2026	5	1	0
0	Grading - Boiler Building	Grading	6/2/2026	6/3/2026	5	2	0
0	Building Construction - Boiler Building	Building Construction	6/4/2026	10/23/2026	5	102	0
0	Eqpt Install	Building Construction	5/1/2027	4/30/2028	5	260	0
0	Paving - whole site	Paving	5/1/2027	6/30/2027	5	43	0
0	Architectural Coating - Boiler Building	Architectural Coating	10/24/2026	10/30/2026	5	5	0
0	0	0	1/0/1900	1/0/1900	0	0	0
0	0	0	1/0/1900	1/0/1900	0	0	0
0	0	0	1/0/1900	1/0/1900	0	0	0

Construction Mobile Calculations

Nothing for the user to do here.

Daily Trips and VMT										
Phase Name	Offroad Equipment Count	Daily Worker Trip Number	Daily Vendor Trip Number	Daily Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Linear, Grubbing & Land	1	5	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Linear, Grading & Excavat	7	35	2	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Linear, Drainage, Utilities	3	15	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Linear, Paving	5	25	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Demolition	4	20	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Site Preparation - Boiler B	1	5	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Grading - Boiler Building	4	20	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Building Construction - Bo	3	2.52	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Eqpt Install	1	2.52	0.98	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Paving - whole site	4	20	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
Architectural Coating - Bo	1	1	0	0	10.5	7.02	20	LD_Mix	HDT_Mix	HHDT
0	0	0	0	0	0	0	0	0	0	0

Nothing to do here. This Phase calculates VMT by type and multiplies by the number of work days in each phase to give total VMT per phase

Phase Name	Worker VMT	Vendor VMT	Haul VMT
Linear, Grubbing & Land	262.5	0	0
Linear, Grading & Excavat	7717.5	294.84	0
Linear, Drainage, Utilities	2992.5	0	0
Linear, Paving	2100	0	0
Demolition	54600	0	0
Site Preparation - Boiler B	52.5	0	0
Grading - Boiler Building	420	0	0
Building Construction - Bo	2698.92	0	0
Eqpt Install	6879.6	1788.696	0
Paving - whole site	9030	0	0
Architectural Coating - Bo	52.5	0	0
0	0	0	0

Nothing to do here. This Looks up MPG by type based on the construction year

Phase Name	Year	Worker MPG	Vendor MPG	Haul MPG
Linear, Grubbing & Land Clearing	2026	27.86	7.51	6.21
Linear, Grading & Excavation	2026	27.86	7.51	6.21
Linear, Drainage, Utilities, & Sub-Grade	2026	27.86	7.51	6.21
Linear, Paving	2026	27.86	7.51	6.21
Demolition	2026	27.86	7.51	6.21
Site Preparation - Boiler Building	2026	27.86	7.51	6.21
Grading - Boiler Building	2026	27.86	7.51	6.21
Building Construction - Boiler Building	2026	27.86	7.51	6.21
Eqpt Install	2026	27.86	7.51	6.21
Paving - whole site	2026	27.86	7.51	6.21
Architectural Coating - Boiler Building	2026	27.86	7.51	6.21
0	2026	27.86	7.51	6.21

Nothing to do here. This Phase Calculates Energy from Workers

Phase Name	Total gallons of gasoline	Total gallons of diesel
Linear, Grubbing & Land	9	
Linear, Grading & Excavat	277	
Linear, Drainage, Utilities	107	
Linear, Paving	75	
Demolition	1,960	
Site Preparation - Boiler B	2	
Grading - Boiler Building	15	
Building Construction - Bo	97	
Eqpt Install	247	
Paving - whole site	324	
Architectural Coating - Bo	2	
0	0	
	3,116	

Nothing to do here. This Phase Calculates Energy from Trucks

Phase Name	Total gallons of gasoline	Total gallons of diesel
Linear, Grubbing & Land Clearing		0
Linear, Grading & Excavation		39
Linear, Drainage, Utilities, & Sub-Grade		0
Linear, Paving		0
Demolition		0
Site Preparation - Boiler Building		0
Grading - Boiler Building		0
Building Construction - Boiler Building		0
Eqpt Install		238
Paving - whole site		0
Architectural Coating - Boiler Building		0
0		0
		278

Appendix B

Special-Status Species Lists

Table B-1 Special-Status Plants and Their Potential for Occurrence on the Project Site

Species	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Threetip sagebrush *Artemisia tripartita* ssp. *tripartita*	—	—	2B.3	Upper montane coniferous forest. Openings in the forest. Rocky, volcanic soils. 7,490–8,010 feet in elevation. Blooms August. Perennial.	Not expected to occur. Project site is out of elevation range of this species.
Austin's astragalus *Astragalus austiniae*	—	—	1B.3	Alpine boulder and rock field, subalpine coniferous forest. Rocky. 8,000–9,730 feet in elevation. Blooms July–September. Perennial.	Not expected to occur. Project site is out of elevation range of this species.
Trinity mountain rockcress *Boechera rigidissima* (synonym: Galena Creek rockcress [*Arabis rigidissima* var. *demota*])	—	—	1B.2	Rocky areas in open conifer forest. 5,900–8,400 feet in elevation. Blooms July–August. Perennial.	May occur. Conifer habitat suitable for this species is present on the project site.
Upswept moonwort *Botrychium ascendens*	—	—	2B.3	Wet or moist soils, mostly of meadows and riparian areas, meadows and seeps. Grassy fields, coniferous woods near springs and creeks. Wetland indicator - facultative upland (usually occurs in non-wetlands but occasionally found in wetlands). 3,660–10,710 feet in elevation. Blooms July–August. Geophyte.	Not expected to occur. The project site does not contain wetland or riparian habitats suitable for this species.
Scalloped moonwort *Botrychium crenulatum*	—	—	2B.2	Occurs in riparian areas and wet to saturated soils of fens and streambanks. Scalloped moonwort, on a gradient of riparian habitats, is noted as the most hydrophilic. It also occurs in seasonally wet roadside ditches and drainages. It is usually found in partial to heavy shade. Moist meadows, freshwater marsh, and near creeks. Wetland indicator - facultative wetland (usually occurs in wetlands but occasionally found in non-wetlands). 3,890–10,210 feet in elevation. Blooms June–September. Geophyte.	Not expected to occur. Project site does not contain wetland or riparian habitats suitable for this species.
North American moonwort *Botrychium neolunaria* (synonym: *Botrychium lunaria*)	—	—	B.3	Meadows and seeps. Moist, rocky meadows. Wetland indicator - facultative (equally likely to occur in wetlands and non-wetlands). 6,400–11,210 feet in elevation. Blooms August. Geophyte.	Not expected to occur. Meadow habitats suitable for this species are absent from the project site.
Davy's sedge *Carex davyi*	—	—	1B.3	Subalpine meadows within coniferous forest, upper montane coniferous forest. Wetland indicator - facultative wetland (usually occurs in wetlands but occasionally found in non-wetlands). 4,790–10,600 feet in elevation. Blooms May–August. Perennial.	Not expected to occur. Meadow habitat suitable for this species is absent from the project site.

Species	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Woolly-fruited sedge *Carex lasiocarpa*	—	—	2B.3	Sphagnum bogs, freshwater marsh, lake margins. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 1,970–6,400 feet in elevation. Blooms June–July. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Mud sedge *Carex limosa*	—	—	2B.2	In floating bogs and soggy meadows and edges of lakes. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 4,490–9,160 feet in elevation. Blooms June–August. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Fell-fields claytonia *Claytonia megarhiza*	—	—	2B.3	Alpine boulder and rock field, subalpine coniferous forest. In the crevices between rocks, rocky or gravelly soil. Wetland indicator - facultative upland (usually occurs in non-wetlands but occasionally found in wetlands). 8,530–10,940 feet in elevation. Blooms July–September. Perennial.	Not expected to occur. Project site is out of elevation range of this species.
English sundew *Drosera anglica*	—	—	2B.3	Bogs and fens, meadows. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 4,260–6,560 feet in elevation. Blooms June–September. Perennial.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Starved daisy *Erigeron miser*	—	—	1B.3	Granitic outcrops in coniferous forest. Rocky. 5,080–9,110 feet in elevation. Blooms June–October. Perennial.	Not expected to occur. Project site does not contain conifer habitat with granitic outcrop habitat suitable for this species.
Donner Pass buckwheat *Eriogonum umbellatum* var. *torreyanum*	—	—	1B.2	Upper montane coniferous forest, meadows and seeps. Usually in bare or very sparsely vegetated volcanic substrate. 6,080–8,600 feet in elevation. Blooms July–September. Perennial.	Not expected to occur. The project site does not contain rock outcrop habitat suitable for this species and is outside the species' elevation range.
Subalpine aster *Eurybia merita*	—	—	2B.3	Upper montane coniferous forest. Wetland indicator - facultative upland (usually occurs in non-wetlands but occasionally found in wetlands). 4,260–6,560 feet in elevation. Blooms July–August. Perennial.	May occur. Conifer habitat suitable for this species is present on the project site.
American manna grass *Glyceria grandis*	—	—	2B.3	Wet meadows, ditches, streams, and ponds, in valleys and lower elevations in the mountains. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 190–6,710 feet in elevation. Blooms June–August. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.

Species	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Plumas ivesia *Ivesia sericoleuca*	—	—	1B.2	Vernally wet portions of meadows (e.g., meadow edges) and alkali flats, and in vernal pools within sagebrush scrub or lower montane coniferous forest; generally present on volcanics. Wetland indicator - facultative (equally likely to occur in wetlands and non-wetlands). 4,310–7,010 feet in elevation. Blooms May–October. Perennial.	Not expected to occur. The project site does not contain meadow or vernal pool habitats suitable for this species. This species has a documented occurrence less than 0.6 miles north of the project site (CNDDB 2025).
Santa Lucia dwarf rush *Juncus luciensis*	—	—	1B.2	Vernal pools, ephemeral drainages, wet meadow habitats and streamsides. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 980–6,700 feet in elevation. Blooms April–July. Annual.	Not expected to occur. Project site does not contain wetland habitats suitable for this species.
Long-petaled lewisia *Lewisia longipetala*	—	—	1B.3	Alpine boulder and rock field, subalpine coniferous forest. Mesic rocky sites; in cracks of granite or gravelly volcanic soils. 8,200–9,600 feet in elevation. Blooms July–August. Perennial.	Not expected to occur. Project site is out of elevation range of this species.
Gray's lomatium *Lomatium grayi*	—	—	2B.3	Rocky banks, slopes. 4,590–6,510 feet in elevation. Blooms April–June. Perennial.	Not expected to occur. Project site does not contain rocky banks or slope habitat suitable for this species.
Broad-nerved hump moss *Meesia uliginosa*	—	—	2B.2	Bogs and fens, and permanently wet meadows, typically spring fed, in subalpine and upper montane coniferous forest. Often found on the edge of fens or raised above the fen on hummocks/shrub bases. 3,590–9,210 feet in elevation. Blooms July–October. Perennial.	Not expected to occur. The project site does not contain wetland habitats suitable for this species.
Sagebrush bluebells *Mertensia oblongifolia* var. *oblongifolia*	—	—	2B.2	Great Basin scrub, lower montane coniferous forest, meadows and seeps, subalpine coniferous forest. Usually in mesic sites. Wetland indicator - facultative (equally likely to occur in wetlands and non-wetlands). 3,280–9,850 feet in elevation. Blooms April–July. Perennial.	May occur. Conifer habitat suitable for this species is present on the project site.
Hiroshi's flapwort *Nardia hiroshii*	—	—	2B.3	Meadows and seeps, edges of wet meadow, damp soil on granitic bedrock. +/- 7,200 feet in elevation. Perennial.	Not expected to occur. Project site is out of elevation range of this species and habitats suitable for this species are not present on the project site.
Stebbins' phacelia *Phacelia stebbinsii*	—	—	1B.2	Lower montane coniferous forest, cismontane woodland, meadows and seeps. Among rocks and rubble on metamorphic rock benches. 2,000–6,600 feet in elevation. Blooms May–July. Annual.	Not expected to occur. The project site does not contain metamorphic rock benches.

Species	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Whitebark pine *Pinus albicaulis*	FT	—	—	Thin, rocky, cold soils in upper red-fir forest to timberline, especially subalpine forest. This species grows at elevations from 6,500 to 12,000 feet across its range, which extends from British Columbia to Mt. Whitney and east to the Rocky Mountains; however, it is usually found between 9,000 and 11,000 feet in the Sierra Nevada. Perennial.	Not expected to occur. Conifer habitat on the project site is mapped as ponderosa pine/shrub understory woodland, which is not expected to contain whitebark pine (Sawyer et al. 2009). The project site is also below the regional elevation range of this species.
Nuttall's ribbon-leaved pondweed *Potamogeton epihydrus*	—	—	2B.2	Shallow water, ponds, lakes, streams, irrigation ditches. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 970–8,660 feet in elevation. Blooms July–September. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Robbins' pondweed *Potamogeton robbinsii*	—	—	2B.3	Deep water, lakes. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 5,020–10,830 feet in elevation. Blooms July–August. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Alder buckthorn *Rhamnus alnifolia*	—	—	2B.2	Wet meadow edges, seeps, streamsides. Mesic sites. Wetland indicator - facultative wetland (usually occurs in wetlands but occasionally found in non-wetlands). 4,690–7,010 feet in elevation. Blooms May–July. Perennial.	Not expected to occur. Project site does not contain wetland or streamside habitat suitable for this species.
Tahoe yellow cress *Rorippa subumbellata*	—	SE	1B.1	Decomposed granitic beaches in lower montane coniferous forest. It is endemic to the shore zone around Lake Tahoe in California and Nevada. Typically found in back beach areas. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 6,210–6,240 feet in elevation. Blooms May–September. Geophyte.	Not expected to occur. Project site does not contain beach habitat suitable for this species and is outside the species range of distribution, which is limited to Lake Tahoe.
Marsh skullcap *Scutellaria galericulata*	—	—	2B.2	Marshes and swamps, lower montane coniferous forest, meadows and seeps. Swamps and wet places. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 0–6,400 feet in elevation. Blooms June–September. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.
Cut-leaf checkerbloom *Sidalcea multifida*	—	—	2B.3	Lower montane coniferous forest, meadows and seeps, Great Basin scrub, pinyon and juniper woodland. 5,740–9,190 feet in elevation. Blooms May–September. Perennial.	Not expected to occur. The project site is outside of this species range of distribution.
Munro's desert mallow *Sphaeralcea munroana*	—	—	2B.2	Dry, open places in sagebrush scrub. +/- 6,560 feet in elevation. Blooms May–June. Perennial.	Not expected to occur. The project site is outside of this species range of distribution.

Species	Federal Status[1]	State Status[1]	CRPR[1]	Habitat	Potential for Occurrence
Hairy marsh hedge-nettle *Stachys pilosa*	—	—	2B.3	Meadows and seeps. Mesic sites in Great Basin scrub. Wetland indicator - facultative wetland (usually occurs in wetlands). 2,570–6,710 feet in elevation. Blooms June–August. Geophyte.	Not expected to occur. The project site does not contain wetland habitat suitable for this species and is outside the species range of distribution, which in California is limited to the Modoc Plateau.
Northern slender pondweed *Stuckenia filiformis* ssp. *alpina*	—	—	2B.2	Marshes and swamps. Shallow, clear water of lakes and drainage channels. Wetland indicator - obligate (occurs almost always under natural conditions in wetlands). 980–7,060 feet in elevation. Blooms May–July. Geophyte.	Not expected to occur. Project site does not contain wetland habitat suitable for this species.

Notes: CEQA = California Environmental Quality Act; CESA = California Endangered Species Act; CRPR = California Rare Plant Rank; CNDDB = California Natural Diversity Database; ESA = Endangered Species Act; ssp. = subspecies; var. = variety

[1] Legal Status Definitions

Federal:
FT Threatened (legally protected)

State:
SE Endangered (legally protected)

California Rare Plant Ranks:
1B Plant species considered rare or endangered in California and elsewhere (protected under CEQA, but not legally protected under ESA or CESA)
2B Plant species considered rare or endangered in California but more common elsewhere (protected under CEQA, but not legally protected under ESA or CESA)

Threat Ranks:
0.1 Seriously threatened in California (more than 80% of occurrences threatened; high degree and immediacy of threat)
0.2 Moderately threatened in California (20–80% occurrences threatened; moderate degree and immediacy of threat)
0.3 Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Sources: CNDDB 2025; CNPS 2025; Sawyer et al. 2009.

Table B-2 Special-Status Wildlife and Their Potential for Occurrence on the Project Site

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Amphibians and Reptiles				
Northwestern pond turtle *Actinemys marmorata*	FP	SSC	Ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6,000 feet elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.3 miles (0.5 kilometer) from water for egg-laying.	Not expected to occur. The range of northwestern pond turtle does not overlap the project site.
Southern long-toed salamander *Ambystoma macrodactylum sigillatum*	—	SSC	High elevation meadows and lakes in the Sierra Nevada, Cascade, and Klamath mountains. Aquatic larvae occur in ponds and lakes. Outside of breeding season adults are terrestrial and associated with underground burrows of mammals and moist areas under logs and rocks.	Not expected to occur. The range of southern long-toed salamander does not overlap the project site.
Northern leopard frog *Lithobates pipiens*	—	SSC	Freshwater marsh, Great Basin flowing waters, Great Basin standing waters, marsh and swamp, and wetlands. Native range is east of Sierra Nevada-Cascade Crest. Near permanent or semi-permanent water in a variety of habitats. Highly aquatic species. Shoreline cover, submerged and emergent aquatic vegetation are important habitat characteristics.	Not expected to occur. The range of northern leopard frog does not overlap the project site.
Sierra Nevada yellow-legged frog *Rana sierrae*	FE	ST	Always encountered within a few feet of water. Tadpoles may require 2 to 4 years to complete their aquatic development.	Not expected to occur. The project site is on the edge of the range of Sierra Nevada yellow-legged frog, but there is no aquatic habitat suitable for this species on the project site. In addition, the Truckee River is over 190 feet away from the project site, downhill, with the Truckee River Legacy Trail between the river and the project site.
Birds				
Greater sandhill crane *Antigone canadensis tabida*	—	ST; FP	Marsh and swamp, meadow and seep, wetland. Nests in wetland habitats in northeastern California; winters in the Central Valley. Prefers grain fields within 4 miles of a shallow body of water used as a communal roost site; irrigated pasture used as loafing sites.	Not expected to occur. The wintering range of greater sandhill crane does not overlap the project site and there is no nesting habitat on the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Golden eagle *Aquila chrysaetos*	—	FP	Broadleaved upland forest, cismontane woodland, coastal prairie, Great Basin grassland, Great Basin scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forest, and valley and foothill grassland. Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. May desert nest in early incubation if disturbed by humans. Needs open terrain for hunting.	May occur. The yearlong range of golden eagle overlaps the project site. This species has been observed less than 1 mile southwest of the project site along the Truckee River and 1.1 miles southeast of the project site at Martis Lake (eBird 2025a). Nesting is not likely on the project site because it is a developed site with a high level of human disturbance and does not contain preferred cliff habitat; however, the disturbance zone for nesting golden eagle is a 1-mile radius around each nest site and this species could nest within 1 mile of the project site.
Long-eared owl *Asio otus*	—	SSC	Riparian habitat required. Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. Usually hunts in open areas, occasionally in woodland and forested habitats.	May occur. The yearlong range of long-eared owl overlaps the project site. Riparian habitat suitable for this species is not present on the project site, though it may be present along the Truckee River, which is less than 200 feet northwest of the project site.
American goshawk *Astur atricapillus*	—	SSC	Nests primarily in conifer forest and aspen stands with high canopy closure (typically greater than 70 percent), relatively high density of large live and dead trees, low density of small trees, and low shrub/sapling and ground cover. Reuses old nests and maintains alternate nest sites. Often nests on gentle to moderate north slopes and near water. Forages in moderately dense, mature forests and younger forests, some openings, and along forest edges. Usually nests on north slopes, near water. California red fir (*Abies magnifica*), lodgepole pine (*Pinus contorta* ssp. *murrayana*), Jeffrey pine (*Pinus jeffreyi*), and quaking aspen (*Populus tremuloides*) are typical nest trees.	Not expected to occur. The yearlong range of American goshawk overlaps the project site; however, forest habitat with at least 70 percent canopy cover suitable for this species is not present on or adjacent to the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Olive-sided flycatcher *Contopus cooperi*	—	SSC	Lower montane coniferous forest, redwood, upper montane coniferous forest. Nesting habitats are mixed conifer, montane hardwood-conifer, Douglas fir, redwood, red fir and lodgepole pine. Most numerous in montane conifer forests where tall trees overlook canyons, meadows, lakes or other open terrain. Sallies out for flying insects over forest canopy or adjacent meadows, clearings, or shrub-covered slopes in wide-ranging flights from high, conspicuous perches. Favors honeybees.	May occur. The breeding range of olive-sided flycatcher overlaps the project site. This species has been observed 0.2 miles northwest and 0.2 miles west of the project site (eBird 2025b). Conifer habitat suitable for this species is present on and adjacent to the project site.
Black swift *Cypseloides niger*	—	SSC	Coastal belt of Santa Cruz and Monterey Counties; central and southern Sierra Nevada; San Bernardino and San Jacinto Mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely	Not expected to occur. The range of black swift does not overlap the project site.
Willow flycatcher *Empidonax traillii*	—	SE	In the Sierra Nevada, suitable habitat typically consists of montane meadows that support riparian deciduous shrubs (particularly willows) and remain wet through the nesting season (i.e., midsummer). Important characteristics of suitable meadows include a high-water table that results in standing or slow-moving water, or saturated soils (e.g., "swampy" conditions) during the breeding season; abundant riparian deciduous shrub cover (particularly willow); and riparian shrub structure with moderate to high foliar density that is uniform from the ground to the shrub canopy. Most breeding occurrences are in meadows larger than 19 acres, but the average size of occupied meadows is approximately 80 acres. Although less common in the Sierra Nevada, riparian habitat along streams also can function as suitable habitat for willow flycatcher. However, those areas must support the hydrologic and vegetation characteristics described for suitable meadows (e.g., standing or slow-moving water, and abundant and dense riparian vegetation).; 2,000-8,000 feet elevation.	Not expected to occur. The breeding range of willow flycatcher overlaps the project site and this species has been observed less than 1 mile southeast of the project site and 1.2 miles southeast of the project site at Martis Lake (eBird 2025a). Nonetheless, the specific habitat requirements for this species are not found on or in proximity to the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Bald eagle *Haliaeetus leucocephalus*	FD	SE; FP	Lower montane coniferous forest, old growth. Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter. Usually does not begin nesting if human disturbance is evident. The disturbance zone for nesting bald eagle is a 0.25-mile radius around each nest site.	May occur. The yearlong range of bald eagle overlaps the project site. This species has been observed less than 0.5 miles and 0.6 miles northeast of the project site along the Truckee River (eBird 2025a). Conifer habitat suitable for bald eagle is on and adjacent to the project site, though this species is more likely to be present adjacent to the project site, closer to the Truckee River, which is less than 200 feet northwest of the project site. Nesting is unlikely on the project site itself, since bald eagle usually does not begin nesting if human disturbance is evident; however, this species could nest within 0.25 miles of the project site.
California condor *Gymnogyps californianus*	FE	SE; FP	Chaparral, valley and foothill grassland. Require vast expanses of open savannah, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Not expected to occur. The range of California condor does not overlap the project site.
California spotted owl *Strix occidentalis occidentalis*	FP	SSC	Broadleaved upland forest, lower montane coniferous forest, and upper montane coniferous forest. Mixed conifer forest, often with an understory of black oaks and other deciduous hardwoods. Canopy closure greater than 40 percent. Most often found in deep-shaded canyons, on north-facing slopes, and within 984 feet (300 meters) of water.	Not expected to occur. The range of California spotted owl does not overlap the project site.
Great gray owl *Strix nebulosa*	—	SE	Lower montane coniferous forest, old growth, subalpine coniferous forest, upper montane coniferous forest. Resident of late-successional coniferous forests bordering large meadows. Requires large diameter snags in a forest with high canopy closure, which provide a cool sub-canopy microclimate.	Not expected to occur. The yearlong range of great gray owl overlaps the project site; however, late-successional forest habitat and large meadows are not present on or adjacent to the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Yellow warbler *Setophaga petechia*	—	SSC	Riparian forest, riparian scrub, riparian woodland. Riparian plant associations in proximity to water. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods (*Populus* spp.), western sycamores (*Platanus racemosa*), ash (*Fraxinus* spp.), and alders (*Alnus* spp.). Also nests in montane shrubbery in open conifer forests with substantial amounts of shrub cover in Cascades and Sierra Nevada.	May occur. The breeding range of yellow warbler overlaps the project site. This species has been observed less than 0.3 miles northeast of the project site along the Truckee River and less than 0.3 miles north of the project site (eBird 2025a). Conifer habitat suitable for yellow warbler is on and adjacent to the project site. Although, there are minimal patches on the project site with substantial amounts of shrub cover. Therefore, this species is more likely to nest adjacent to the project site in the conifer habitat along the Truckee River, which is less than 200 feet northwest of the project site.
Fish				
Lahontan mountain sucker *Catostomus lahontan*	—	SSC	Occur in the Walker, Carson, Truckee and Susan river drainages of the Lahontan basin in the eastern Sierra Nevada, but not in the Eagle Lake basin. Also found in the North Fork Feather River drainage, mainly in Red Clover Creek. Found in shallow (less than 6.6 feet [2 meters]), clear, low-gradient streams; associated with diverse substrates, from sand to boulders, in areas with dense cover. Have been found in streams at elevations up to 9,186 feet (2,800 meters) and at temperatures of 1–25 °C.	Not expected to occur. Stream habitat suitable for Lahontan mountain sucker is not present on the project site.
Lahontan cutthroat trout *Oncorhynchus clarkii henshawi*	FT	—	Great Basin flowing waters. Historically in all accessible cold waters of the Lahonton Basin in a wide variety of water temperatures and conditions. Cannot tolerate presence of other salmonids. Requires gravel riffles in streams for spawning.	Not expected to occur. Stream habitat suitable for Lahontan cutthroat trout is not present on the project site.
Mountain whitefish *Prosopium williamsoni*	—	SSC	Mountain whitefish in California inhabit clear, cold streams and rivers at elevations of 4,590–7,550 feet. While they are known to occur in a few natural lakes (e.g. Tahoe), there are few records from reservoirs. In streams, they are generally associated with large pools (less than 3.3 feet [1 meter] deep) or deep runs. In lakes, they typically live close to the bottom in fairly deep water although they will move into shallows during spawning season.	Not expected to occur. Stream habitat suitable for mountain whitefish is not present on the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Lahontan Lake tui chub *Siphateles bicolor pectinifer*	—	SSC	Great Basin standing waters. Inhabits large, deep lakes. Tolerates a wide range of physiochemical water conditions. Spawns in near-shore shallow areas over beds of aquatic vegetation.	Not expected to occur. Lake habitat suitable for Lahontan Lake tui chub is not present on the project site.
Invertebrates				
Western bumble bee *Bombus occidentalis*	—	SC	Once common throughout much of its range, in California, this species is currently largely restricted to high elevation sites in the Sierra Nevada and the northern California coast. Habitat includes open grassy areas, chaparral, scrub, and meadows. Requires suitable nesting sites for the colonies, availability of nectar and pollen from floral resources throughout the duration of the colony period (spring, summer, and fall), and suitable overwintering sites for the queens.	May occur. The range of western bumble bee overlaps the project site. Floral resources on the project site provide a potential food source for this species and open grassy areas within conifer habitat on the project site may provide nesting habitat suitable for this species.
Monarch *Danaus plexippus*	FP	—	Habitat requirements include host plants for larvae (primarily milkweeds [*Asclepias* spp.]); adult nectar sources (i.e., flowering plants); and sites for roosting, thermoregulation, mating, hibernation, and predator escape. Additionally, monarch butterfly requires conditions and resources for initiating and completing migration both to and from winter roosting areas. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts are located in wind-protected tree groves, with nectar and water sources nearby.	May occur. The project site is within the monarch summer breeding zone (Xerces Society et al. 2024). Floral resources on the project site provide a potential food source for this species and the project site could also contain milkweed plants. This species has been observed less than 0.5 miles west of the project site (iNaturalist 2025).
Mammals				
Pallid bat *Antrozous pallidus*	—	SSC	Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Tree roosting has also been documented in large conifer snags, inside basal hollows of redwoods and giant sequoias, and bole cavities in oaks. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Not expected to occur. The range of pallid bat overlaps the project site. However, roosting habitat with low human disturbance that would provide habitat suitable for this species is not present on or adjacent to the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Sierra Nevada mountain beaver *Aplodontia rufa californica*	—	SSC	Riparian forest, riparian scrub, riparian woodland. Dense growth of small deciduous trees and shrubs, wet soil, and abundance of forbs in the Sierra Nevada and east slope. Needs dense understory for food and cover. Burrows into soft soil. Needs abundant supply of water.	Not expected to occur. The range of Sierra Nevada mountain beaver overlaps the project site. The Truckee River is less than 200 feet from the project site. However, there is no riparian habitat or dense understory suitable for this species on the project site.
Northern California ringtail *Bassariscus astutus raptor*	—	FP	Riparian habitats, forest habitats, and shrub habitats in lower to middle elevations. Dens most often in rock crevices, boulder piles, or talus, but also tree hollows, root cavities, and rural buildings. Rarely use the same den for more than a few days. Females with litters change dens within 10 days of birth and almost daily after 20 days.	May occur. The range of ringtail overlaps the project site. Conifer habitat suitable for this species is present on the project site.
Gray wolf *Canis lupus*	FE	SE	Habitat generalists, historically occupying diverse habitats including tundra, forests, grasslands, and deserts. Primary habitat requirements are the presence of adequate ungulate prey, water, and low human contact.	Not expected to occur. The range of gray wolf overlaps the project site. However, habitat with low human contact suitable for this species is not present on the project site.
Townsend's big-eared bat *Corynorhinus townsendii*	—	SSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Requires large cavities for roosting, which may include abandoned buildings and mines, caves, and basal cavities of trees. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	Not expected to occur. The range of Townsend's big-eared bat overlaps the project site. However, roosting habitat with low human disturbance suitable for this species is not present on or adjacent to the project site.
North American wolverine *Gulo gulo luscus*	FT	ST; FP	Found in the north coast mountains and the Sierra Nevada. Found in a wide variety of high elevation habitats. Needs water source. Uses caves, logs, burrows for cover and den area. Hunts in more open areas. Can travel long distances. Prefer areas with low human disturbance.	Not expected to occur. The range of wolverine overlaps the project site. However, habitat with low human disturbance suitable for this species is not present on the project site.
Sierra Nevada snowshoe hare *Lepus americanus tahoensis*	—	SSC	Boreal riparian areas in the Sierra Nevada. Thickets of deciduous trees in riparian areas and thickets of young conifers.	Not expected to occur. The range of Sierra Nevada snowshoe hare overlaps the project site. Although, riparian areas and thickets of young conifer habitat suitable for this species are not present on the project site.

Species	Federal Status[1]	State Status[1]	Habitat	Potential for Occurrence
Western white-tailed jackrabbit *Lepus townsendii townsendii*	—	SSC	Sagebrush, subalpine conifer, juniper, alpine dwarf shrub and perennial grassland. Open areas with scattered shrubs and exposed flat-topped hills with open stands of trees, brush and herbaceous understory.	Not expected to occur. The range of western white-tailed jackrabbit overlaps the project site. However, open area habitat with scattered shrubs and exposed flat-topped hills suitable for this species is not present on the project site.
Fisher *Pekania pennanti*	—	SSC	North coast coniferous forest, old growth, riparian forest. Intermediate to large-tree stages of coniferous forests and deciduous-riparian areas with high percent canopy closure. Uses cavities, snags, logs and rocky areas for cover and denning. Needs large areas of mature, dense forest.	Not expected to occur. The yearlong range of fisher overlaps the project site; however, forest habitat with high percent canopy cover suitable for this species is not present on the project site.
American badger *Taxidea taxus*	—	SSC	Most commonly found in treeless areas including tallgrass and shortgrass prairies, grass-dominated meadows and fields within forested habitats, and shrub-steppe communities. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not expected to occur. The range of American badger overlaps the project site. However, treeless burrowing habitat suitable for this species is not present on the project site
Sierra Nevada red fox Sierra Nevada DPS (pop. 2) *Vulpes vulpes necator*	FE	ST	Use multiple habitat types in the alpine and subalpine zones including high-elevation conifer habitats, as well as meadows and fell-fields; typically in areas of heavy snow cover. Generally, above 3,900 feet (1,200 meters).	Not expected to occur. This species has documented occurrences northwest of the project site along State Route 89 and in Euer Valley, though both of these occurrences are presumed extirpated (CNDDB 2025). In addition, sightings of the Sierra Nevada distinct population unit (DPS) has been limited to Alpine, Fresno, Inyo, Madera, Mono, and Tuolumne counties (USFWS n.d.).

Notes: CEQA = California Environmental Quality Act; CNDDB = California Natural Diversity Database; DPS = distinct population segment.

[1] Legal Status Definitions

Federal:
FE Endangered (legally protected)
FT Threatened (legally protected)
FP Federally proposed for listing (no formal protection other than CEQA consideration)
FD Federally delisted

State:
SE Endangered (legally protected)
ST Threatened (legally protected)
SC State candidate for listing (legally protected)
FP Fully protected (legally protected)
SSC Species of special concern (no formal protection other than CEQA consideration)

Sources: CNDDB 2025; eBird 2025a; eBird 2025b; iNaturalist 2025; USFWS 2025; USFWS n.d; Xerces Society et al. 2024.

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Appendix C

Noise Data

Construction Equipment Average Noise Levels

Project Name: TTSA Digestion

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (dBA L_{eq})
Thresholds		
Daytime Standard		
Evening Standard		
Nighttime Standard		
Sensitive Receptors		
Residence 1	1600	38.8
Residence 2		
Residence 3		

Equipment[1]	Reference Emission Noise Levels (dBA L_{max}) at 50 feet[2]	Usage Factor[2]
Crane	81	0.2
Excavator	81	0.4

Ground Type	Soft
Source Height	8
Receiver Height	5
Ground Factor[3]	0.63

Predicted Noise Level [4]	dBA L_{eq} at 50 feet[4]
Crane	73.0
Excavator	77.0

Combined Predicted Noise Level (dBA L_{eq} at 50 feet)
78.5

Sources:

[1] Where measured values are not available, noise levels based on the Construction Noise Control Specifiction 721.560 were used.

[2] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[3] Based on Figure 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[4] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Construction Equipment Maximum Noise Levels

Project Name: TTSA Digestion

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Location	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (dBA L_{max})
Thresholds		
Daytime Standard		
Nighttime Standard		
Sensitive Receptors		
Residence 1	1600	44.4
Residence 2		

Equipment[1]	Reference Emission Noise Levels (dBA L_{max}) at 50 feet[2]
Crane	81
Excavator	81

Ground Type	Soft
Source Height	8
Receiver Height	5
Ground Factor[3]	0.63

Predicted Noise Level [3]	dBA L_{max} at 50 feet[3]
Crane	81.0
Excavator	81.0

Combined Predicted Noise Level (dBA L_{max} at 50 feet)
84.0

Sources:

[1] Where measured values are not available, noise levels based on the Construction Noise Control Specifiction 721.560 were used.

[2] Based on Figure 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor, assumed to be 1 for the purposes of the calculation of maximum noise levels;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Equipment Description	Acoustical Usage Factor (%)	Spec 721.560 Lmax @ 50ft (dBA slow)	Actual Measured Lmax @ 50ft (dBA slow)	No. of Actual Data Samples (count)	Spec 721.560 LmaxCalc	Spec 721.560 Leq	Distance	Actual Measured LmaxCalc	Actual Measured Leq
Auger Drill Rig	20	85	84	36	79.0	72.0	100	78.0	71.0
Backhoe	40	80	78	372	74.0	70.0	100	72.0	68.0
Bar Bender	20	80	80	0	74.0	67.0	100		
Blasting	100	94	94	0	88.0		100		
Boring Jack Power Unit	50	80	83	1	74.0	71.0	100	77.0	74.0
Chain Saw	20	85	84	46	79.0	72.0	100	78.0	71.0
Clam Shovel (dropping)	20	93	87	4	87.0	80.0	100	81.0	74.0
Compactor (ground)	20	80	83	57	74.0	67.0	100	77.0	70.0
Compressor (air)	40	80	78	18	74.0	70.0	100	72.0	68.0
Concrete Batch Plant	15	83	83	0	77.0	68.7	100		
Concrete Mixer Truck	40	85	79	40	79.0	75.0	100	73.0	69.0
Concrete Pump Truck	20	82	81	30	76.0	69.0	100	75.0	68.0
Concrete Saw	20	90	90	55	84.0	77.0	100	84.0	77.0
Crane	16	85	81	405	79.0	71.0	100	75.0	67.0
Dozer	40	85	82	55	79.0	75.0	100	76.0	72.0
Drill Rig Truck	20	84	79	22	78.0	71.0	100	73.0	66.0
Drum Mixer	50	80	80	1	74.0	71.0	100	74.0	71.0
Dump Truck	40	84	76	31	78.0	74.0	100	70.0	66.0
Excavator	40	85	81	170	79.0	75.0	100	75.0	71.0
Flat Bed Truck	40	84	74	4	78.0	74.0	100	68.0	64.0
Front End Loader	40	80	79	96	74.0	70.0	100	73.0	69.0
Generator	50	82	81	19	76.0	73.0	100	75.0	72.0
Generator (<25KVA, VMS signs)	50	70	73	74	64.0	61.0	100	67.0	64.0
Gradall	40	85	83	70	79.0	75.0	100	77.0	73.0
Grader	40	85	85	0	79.0	75.0	100		
Grapple (on Backhoe)	40	85	87	1	79.0	75.0	100	81.0	77.0
Horizontal Boring Hydr. Jack	25	80	82	6	74.0	68.0	100	76.0	70.0
Hydra Break Ram	10	90	90	0	84.0	74.0	100		
Impact Pile Driver	20	95	101	11	89.0	82.0	100	95.0	88.0
Jackhammer	20	85	89	133	79.0	72.0	100	83.0	76.0
Man Lift	20	85	75	23	79.0	72.0	100	69.0	62.0
Mounted Impact Hammer (hoe ram)	20	90	90	212	84.0	77.0	100	84.0	77.0
Pavement Scarafier	20	85	90	2	79.0	72.0	100	84.0	77.0
Paver	50	85	77	9	79.0	76.0	100	71.0	68.0
Pickup Truck	40	55	75	1	49.0	45.0	100	69.0	65.0
Pneumatic Tools	50	85	85	90	79.0	76.0	100	79.0	76.0
Pumps	50	77	81	17	71.0	68.0	100	75.0	72.0
Refrigerator Unit	100	82	73	3	76.0	76.0	100	67.0	67.0
Rivit Buster/chipping gun	20	85	79	19	79.0	72.0	100	73.0	66.0
Rock Drill	20	85	81	3	79.0	72.0	100	75.0	68.0
Roller	20	85	80	16	79.0	72.0	100	74.0	67.0
Sand Blasting (Single Nozzle)	20	85	96	9	79.0	72.0	100	90.0	83.0
Scraper	40	85	84	12	79.0	75.0	100	78.0	74.0
Shears (on backhoe)	40	85	96	5	79.0	75.0	100	90.0	86.0
Slurry Plant	100	78	78	1	72.0	72.0	100	72.0	72.0
Slurry Trenching Machine	50	82	80	75	76.0	73.0	100	74.0	71.0
Soil Mix Drill Rig	50	80	80	0	74.0	71.0	100		
Tractor	40	84	84	0	78.0	74.0	100		
Vacuum Excavator (Vac-truck)	40	85	85	149	79.0	75.0	100	79.0	75.0
Vacuum Street Sweeper	10	80	82	19	74.0	64.0	100	76.0	66.0
Ventilation Fan	100	85	79	13	79.0	79.0	100	73.0	73.0
Vibrating Hopper	50	85	87	1	79.0	76.0	100	81.0	78.0
Vibratory Concrete Mixer	20	80	80	1	74.0	67.0	100	74.0	67.0
Vibratory Pile Driver	20	95	101	44	89.0	82.0	100	95.0	88.0
Warning Horn	5	85	83	12	79.0	66.0	100	77.0	64.0
Welder / Torch	40	73	74	5	67.0	63.0	100	68.0	64.0

Attenuation Calculations for Stationary Noise Sources

KEY: Orange cells are for input.
Grey cells are intermediate calculations performed by the model.
Green cells are data to present in a written analysis (output).

Project Name: T-TSA Digester

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
Linear Generator	51.7	@	50	soft	3	5	0.60	11.9	@	1700
Waste Heat Radiator	64.0	@	50	soft	3	5	0.60	24.2	@	1700
Hydronic Boiler	52.3	@	50	soft	3	5	0.60	12.5	@	1700
Comfort Heating System	87.0	@	50	soft	3	5	0.60	47.2	@	1700
Combined Noise Levels (i.e. Linear Generator, Waste Heat Radiator, Hydronic Boiler, and Comfort	87.0	@	50	soft	3	5	0.60	47.2	@	1700

Notes:
Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presentd in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:
Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: <http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf>Accessed: March 5, 2020.