PUBLIC REVIEW DRAFT

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

BIG SANDY RANCHERIA WASTEWATER SYSTEM IMPROVEMENTS PROJECT

FRESNO COUNTY, CALIFORNIA

LSA

August 2024

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BIG SANDY RANCHERIA WASTEWATER SYSTEM IMPROVEMENTS PROJECT

FRESNO COUNTY, CALIFORNIA

Submitted to:

State Water Resources Control Board
Division of Financial Assistance
1001 I Street
Sacramento, California 95814

Prepared by:

LSA
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Project No. MKN2001

LSA

August 2024

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LIST OF ABBREVIATIONS AND ACRONYMS

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ADF	average daily flow
APE	Area of Potential Effects
AQMP	Air Quality Management Plan
BMPs	best management practices
BOD5	5-day biochemical demand
BPS	best performance standards
BSA	Biological Study Area
BSR	Big Sandy Rancheria
BTU	British thermal units
C&D	construction and demolition
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAP	Control District Climate Change Action Plan
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission

CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFGC	California Fish and Game Code
CGP	Construction General Permit
CH_4	methane
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
CNDDB	California Natural Diversity Database
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
COG	Council of Governments
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CUPS	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted sound level
DOC	Department of Conservation
DOT	United States Department of Transportation
DTSC	California Department of Toxic Substances Control
ESA	environmentally sensitive area
EO	Executive Order
FCFPD	Fresno County Fire Protection District
FEMA	Federal Emergency Management Agency
FESA	federal Endangered Species Act
FHWA	Federal Highway Administration
FIRMs	Flood Insurance Rate Maps
FMMP	Farmland Monitoring and Mapping Program

GAMAQI	Guide for Assessing and Mitigating Air Quality Impacts
GHG	greenhouse gas emissions
GHGRx	Greenhouse Gas Reduction Exchange
gpd	gallons per day
gpm	gallons per minute
GWP	Global Warming Potential
HCP	Habitat Conservation Plan
HFCs	hydrofluorocarbons
HMBP	Hazardous Materials Business Plan
HPIR	Historic Property Identification Report
IPaC	Information, Planning, and Consultation
LAMP	Local Agency Management Plan
LBP	lead-based paint
L_{dn}	average level
L_e	sound level
LOS	level of service
L_{max}	noise levels
LS-1	Lift Station 1
LS-2	Lift Station 2
MBTA	Migratory Bird Treaty Act
mg/L	milligrams per liter
MLD	Most Likely Descendant
MMT	million metric tons
MPOs	Metropolitan Planning Organization
MRZs	Mineral Resource Zones
MW	megawatt
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NF_3	nitrogen trifluoride
NHPA	National Historic Preservation Act

NHTSA	National Highway Traffic Safety Administration
NMFS	National Marine Fisheries Service
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System
O&M	operation and maintenance
O_3	ozone
OPR	Office of Planning and Research
OWTS	Onsite Wastewater Treatment Systems
Pb	lead
PCBs	polychlorinated biphenyls
PFCs	perfluorocarbons
PG&E	Pacific Gas and Electric
PHF	peak hourly flow
PM_{10}	particulate matter
$PM_{2.5}$	fine particulate matter
ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
project	Big Sandy Rancheria Wastewater System Improvements Project
PVC	polyvinyl chloride
RC	Resource Conservation
RCRA	Resource Conservation and Recovery Act
ROG	reactive organic gases
RSP	Renewables Portfolio Standard
SB	Senate Bill
SCS	Sustainable Communities Strategy
SDC	Seismic Design Category
SF_6	sulfur hexafluoride
SFHAs	Special Flood Hazard Areas
SHMA	Seismic Hazard Mapping Act
SJVAB	San Joaquin Valley Air Basin

SJVAPCD	San Joaquin Valley Air Pollution Control District
SLF	Sacred Lands File
SMARA	Surface Mining and Reclamation Act
SO_2	sulfur dioxide
SR	State Route
SSJVIC	Southern San Joaquin Valley Information Center
State	State of California
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	toxic air contaminants
TCR	tribal cultural resource
TDH	total dynamic head
TMDL	total maximum daily load
TSCA	Toxic Substances Control Act
TSS	total suspended solids
UBC	Uniform Building Code
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USTs	underground storage tanks
VHFHSZ	Very High Fire Hazard Severity Zone
VMT	vehicle miles traveled
WDRs	Waste Discharge Requirements
WWTP	wastewater treatment plant
ZEVs	zero-emission vehicles
ZNE	zero net energy

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1.0 PROJECT INFORMATION

1. **Project Title:**

   Big Sandy Rancheria Wastewater System Improvements Project

2. **Lead Agency Name and Address:**

   State Water Resources Control Board
   Division of Financial Assistance
   1001 I Street
   Sacramento, California 95814

3. **Contact Person and Phone Number:**

   Brian Cary, Senior Environmental Scientist, Clean Water Environmental Review Unit
   (916) 449-5624

4. **Project Location:**

   Big Sandy Rancheria, approximately one mile east of Auberry in eastern Fresno County.

5. **Project Sponsor's Name and Address:**

   Big Sandy Rancheria
   37387 Auberry Mission Road
   Auberry, California 93602

6. **Zoning:**

   Resource Conservation (RC) 40 Zoning District of Fresno County

7. **Description of Project:**

   The following describes the proposed Big Sandy Rancheria Wastewater System Improvements Project (project). The project would include the construction and operation of a new wastewater treatment plant (WWTP) and associated wastewater collection system within the Big Sandy Rancheria (BSR). This section includes a summary description of the project's location, existing site characteristics, and required approvals.

   The Big Sandy Rancheria of Mono Indians of California (Big Sandy Rancheria) is a rancheria and federally recognized tribe of Western Mono Indians (Monache). The State Water Resources Control Board (SWRCB) Division of Financial Assistance is the lead agency for review of the project under the California Environmental Quality Act (CEQA). The CEQA documentation for the proposed project is funded in part via the Clean Water State Revolving Fund, which is administered by the SWRCB. An Initial Study for this project was previously circulated for a 30-day public review on October 29, 2021 (State Clearinghouse No. 2021100580). This Initial Study reflects minor project clarifications and is being recirculated for public review with the SWRCB serving as the lead agency.

For the purpose of describing the proposed project, the project site consists of the area in which the following components would be located: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and two lift stations that would accommodate 57 service connections; 3) abandonment of 56 existing septic systems; and 4) electrical improvements to facilitate the new components. Collectively, these components are referred to as the proposed project and are located within the BSR.

Project Site

This section describes the location and characteristics of the project site and provides a brief overview of the existing land uses within and in the vicinity of the project site. The Big Sandy Rancheria plans to make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including 57 service connections to the following:

- 47 residential structures
- Mono Wind Casino
- General Store and Gas Station
- Gaming Commission Building
- Family Services Center
- Emergency Services Building
- Cemetery
- Gymnasium
- Tribal Administration Buildings (x2)
- Head Start Center

Location

The project site is approximately 18.2 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The BSR is located approximately 20 miles northeast of the Fresno-Clovis metropolitan area. Regional access to the BSR is made through State Route (SR) 168 and Auberry Road. Figure 1 shows the location of the BSR and the regional context. Figure 2 shows the project site location and proposed project. Figure 3 shows the property ownership associated with the project site.

Site Characteristics and Current Site Conditions

The project site is characterized by uneven topography, typical of the Sierra Nevada foothills. The project site is generally bisected by a dry creek bed (Backbone Creek) with flow only during large rain events (Figure 2). The project site generally slopes from south to north and encompasses residential and commercial properties currently being served by septic systems.

Within the northern portion of the BSR, is an undeveloped 71-acre area referred to as the Comstock property. A portion of this property, which is shown as Parcel 1 (Assessor's Parcel Number 128-031-30T) on Figure 3, is located within the project site.

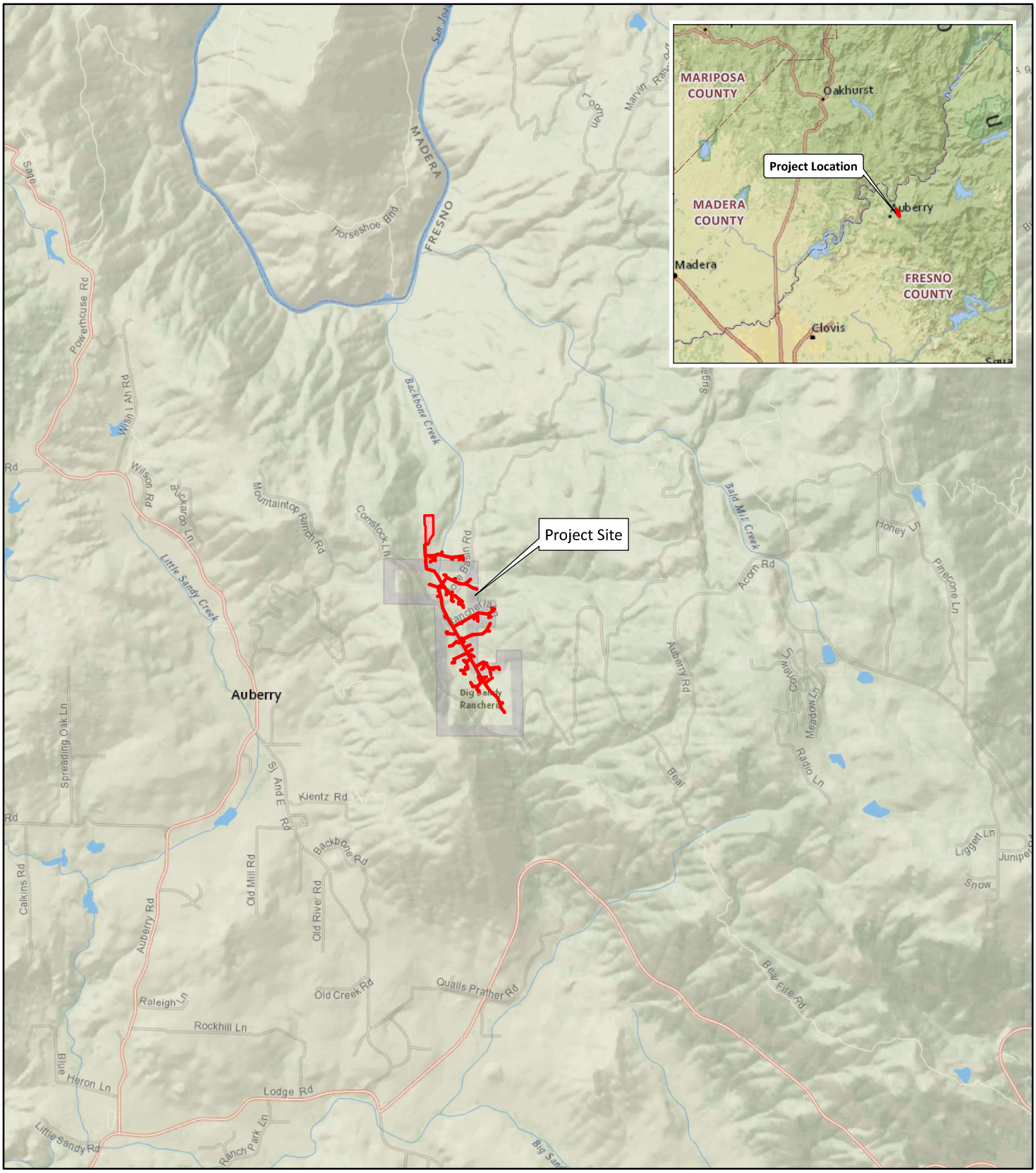

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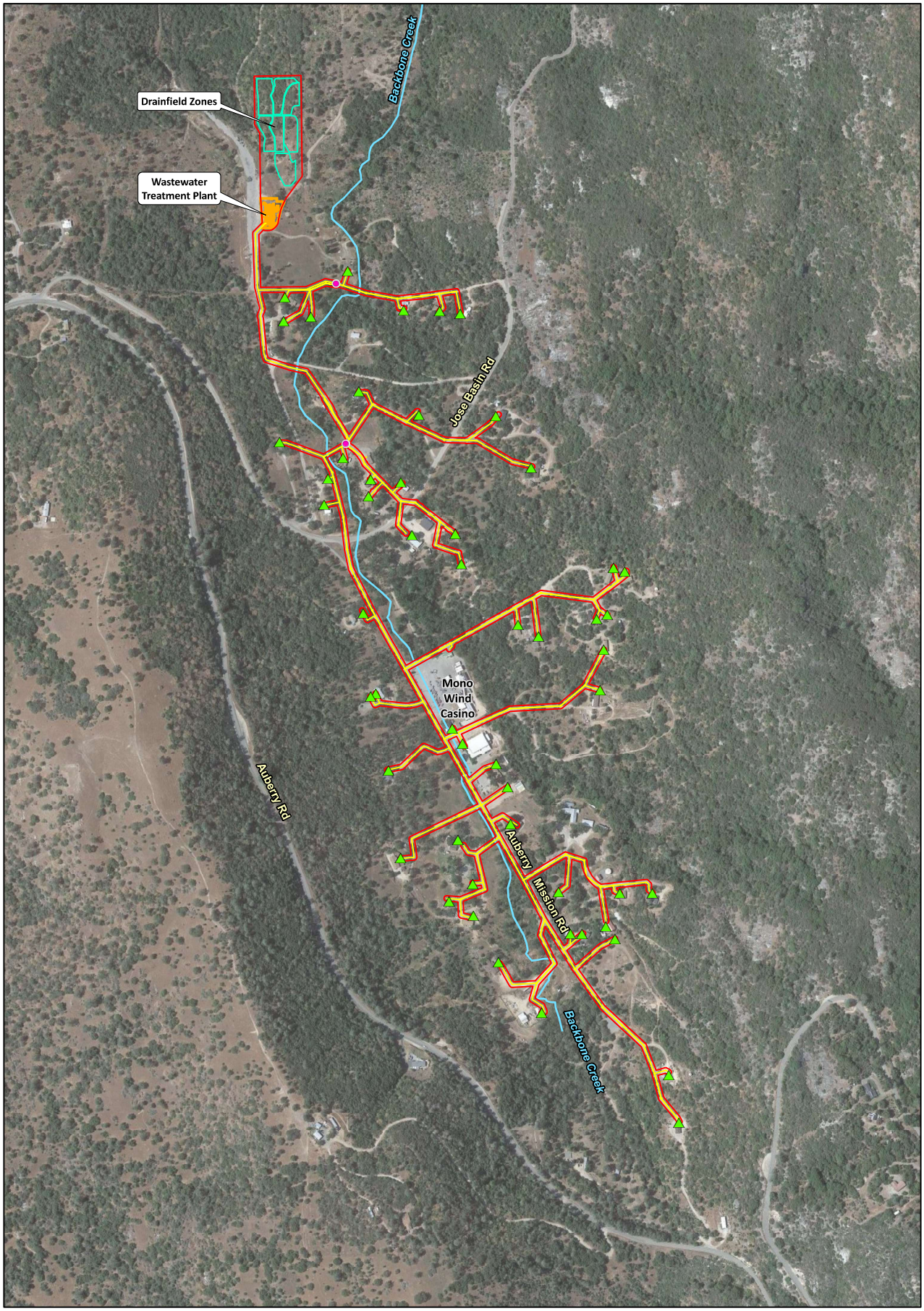
FIGURE 1

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California
Project Location and Vicinity

SOURCE: MKN (06/2023); National Geographic World Map (2023).

I:\MKN2001-ROS\GIS\Reports\IS-MND\Figure 1_Project Location and Vicinity.mxd (11/9/2023)



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LEGEND

- Project Area (18.2 acres)
- Existing Septic Tank
- Backbone Creek
- New Wastewater Treatment Plant
- New Sanitary Sewer Lines
- New Drainfield Zones
- New Lift Station

0 250 500
FEET

FIGURE 2

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California

Proposed Project

SOURCE: MKN Associates (06/2023); USGS NHD (2020); Aerial Imagery from Google Maps (2023).

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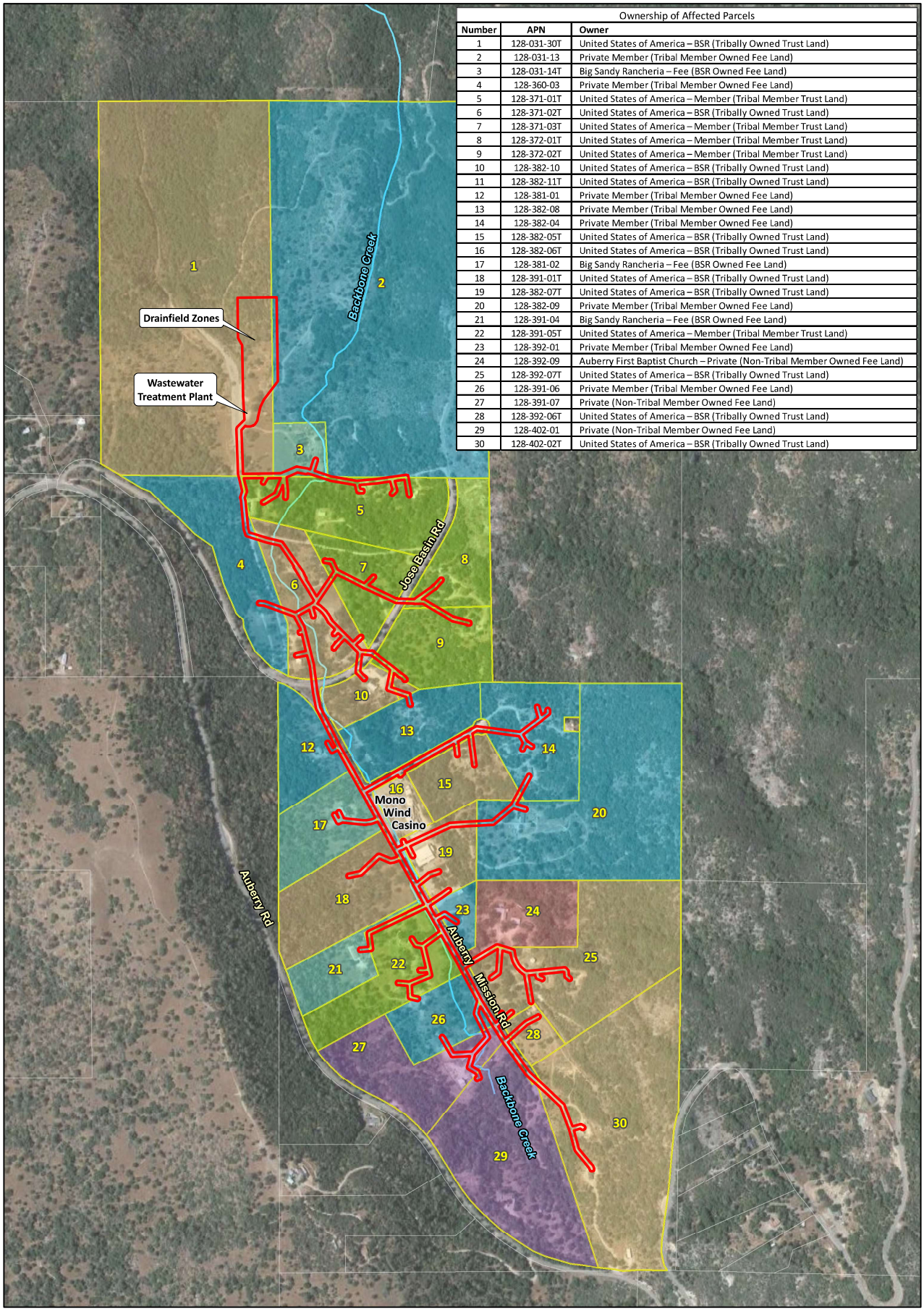

Ownership of Affected Parcels

Number	APN	Owner
1	128-031-30T	United States of America – BSR (Tribally Owned Trust Land)
2	128-031-13	Private Member (Tribal Member Owned Fee Land)
3	128-031-14T	Big Sandy Rancheria – Fee (BSR Owned Fee Land)
4	128-360-03	Private Member (Tribal Member Owned Fee Land)
5	128-371-01T	United States of America – Member (Tribal Member Trust Land)
6	128-371-02T	United States of America – BSR (Tribally Owned Trust Land)
7	128-371-03T	United States of America – Member (Tribal Member Trust Land)
8	128-372-01T	United States of America – Member (Tribal Member Trust Land)
9	128-372-02T	United States of America – Member (Tribal Member Trust Land)
10	128-382-10	United States of America – BSR (Tribally Owned Trust Land)
11	128-382-11T	United States of America – BSR (Tribally Owned Trust Land)
12	128-381-01	Private Member (Tribal Member Owned Fee Land)
13	128-382-08	Private Member (Tribal Member Owned Fee Land)
14	128-382-04	Private Member (Tribal Member Owned Fee Land)
15	128-382-05T	United States of America – BSR (Tribally Owned Trust Land)
16	128-382-06T	United States of America – BSR (Tribally Owned Trust Land)
17	128-381-02	Big Sandy Rancheria – Fee (BSR Owned Fee Land)
18	128-391-01T	United States of America – BSR (Tribally Owned Trust Land)
19	128-382-07T	United States of America – BSR (Tribally Owned Trust Land)
20	128-382-09	Private Member (Tribal Member Owned Fee Land)
21	128-391-04	Big Sandy Rancheria – Fee (BSR Owned Fee Land)
22	128-391-05T	United States of America – Member (Tribal Member Trust Land)
23	128-392-01	Private Member (Tribal Member Owned Fee Land)
24	128-392-09	Auberry First Baptist Church – Private (Non-Tribal Member Owned Fee Land)
25	128-392-07T	United States of America – BSR (Tribally Owned Trust Land)
26	128-391-06	Private Member (Tribal Member Owned Fee Land)
27	128-391-07	Private (Non-Tribal Member Owned Fee Land)
28	128-392-06T	United States of America – BSR (Tribally Owned Trust Land)
29	128-402-01	Private (Non-Tribal Member Owned Fee Land)
30	128-402-02T	United States of America – BSR (Tribally Owned Trust Land)

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LEGEND

- Area of Potential Effects (18.2 acres)
- Affected Parcels
- Other Parcels

Ownership of Affected Parcels

- Big Sandy Rancheria – Fee (BSR Owned Fee Land)
- United States of America – BSR (Tribally Owned Trust Land)
- United States of America – Member (Tribal Member Trust Land)
- Private Member (Tribal Member Owned Fee Land)
- Private (Non-Tribal Member Owned Fee Land)
- Auberry First Baptist Church – Private (Non-Tribal Member Owned Fee Land)

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SOURCE: MKN Associates (06/2023); ParcelQuest (11/2023); Aerial Imagery from Google Maps (2023).

I:\MKN2001-ROS\GIS\Reports\IS-MND\Figure 3_Property Ownership_v2.mxd (1/10/2024)

FIGURE 3

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California

Property Ownership

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The project site includes 56 residences and non-residential buildings that are connected to individual septic tank systems. The locations of septic tanks that would be connected to the wastewater collection system are shown in Figure 2. The existing septic systems have structural damage, are undersized, or are in soils that are not suited for percolation. In addition, some homes do not have acceptable areas for replacement drain field systems, are susceptible to infiltration resulting in ground water or surface water contamination, and are in proximity to drinking water wells.

Proposed Project

This section provides a description of the proposed project as identified in the BSR Wastewater System Improvements Preliminary Engineering Report, dated August 28, 2020 (MKN & Associates 2020). The Big Sandy Rancheria proposes to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. The proposed project is shown in Figure 2.

Wastewater Treatment

Wastewater treatment would consist of two components: treatment of wastewater at a WWTP; and disposal of wastewater through subsurface disposal via drip fields. As shown in Figures 2 and 3, the proposed WWTP would be located in the northern portion of the project site along the entrance road at the southeast end of the Comstock Property. The wastewater treatment system, comprised of a WWTP and treated effluent disposal, is described below.

Wastewater Treatment Plant

The project includes the construction and operation of a packed bed aerobic system that would consist of a reactor with media and an effluent recirculation chamber to keep the media wet. Similar to a biological filtration process, the packed bed would consist of textile-covered plastic media which promotes growth of microorganisms on the surfaces. Such forms of treatment provide a high tolerance for variances in flow while providing stable treatment. Figure 2 shows the location of the proposed WWTP.

Generally, wastewater strength is defined by its five-day biochemical demand (BOD5), total suspended solids (TSS), and nitrogen content. The system would consist of two phases. In the first phase, two 15,000-gallon flow equalization tanks would sequentially provide primary treatment. The influent would then be pumped into the second phase, where flow would be directed to five treatment tanks that would be controlled by a pump station that would adjust the load accordingly to provide a treated effluent. Each of the five treatment tanks would have a forced air venting system to minimize buildup of odorous gases. The tops of all tanks would be 18 inches above final grade. The treated effluent would be less than 10 milligrams per liter (mg/L) of BOD5 and TSS. Finally, the treated effluent would be pumped to the disposal fields that would cover approximately 2 acres of surface area and utilize approximately 43,200 linear feet of drip piping, as described below.

The proposed WWTP would be the Model AX-Max 300-42 AdvanTex Pod to treat the projected wastewater flow. Each AX-Max 300-42 pod is rated for an average wastewater flow of 15,000 gallons per day (gpd) in typical residential wastewater. The AdvanTex system's control panel would be installed inside a new fiberglass control building structure on site.

Six-foot-tall chain link security fencing would be installed around the WWTP perimeter. Three light posts would be located at the southern end of the WWTP and would provide security lighting to be directed down to the proposed WWTP.

The proposed ground disturbance area associated with the WWTP would be approximately 21,000 square feet (approximately 0.5 acre). Land clearing, grading, and earthwork would be conducted throughout the work area, and gravel surfacing would be installed throughout the WWTP site. Approximately four oak trees would be removed as a result of construction of the WWTP.

Treated Effluent Disposal

The proposed project would include a shallow drip distribution system to dispose of treated effluent. Shallow drip distribution systems are used in places where conventional trench systems are not suitable or where steep slopes in heavily forested areas make it difficult to install trenches, mounds, or at-grade systems. Constraints and obstacles such as shallow bedrock, high-water table, and low-permeability soils are less problematic for subsurface drip lines. The proposed drip system would consist of pressurized small-diameter tubing buried below ground, as mandated by regulatory agencies, including integrated emitters with each trickling up to 2 gallons per hour. A minimum 3 feet separation distance between the drip lines and the groundwater table would be maintained.

Given the advantages associated with operating a shallow drip distribution system and low maintenance requirement, subsurface disposal via drip fields is proposed. The geotechnical investigation (Moore Twining 2020) identified areas on the Comstock property with adequate percolation suitable for drip fields. Figure 2 shows the location of the proposed drainfield zones to the north of the WWTP. Subsurface disposal would provide year-round disposal, reduce the potential for contact with wastewater by the public, utilize percolation through the soil to further enhance treatment, and would be simple to operate and cost effective to construct and maintain. Furthermore, compared to a leach field, drip system operation and maintenance costs are lower because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Furthermore, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

The proposed ground disturbance area associated with the drainfield zones would be approximately 82,353 square feet (approximately 1.9 acres). Existing trees and bushes within the drainfield would be cleared as necessary to install the drip field pipe, tubing, and valves. Approximately 66 trees, including approximately 33 oak trees, would be removed to

accommodate the proposed drainfield. Any trees remaining would be protected from construction activity.

Wastewater Collection System

The proposed wastewater collection system would connect the existing residences and non-residential buildings to the proposed WWTP, as shown in Figure 2. The project site includes uneven terrain and wide spacing between potential connections. In designing the proposed wastewater collection system, the following guidelines were considered:

- Avoid trees and vegetation to the maximum extent possible
- Stay in public right-of-way when possible
- Utilize existing easements
- Minimize lift stations
- Avoid inverted siphons

The wastewater collection system would be comprised of gravity sewer lines and lift stations, as described below.

Gravity Sewer Lines

Up to 57 service connections to residences and other buildings would be made with 4-inch polyvinyl chloride (PVC) pipe to the nearest sewer main. The wastewater collection system was designed to avoid as many trees as possible. Approximately 15 trees, including approximately 13 oak trees, would be removed as a result of the construction of the wastewater collection system. Manholes or cleanouts would be located at all alignment changes and would be 48 inches in diameter to allow maintenance access.

The design parameters for the proposed wastewater collection system accounts for the steep terrain and low wastewater flow conditions. The gravity sewer design parameters are summarized in Table A.

Table A: Gravity Sewer Design Parameters

Design Parameter	Requirement
Minimum Gravity Sewer Pipe Diameter	6-inch (4-in laterals)
Gravity Sewer Pipe Material	SDR-35 PVC
Maximum Slope	15 percent (0.150)
Minimum Slope	0.35 percent (0.0035)
Minimum Pipe Depth	4 feet
Maximum Pipe Depth	12 feet
Maximum Manhole Spacing	400 feet

Source: MKN (2020).
PVC = polyvinyl chloride

Lift Stations

The proposed project would include the construction of two lift stations, as shown in Figure 2. Lift Station 1 (LS-1) would be at the northern region of the project site and would convey wastewater flows to the proposed WWTP. Lift Station 2 (LS-2) would be at the north-central region and would pump flows received by most of the gravity system to the WWTP. Each lift station would include a primary pump, backup pump, and force main to connect to the wastewater collection system. The buildout peak flows for each lift station are shown in Table B.

Table B: Lift Station Flows at Buildout

Lift Station Number	Average Daily Flow (gallons per minute)	Peak Hourly Flow (gallons per minute)
LS-1 (North)	1.36	5.44
LS-2 (North-Central)	16.59	66.36

Source: MKN (2020).

Each lift station would include duplex submersible pumps within a wet-well operating in a lead/lag configuration. In this arrangement, one pump would be fully capable of meeting the peak flows to provide 100 percent redundancy, which improves lift station reliability.

To minimize excessive wear on the pumps, each lift station would be sized for a maximum of six pump starts per hour. In the event there is a pump failure, the remaining pump would convey the required flow while the failed pump is repaired or reset. The total dynamic head (TDH) required for each pump is based on the system curve which accounts for friction losses within the system plus the elevation differential between the low level of the wet-well and the discharge point required.

The pumps were selected in conjunction with the force main pipe sizes to maintain a cleaning velocity of at least 3.5 feet per second. Such velocities typically prevent sediment from accumulating at the bottom of the force main. Since the force main piping diameters are generally smaller (2.5 and 5-inches), the proposed lift station pumps would be grinder-type submersibles capable of grinding down larger particles to reduce the potential for clogging. Furthermore, each force main would be constructed without localized high points, eliminating the need for air relief valves.

The proposed ground disturbance area associated with LS-1 and LS-2 would be approximately 625 square feet each. Ground disturbance would consist of site grading and excavation for the pump installation. No trees would be removed. The perimeter of the lift station sites would be paved, and 6-foot-tall chain link fencing would be installed.

Septic Tank Abandonment

Prior to abandoning an existing septic system, a permit would be required from the Fresno County Department of Works and Planning, Development Services and Capital Projects Division.

Following approval from Fresno County, demolition of each of the 56 existing septic systems would include the following:

- **Cap Existing Building Sewer Lines and Pump Remaining Waste from Septic Tank.** Prior to connecting to a public sewer, any abandoned septic tank would be capped within five feet of the property line. A certified septic hauler would pump any remaining waste from each tank.

- **Fill Septic Tank with Approved Materials.** Each tank would be completely filled with earth, gravel, concrete, or other approved materials. Per the County Local Agency Management Plan (LAMP), the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection has been called and the cesspool, septic tank, or seepage pit has been inspected. After such inspection, the cesspool, septic tank, or seepage pit would be filled to the level of the top of the ground.

- **Owner and Permittee Guidelines.** Within 30 days of connecting the building sewer to a public sewer, the permittee making the connection would fill all abandoned facilities in accordance with the County. The property owner would act in accordance with the County LAMP and Onsite Wastewater Treatment Systems (OWTS) Guidelines.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each septic tank. Following abandonment, the Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County.

Electrical Improvements

The electrical improvements required for project construction would include three new electrical supplies. The new services would be located at the wastewater treatment facility and at the two new lift stations. All new conduits and supply connection points are included in the project area shown in Figure 2.

- **Wastewater Treatment Facility (New supply existing meter location).** The supply for the WWTP would be generated by the existing Pacific Gas and Electric (PG&E) utility pole and meter located at Well 7 on the west side of the Comstock Property, approximately 360 feet northwest of the proposed WWTP. The power available is 230-volt, three-phase, and 400 amp.

- **LS-1 (New supply existing meter location).** The supply for LS-1 would be generated by the Brindle Well power pole located approximately 340 feet north of LS-1. The power available is 240-volt single-phase and 100 amp.

- **LS-2 (Existing building with existing meter).** The power for this lift station would be supplied from the existing Well 5 meters. Service is at the Well 5 building approximately 130 feet north of the lift station. This service is 240-volt single-phase.

Construction

Construction of the proposed project, including the WWTP and wastewater collection system, is expected to occur over an estimated 9-month period starting in 2025. Land clearing, grading, and earthwork would be conducted throughout the work area, and approximately 85 trees, including approximately 50 oak trees, would be removed as part of the proposed project. Construction of the WWTP and the wastewater collection system would take place concurrently. Construction staging would occur within the project boundaries shown in Figure 2, with most equipment staging likely occurring on the WWTP site.

8. **Surrounding Land Uses and Setting:**

   Unincorporated forest land, one mile east of Auberry.

9. **Other Public Agencies Whose Approval is Required (e.g., permits, financial approval, or participation agreements):**

   While the SWRCB is the CEQA Lead Agency for the project, other agencies also have discretionary authority related to the project and approvals, or serve as a responsible and/or trustee agency in connection to the proposed project. A list of these agencies and potential permits and approvals that may be required is provided below.

   - Fresno County, encroachment permit
   - PG&E, electricity service
   - United States Army Corps of Engineers, Section 404 permit
   - United States Environmental Protection Agency, Section 401 permit

10. **Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resource Code 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.?**

    The SWRCB consulted with the Big Sandy Rancheria. The results of this consultation are included in Section 3.18, Tribal Cultural Resources.

2.0 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" or "Less Than Significant Impact with Mitigation" as indicated by the checklist in Chapter 3.0.

☐ 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

2.1 DETERMINATION

On the basis of this initial evaluation:

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

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

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

☐ I find that the proposed project MAY have a "Potentially Significant Impact" or "Potentially Significant Unless Mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Brian Cary Digitally signed by Brian Cary Date: 2024.09.04 11:59:21 -07'00'
Water Boards

Brian Cary, Senior Environmental Scientist
State Water Resources Control Board

9/4/24
Date

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3.0 CEQA ENVIRONMENTAL CHECKLIST

3.1 AESTHETICS

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

3.1.1 Impact Analysis

3.1.1.1 Environmental Setting

The project site is approximately 18.2 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The BSR is located approximately 20 miles northeast of the Fresno-Clovis metropolitan area. Regional access to the BSR is via SR 168 and Auberry Road.

The project region lies in the western foothills of central Sierra Nevada. Open space, agriculture, grazing land and recreation are some of the land uses in the region. Mixed oak forests belonging to national and state forests and parks such as the Sierra and Sequoia National Forests and Millerton Lake State Recreation Area are also present in the region. The forested areas transition to rolling terrain to the west near Madera, Clovis, and Sanger, where land uses are mainly urban and agricultural. Population density increases southwest of the project region, towards Fresno and Clovis. Smaller communities in the region include Yosemite Lakes to the north, Auberry to the east, and Friant to the west. Millerton, Bass, Shaver, Pine Flat, Hensley, and H. V. Eastman Lakes are all freshwater, artificial lakes within the project region that support recreational uses. The Chowchilla, Fresno, San Joaquin, and Kings rivers are major waterways in the project region, along with numerous creeks and smaller drainages. The areas surrounding the lakes and waterways are devoted to the tourism industry. Natural landscapes dominate the character of the project region, with a few intermixed rural residential developments.

3.1.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to aesthetics for the proposed project.

State Regulations.

California Department of Transportation (Caltrans) Scenic Highway Program. Caltrans's California Scenic Highway Program was created in 1963, and it maps and describes all scenic highways within the state. The program protects these state scenic highway and adjacent corridors through special conservation treatment. There are no highways in or near the project site that are designated in state plans as scenic highways in need of protection for maintaining and enhancing scenic viewsheds.

California Building Energy Efficiency Standards. Title 24, Part 6 of the California Code of Regulations outlines mandatory provisions for lighting control devices and luminaires for all new developments. This code encourages buildings (both residential and nonresidential) to engage in energy-efficient development strategies.

Local Regulations.

Fresno County General Plan. The General Plan contains policies aimed at preserving scenic views and panoramas and designating and maintaining scenic roadways including highways, scenic drives, and landscaped drives. The following policy included below related to aesthetics would apply to the proposed project (County of Fresno 2000).

- **Policy OS-F.11:** The County shall promote the preservation and management of oak woodlands by encouraging landowners to follow the Fresno County Oak Management Guidelines shown below and to prepare an Oak Management Plan for their property.
    - Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors, and enhance soil and water conservation practices.
    - Avoid tree root compaction during construction by limiting heavy equipment in root zones.
    - Carefully plan roads, cuts, and fills, building foundations, and septic systems to avoid damage to tree roots. Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also, consider reseeding any disturbed ground.
    - Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
    - Consider replacing trees whose removal during construction was avoidable.

- Use fire-inhibiting and drought-tolerant and oak-compatible landscaping wherever possible.

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

Less Than Significant Impact. The project site is characterized by uneven topography, typical of the Sierra Nevada foothills. The project site is generally bisected by a dry creek bed with flow only during large rain events. The project site generally slopes from south to north and encompasses residential and commercial properties currently being served by septic systems.

The proposed project includes the construction and operation of a new WWTP and associated wastewater collection system. None of the visual changes that would result from implementation of the proposed project would result in a substantial adverse effect on a scenic vista. Planned improvements would include 1) the proposed WWTP site 2) proposed wastewater collection pipelines and lift stations 3) abandonment of existing septic systems and 4) electrical improvements to facilitate the new components. The most evident new feature within viewsheds would be the treatment tanks at the WWTP site; however, the treatment tanks would not be of such physical prominence that their presence would significantly affect a scenic vista.

During construction of planned improvements, additional vehicles, workers, and materials coming to and from the site, and site preparation activities would be visible from travelers along adjacent roadways and from adjacent uses. However, construction activities would occur within the BSR and would be intermittent and of relatively short duration.

Planned improvements would not include any tall structures or landscaping that would reduce, obstruct, or degrade scenic vistas. Therefore, the implementation of the proposed project would have a less than significant impact on scenic vistas.

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

Less Than Significant Impact. The Caltrans Landscape Architecture Program administers the Scenic Highway Program, contained in the State Streets and Highways Code, Sections 260–263. State highways are classified as either Eligible for Scenic Designation, Officially Designated, or Connecting Federal Highway. The project site is located approximately 0.6 mile from SR 168. The County's General Plan (County of Fresno 2000) designates portions of SR 168 as a County-designated scenic highway. The portions of SR 168 that are County-designated include the following segments: a proposed scenic highway from Friant-Kern Canal to Lodge Road; a designated scenic highway from Lodge Road to Pineridge; a proposed scenic highway from Pineridge to Huntington Lake Road; and a designated scenic highway from Huntington Lake Road to Huntington Lake. The segment of SR 168 highway from Lodge Road to Pineridge is located approximately 0.6 mile from the project site; however, implementation of the proposed project would include construction and operation of a new WWTP and associated wastewater collection system in an area not visible from SR 168 due to topography. The construction of the proposed project would result in grading activities and tree removal, where necessary; however, due to distance and topography, the proposed project would not result in a substantial adverse effect on a scenic highway. Therefore, the proposed project does

not have the potential to damage scenic resources from designated scenic highways. This impact would be less than significant, and no mitigation is required.

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

Less Than Significant Impact. Implementation of the proposed project could result in the following visual changes: placement of treatment tanks; drip fields; and lift stations; and tree removal. Located within the BSR, the proposed improvements would increase the level of human-made elements on the project site; however, as described above, implementation and operation of the project would not substantially degrade the existing visual character or quality of public views of the project site. Furthermore, the proposed project would not conflict with zoning or other regulations governing scenic quality. This would be a less than significant impact.

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

Less Than Significant Impact. Glare is the result of improperly aimed or blocked lighting sources that are visible against a dark background such as the night sky. Glare may also refer to the sensation experienced looking into an excessively bright light source that causes a reduction in the ability to see or causes discomfort. Glare generally does not result in illumination of off-site locations but results in a visible source of light viewable from a distance.

The proposed project would not result in significant changes to lighting, shadows, or glare. The proposed project would include some exterior security lighting on light posts along the southern end of the WWTP. All exterior lighting would be light-emitting diode fixtures and would comply with Title 24 Part 6 of the California Energy Code. The security lighting would be directed towards the WWTP to avoid the creation of intrusive lighting and glare within the immediate project area. Therefore, light and glare impacts would be considered less than significant.

3.2 AGRICULTURE AND FORESTRY RESOURCES

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on 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 Impact Analysis

3.2.1.1 Environmental Setting

The proposed project is located within the BSR, in eastern Fresno County. According to the Department of Conservation Farmland Mapping Program, Fresno County has approximately 374,567 acres of Prime Farmland, 144,243 acres of Farmland of Statewide Importance, 96,724 acres of Unique Farmland, 29,663 acres of Local Farmland and 308,945 acres of land for cattle grazing. Furthermore, approximately 1,494,454 acres of farmland in the County are under Williamson Act contracts (County of Fresno 2000).

3.2.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to agriculture and forestry resources for the proposed project.

State Regulations.

California Department of Conservation Farmland Mapping and Monitoring Program. In 1982, the Department of Conservation (DOC) began coordinating with the United States Department of Agriculture (USDA) Soil Conservation Service in the preparation and completion of Important Farmland mapping for California through the establishment of the Farmland Mapping and Monitoring Program (FMMP). The FMMP created a greater level of mapping compared to the USDA Soil Conservation Service by modifying the federal criteria for use in California and incorporating irrigation criteria for farmland significance. The primary purpose of the FMMP is

to monitor the conversion of California's agricultural lands. The DOC Division of Land Resource Protection works with landowners, local governments, and researchers to conserve California's farmland and open space resources based on information provided in the FMMP.

The DOC FMMP produces maps and statistical data used for analyzing impacts on agricultural resources. Agricultural land is categorized according to soil quality and irrigation status. The maps are updated every 2 years through review of aerial photographs, a computer mapping system, public review, and field reconnaissance. The FMMP categories are defined as follows:

- **Prime Farmland.** The best combination of physical and chemical features and the ability to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Farmland of Statewide Importance.** Similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

- **Unique Farmland.** Lesser-quality soils used for the production of the state's leading agricultural crops. This land is usually irrigated but may include non-irrigated orchards or vineyards. Land must have been cultivated at some time during the four years prior to the mapping date.

- **Farmland of Local Importance.** Land of importance to the local economy, as defined by each county's local advisory committee and adopted by its board of supervisors. In Fresno County, this refers to all farmable lands in the county that do not meet the definitions of Prime, Statewide, or Unique. This includes land that is or has been used for irrigated pasture, dryland farming, confined livestock and dairy, poultry facilities, aquaculture, and grazing land.

- **Grazing Land.** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities.

- **Urban and Built-Up Land.** Land occupied by structures with a building density of at least 1 unit to 1.5 acres, or approximately 6 structures to a 10-acre parcel. This land is used for residential, industrial, commercial, construction, institutional, public administration, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

- **Other Land.** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow

pits; and waterbodies smaller than 40 acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

California Land Conservation (Williamson) Act. The California Land Conservation Act, better known as the Williamson Act, has been the state's most important agricultural land protection program since its enactment in 1965. Fundamentally, the Williamson Act is a state policy administered by local governments. Local governments are not mandated to administer the act, but those that do have some latitude to tailor the program to suit local goals and objectives.

Williamson Act contracts have a minimum term of 10 years, with renewal occurring automatically each year (local governments can establish initial contract terms for longer periods of time). The contracts run with the land and are binding on all successors in interest of the landowner. Only land located within an agricultural preserve is eligible for Williamson Act contracts. An agricultural preserve defines the boundary of an area within which a city or county would enter into contracts with landowners. The boundary is designated by resolution of the board of supervisors or city council having jurisdiction. The rules of each agricultural preserve specify the uses allowed. Generally, any commercial agricultural uses would be permitted within any agricultural preserve. In addition, local governments may identify compatible uses permitted with a use permit.

Local Regulations. There are no applicable local regulations related to agriculture and forestry resources for the proposed project.

a. Would the project 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. As the project site is located on tribal land held in trust by the federal government, the project site is not mapped by the FMMP. Thus, the project site is not land that is designated as Prime Farmland or Farmland of State Importance. Therefore, implementation of the proposed project would not result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the Fresno County Important Farmland Map, to a non-agricultural use. As such, implementation of the proposed project would result in no impact on agricultural resources.

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

No Impact. The project site is designated within the RC 40 Zoning District of Fresno County. The project site is not zoned for agricultural uses and is not enrolled in a Williamson Act Contract. Therefore, the proposed project would have no impact on zoning designations for agricultural and farmland use or land currently under a Williamson Act contract.

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

Less Than Significant Impact with Mitigation. The project site is not zoned for, nor would it require the rezoning of, any existing parcels or land use designations, including forest land or timberland uses. However, interior live oak woodland community is present in the project site, and as described in Section 1.0, approximately 85 trees, including approximately 50 oak trees, would be removed as a result of project implementation.

Under Public Resources Code (PRC) 21083.4, counties administering CEQA must consider mitigation for oak woodland impacted by the project. This state law requires a county to establish a method for requiring oak woodland mitigation. Additionally, the Fresno County General Plan contains several policies related to the protection of oak woodlands, including Policy OS-F.10, which specifies that new developments need to preserve natural woodlands to the maximum extent possible, and Policy OS-F.11, which requires that the County promote the preservation and management of oak woodlands by encouraging landowners to voluntarily follow the Fresno County Oak Management Guidelines (1998) and the County adopted Oak Woodlands Management Plan. In compliance with state and local regulations, Mitigation Measure BIO-3 would be implemented, which would reduce impacts to interior live oak woodland community to a less than significant level. Therefore, with Mitigation Measure BIO-3, the proposed project would result in a less than significant impact to forestland or timberland.

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

Less Than Significant Impact with Mitigation. See Response 3.2.1.c. The proposed project would potentially result in impacts to the interior live oak woodland community, including the removal of approximately 50 oak trees and approximately 85 trees overall. However, Mitigation Measure BIO-3 would require consultation with a qualified arborist to implement best management, preservation, and recovery practices in accordance with state and local oak woodland management requirements. Implementation of Mitigation Measure BIO-3 would mitigate impacts related to loss or conversion of forestland to a less than significant level.

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

No Impact. As stated previously, the proposed project would not convert farmland to a non-agricultural use. In addition, the proposed project would not contribute to environmental changes that would result in conversion of farmland to non-agricultural use. Therefore, no impacts to farmland or forest land would occur.

3.3 AIR QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Impact Analysis

3.3.1.1 Environmental Setting

The following discussion provides an overview of existing air quality conditions in the region and in Fresno County. Ambient air quality standards and the regulatory framework are summarized, and air quality conditions and typical air pollutant types and sources are also described.

Air Quality Background. Air quality is a function of both local climate and local sources of air pollution. The amount of a given pollutant in the atmosphere is determined by the amount of the pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinants of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sunshine.

The project site is located within the San Joaquin Valley Air Basin (SJVAB) and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). A region's topographic features have a direct correlation with air pollution flow and therefore are used to determine the boundary of air basins. The SJVAB is comprised of approximately 25,000 square miles and covers of eight counties including Fresno, Kings, Madera, Merced, San Joaquin, Stanislaus and Tulare, and the western portion of Kern. The SJVAB is defined by the Sierra Nevada mountains in the east (8,000 to 14,000 feet in elevation), the Coast Ranges in the west (averaging 3,000 feet in elevation), and the Tehachapi mountains in the south (6,000 to 8,000 feet in elevation). The valley is basically flat with a slight downward gradient to the northwest. The valley opens to the sea at the Carquinez Straits where the San Joaquin-Sacramento Delta empties into San Francisco Bay. An aerial view of the SJVAB would simulate a "bowl" opening only to the north. These topographic features restrict air movement through and out of the basin.

Both the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established health-based ambient air quality standards for the following criteria pollutants: CO, O_3, NO_2, SO_2, Pb, and suspended particulate matter. In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. These

standards are designed to protect the health and welfare of the populace with a reasonable margin of safety. These ambient air quality standards are levels of contaminants that avoid specific adverse health effects associated with each pollutant.

The USEPA and the CARB designate air basins where ambient air quality standards are exceeded as "nonattainment" areas. If standards are met, the area is designated as an "attainment" area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered "unclassified." National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or "form" of what constitutes attainment, based on specific air quality statistics. For example, the federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring value exceeds the threshold per year. In contrast, the federal annual fine particulate matter ($PM_{2.5)}$ standard is met if the 3-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard. The current attainment designations for the basin are shown in Table C.

Table C: San Joaquin Valley Air Basin Air Quality Attainment Status

Pollutant	State	Federal
Ozone (1-hour)	Severe/Nonattainment	Not Applicable
Ozone (8-hour)	Nonattainment	Extreme Nonattainment
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Lead	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard

Source: California Air Resources Board and USEPA (2023).

Air Quality Monitoring Results. Air quality monitoring stations are located throughout the nation and maintained by the local air pollution control district and state air quality regulating agencies. The SJVAPCD, together with CARB, maintains ambient air quality monitoring stations in the SJVAB. The air quality monitoring stations closest to the project site are located at 908 N. Villa Avenue, Clovis and at 3727 N. First Street in Fresno, California.

Pollutant monitoring results for years 2020 to 2022 at the Clovis and Fresno monitoring stations, shown in Table D, indicate that air quality in the vicinity of the project site has generally been moderate. As indicated in the monitoring results, the federal particulate matter (PM_{10}) standard was exceeded once in 2020 only, with no exceedances in 2021 and 2022. The state PM_{10} standard was exceeded 114 times in 2020, 111 times in 2021, and 73 times in 2022. Similarly, the federal $PM_{2.5}$ standard had 40 exceedances in 2020, 22 exceedances in 2021, and four exceedances in 2022.

Table D: Ambient Air Quality in the Project Vicinity

Pollutant	Standard	2020	2021	2022
Carbon Monoxide (CO)[1]				
Maximum 1-hour concentration (ppm)		2.9	1.3	1.3
Number of days exceeded:	State: > 20 ppm	0	0	0
	Federal: > 35 ppm	0	0	0
Maximum 8-hour concentration (ppm)		2.6	1.2	1.1
Number of days exceeded:	State: > 9 ppm	0	0	0
	Federal: > 9 ppm	0	0	0
Ozone (O_3)[1]				
Maximum 1-hour concentration (ppm)		0.142	0.123	0.109
Number of days exceeded:	State: > 0.09 ppm	12	9	3
Maximum 8-hour concentration (ppm)		0.108	0.100	0.084
Number of days exceeded:	State: > 0.07 ppm	41	37	26
	Federal: > 0.07 ppm	36	34	23
Coarse Particulates (PM_{10})[1]				
Maximum 24-hour concentration (µg/m^3)		180.9	125.0	127.0
Number of days exceeded:	State: > 50 µg/m^3	114	111	73
	Federal: > 150 µg/m^3	1	0	0
Annual arithmetic average concentration (µg/m^3)		45.8	37.6	35.5
Exceeded for the year:	State: > 20 µg/m^3	Yes	Yes	Yes
	Federal: > 50 µg/m^3	No	No	No
Fine Particulates ($PM_{2.5}$)[1]				
Maximum 24-hour concentration (µg/m^3)		193.7	104.6	41.9
Number of days exceeded:	Federal: > 35 µg/m^3	40	22	4
Annual arithmetic average concentration (µg/m^3)		18.4	ND	10.5
Exceeded for the year:	State: > 12 µg/m^3	Yes	ND	No
	Federal: > 15 µg/m^3	Yes	ND	No
Nitrogen Dioxide (NO_2)[1]				
Maximum 1-hour concentration (ppm)		0.054	0.049	0.052
Number of days exceeded:	State: > 0.250 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.009	0.007	0.008
Exceeded for the year:	Federal: > 0.053 ppm	No	No	No
Sulfur Dioxide (SO_2)[2]				
Maximum 1-hour concentration (ppm)		0.0162	0.0075	0.0034
Number of days exceeded:	State: > 0.25 ppm	0	0	0
Maximum 24-hour concentration (ppm)		0.0022	0.0027	0.0012
Number of days exceeded:	State: > 0.04 ppm	0	0	0
	Federal: > 0.14 ppm	0	0	0
Annual arithmetic average concentration (ppm)		0.00046	0.00043	0.00034
Exceeded for the year:	Federal: > 0.030 ppm	No	No	No

Sources: CARB (2023) and USEPA (2023).
[1] Data taken from the Clovis Monitoring Station at 908 N. Villa Avenue.
[2] Data taken from the Fresno Monitoring Station at 3727 N. First Street.
CARB = California Air Resources Board
ND = No data. There were insufficient (or no) data to determine the value.
ppm = parts per million
USEPA = United States Environmental Protection Agency

The state 1-hour ozone standard was exceeded 12 times in 2020, nine times in 2021, and three times in 2022. The state 8-hour ozone standard was exceeded 41 times in 2020, 37 times in 2021, and 26 times in 2022. The federal 8-hour ozone standard was exceeded 36 times in 2021, 34 times in 2021, and 23 times in 2022. The CO, SO_2, and NO_2 standards were not exceeded in this area during the 3-year period.

3.3.1.2 Regulatory Setting

Federal Regulations. The 1970 federal Clean Air Act (CAA) authorized the establishment of national health-based air quality standards and set deadlines for their attainment. The CAA Amendments of 1990 changed deadlines for attaining national standards as well as the remedial actions required for areas of the nation that exceed the standards. Under the CAA, state and local agencies in areas that exceed the national standards are required to develop State Implementation Plans to demonstrate how they will achieve the national standards by specified dates.

State Regulations. In 1988, the California Clean Air Act (CCAA) required that all air districts in the state endeavor to achieve and maintain California Ambient Air Quality Standards (CAAQS) for CO, O_3, SO_2, and NO_2 by the earliest practical date. The CCAA provides districts with authority to regulate indirect sources and mandates that air quality districts focus particular attention on reducing emissions from transportation and area-wide emission sources. Each nonattainment district is required to adopt a plan to achieve a 5 percent annual reduction, averaged over consecutive 3-year periods, in district-wide emissions of each nonattainment pollutant or its precursors. A Clean Air Plan shows how a district would reduce emissions to achieve air quality standards. Generally, the state standards for these pollutants are more stringent than the national standards.

The CARB is the state's "clean air agency." The CARB's goals are to attain and maintain healthy air quality, protect the public from exposure to toxic air contaminants, and oversee compliance with air pollution rules and regulations.

Regional Regulations. The proposed project would be required to comply with regional rules that assist in reducing short-term air pollutant emissions.

> ***San Joaquin Valley Air Pollution Control District.*** The SJVAPCD has specific air quality-related planning documents, rules, and regulations. This section summarizes the local planning documents and regulations that may be applicable to the project as administered by the SJVAPCD with CARB oversight.
>
> ***Rule 2280—Portable Equipment Registration.*** Portable equipment used at project sites for less than six consecutive months must be registered with the SJVAPCD. The SJVAPCD will issue the registrations 30 days after receipt of the application (SJVAPCD 1996a).
>
> ***Rule 4201—Particulate Matter Concentration and Emission Rates.*** Rule 4201 provides emission thresholds that apply to operations that emit or may emit dust, fumes, or total suspended particulate matter (SJVAPCD 1996b).
>
> ***Rule 8011—General Requirements: Fugitive Dust Emission Sources.*** Fugitive dust regulations are applicable to outdoor fugitive dust sources. Operations, including construction operations,

must control fugitive dust emissions in accordance with SJVAPCD Regulation VIII. According to Rule 8011, the SJVAPCD requires the implementation of control measures for fugitive dust emission sources. For projects in which construction-related activities would disturb equal to or greater than one acre of surface area, the SJVAPCD recommends that demonstration of receipt of an SJVAPCD-approved Dust Control Plan or Construction Notification Form, before issuance of the first grading permit, be made a condition of approval (SJVAPCD 2004).

Rule 9510—Indirect Source Review. In December 2005, the SJVAPCD adopted the Indirect Source Rule (Rule 9510) to meet its emission reduction commitments in the PM_{10} and O_3 Attainment Plans. Indirect Source Review regulation applies to any development project that includes at least 2,000 sq ft of commercial space. This rule requires project applicants to reduce operation emission of NO_x by 33.3 percent of the project's operational baseline and 50 percent of the project's operational PM_{10} emissions (SJVAPCD 2015a).

Guidance for Assessing and Mitigating Air Quality Impacts. The SJVAPCD prepared the Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI) (SJVAPCD 2015b) to assist lead agencies and project applicants in evaluating the potential air quality impacts of projects in the SJVAB. The GAMAQI provides SJVAPCD-recommended procedures for evaluating potential air quality impacts during the CEQA environmental review process. The GAMAQI provides guidance on evaluating short-term (construction) and long-term (operational) air emissions. The most recent version of the GAMAQI, adopted March 19, 2015, was used in this evaluation. It contains guidance on the following:

- Criteria and thresholds for determining whether a project may have a significant adverse air quality impact;
- Specific procedures and modeling protocols for quantifying and analyzing air quality impacts;
- Methods to mitigate air quality impacts; and
- Information for use in air quality assessments and environmental documents, including air quality, regulatory setting, climate, and topography data.

Regional Air Quality Management Plan. The SJVAPCD is responsible for formulating and implementing the Air Quality Management Plan (AQMP) for the air basin. The main purpose of an AQMP is to bring the area into compliance with federal and state air quality standards. The SJVAPCD does not have one single AQMP for criteria pollutants, rather the SJVAPCD addresses each criteria pollutant with its own plan. The SJVAPCD has the following AQMPs:

- 2022 Plan for the 2015 8-Hour Ozone Standard
- 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards
- 2016 Moderate Area Plan for the 2012 $PM_{2.5}$ standard
- 2016 Plan for the 2008 8-Hour Ozone Standard
- 2013 Plan for the Revoked 1-Hour Ozone Standard
- 2007 PM_{10} Maintenance Plan
- 2004 Revision to the California State Implementation Plan for Carbon Monoxide

The SJVAPCD's AQMPs incorporate the latest scientific and technological information and planning assumptions, including updated emission inventory methodologies for various source categories. The SJVAPCD's AQMPs included the integrated strategies and measures needed to meet the National Ambient Air Quality Standards (NAAQS), implementation of new technology measures, and demonstrations of attainment of the 1-hour and 8-hour ozone NAAQS as well as the latest 24-hour and annual $PM_{2.5}$ standards. The Fresno Council of Governments (COG) is responsible for regional transportation planning in Fresno County and participates in developing mobile source emission inventories used in air quality attainment plans.

Local Regulations.

Fresno County General Plan. Fresno County addresses air quality in the Open Space and Conservation Element of the County General Plan. Applicable air quality policies and action items from the General Plan are listed below.

- **Policy OS-G.1:** The County shall develop standard methods for determining and mitigating project air quality impacts and related thresholds of significance for use in environmental documents. The County will do this in conjunction with the SJVAPCD and the cities in Fresno County.

- **Policy OS-G.2:** The County shall ensure that air quality impacts identified during the CEQA review process are fairly and consistently mitigated. The County shall require projects to comply with the County's adopted air quality impact assessment and mitigation procedures.

- **Policy OS-G.12:** The County shall continue, through its land use planning processes, to avoid inappropriate location of residential uses and sensitive receptors in relation to uses that include but are not limited to industrial and manufacturing uses and any other use which have the potential for creating a hazardous or nuisance effect.

- **Policy OS-G.13:** The County shall include fugitive dust control measures as a requirement for subdivision maps, site plans, and grading permits. This will assist in implementing the SJVAPCD's PM_{10} regulation (Regulation VIII). Enforcement actions can be coordinated with the Air District's Compliance Division.

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

Less Than Significant Impact. An air quality plan describes air pollution control strategies to be implemented by a city, county, or region classified as a non-attainment area. The main purpose of the air quality plan is to bring the area into compliance with the requirements of the federal and state air quality standards. To bring the San Joaquin Valley into attainment, the SJVAPCD adopted the 2016 Plan for the 2008 8-Hour Ozone Standard in June 2016 to satisfy Clean Air Act requirements and ensure attainment of the 75 parts per billion (ppb) 8-hour ozone standard (SJVAPCD 2016).

To assure the SJVAB's continued attainment of the USEPA PM_{10} standard, the SJVAPCD adopted the 2007 PM_{10} Maintenance Plan in September 2007 (SJVAPCD 2007). SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD

adopted the 2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ standards to address the USEPA annual $PM_{2.5}$ standard of 12 µg/m^3, established in 2012.

CEQA requires that certain proposed projects be analyzed for consistency with the applicable air quality plan. For a project to be consistent with SJVAPCD air quality plans, the pollutants emitted from a project should not exceed the SJVAPCD emission thresholds or cause a significant impact on air quality. In addition, emission reductions achieved through implementation of offset requirements are a major component of the SJVAPCD air quality plans. As discussed below, the proposed project would not result in the generation of criteria air pollutants that would exceed SJVAPCD thresholds of significance. Therefore, the proposed project would not conflict with nor obstruct implementation of SJVAPCD air quality plans and impacts would be less than significant.

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

Less Than Significant Impact with Mitigation. As identified above, the SJVAB is designated as non-attainment for O_3 and $PM_{2.5}$ for federal standards and non-attainment for O_3, PM_{10}, and $PM_{2.5}$ for state standards. The SJVAPCD's nonattainment status is attributed to the region's development history. Past, present, and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of Ambient Air Quality Standards (AAQS). Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

In developing thresholds of significance for air pollutants, the SJVAPCD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. The following analysis assesses the potential project-level air quality impacts associated with construction and operation of the proposed project. As demonstrated in the analysis below, the proposed project would not exceed the SJVAPCD's emissions thresholds. Therefore, additional analysis to assess cumulative impacts is not necessary.

Short-Term (Construction) Emissions. During construction, short-term degradation of air quality may occur due to the release of particulate matter emissions (i.e., fugitive dust) generated by grading, hauling, and other activities. Emissions from construction equipment are also anticipated and would include CO, NO_x, reactive organic gases (ROG), directly emitted $PM_{2.5}$ and PM_{10}, and toxic air contaminants (TACs) such as diesel exhaust particulate matter.Project construction would involve linear grubbing and land clearing, grading and excavation, drainage, utilities, paving, and other activities. Construction-related effects on air quality from the proposed project would be greatest during the site preparation phase due to the disturbance of soils. If not properly controlled, these activities would temporarily generate particulate emissions. Sources of fugitive dust would include disturbed soils at the construction site. Unless properly controlled, vehicles leaving the site would deposit dirt and mud on local streets, which could be an additional

source of airborne dust after it dries. PM_{10} emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM_{10} emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Water or other soil stabilizers can be used to control dust, resulting in emission reductions of 50 percent or more. SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions) is designed to reduce PM_{10} emissions generated by human activity. The SJVAPCD has established Regulation VIII measures for reducing fugitive dust emissions of PM_{10}. With the implementation of Regulation VIII measures, fugitive dust emissions from construction activities would not result in adverse air quality impacts.

In addition to dust-related PM_{10} emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO_2, NO_x, ROGs and some soot particulate ($PM_{2.5}$ and PM_{10}) in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

The California Emissions Estimator Model (CalEEMod), Version 2022.1, was used to estimate construction emissions for the proposed project. Construction of the proposed project, including the WWTP and the wastewater collection system, is expected to occur over a period of 9 months starting in 2025. Construction of the WWTP and the wastewater collection system would take place concurrently. The total disturbance area would be approximately 2.4 acres. Construction would not require soil off-haul. Results, summarized in Table E, were compared to SJVAPCD thresholds of significance for construction impacts. CalEEMod output sheets are included in Appendix A.

Table E: Project Construction Emissions in Maximum Tons Per Year

Project Construction	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Project Construction Emissions	0.1	2.0	1.6	<0.1	0.1	0.1
SJVAPCD Thresholds	10.0	10.0	100.0	27.0	15.0	15.0
Exceed Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: LSA (2021).

As shown in Table E, construction emissions associated with the project would be less than significant for ROG, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions. The SJVAPCD requires the implementation of Regulation VIII measures for dust control during construction. Implementation of Mitigation Measure AIR-1 would ensure that the proposed project complies with Regulation VIII and further reduces the short-term construction period air quality impacts.

Mitigation Measure AIR-1: Consistent with SJVAPCD Regulation VIII (Fugitive PM_{10} Prohibitions), the following controls are required to be included

as specifications for the proposed project and implemented at the construction site:

- All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.
- All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.
- All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
- When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least 6 inches of freeboard space from the top of the container shall be maintained.
- All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. Use of blower devices is expressly forbidden.)
- Following the addition of materials to, or the removal of materials from, the surface of out-door storage piles, said piles shall be effectively stabilized of fugitive dust emission utilizing sufficient water or chemical stabilizer/suppressant.

Construction emissions associated with the project would be less than significant with implementation of Mitigation Measure AIR-1. Therefore, construction of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state AAQS.

Long-Term (Operational) Emissions. Long-term air pollutant emission impacts are those associated with mobile sources (e.g., vehicle trips), energy sources (e.g., electricity), and area sources (e.g., landscape maintenance equipment use) related to the proposed project. The proposed project includes: 1) the proposed WWTP; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Once operational, it is anticipated that inspection and

maintenance of the WWTP would occur; however, given the minimal trip generation, mobile source emissions would be minimal and would be below SJVAPCD significance thresholds. In addition, the proposed project would result in energy source emissions associated with the electrical improvements; however, these emissions are also expected to be minimal and be below SJVAPCD significance thresholds. Therefore, the proposed project would not be a significant source of operational emissions. Therefore, operation of the proposed project would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state AAQS and impacts would be less than significant.

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

Less Than Significant Impact. Sensitive receptors are defined as people that have an increased sensitivity to air pollution or environmental contaminants. Sensitive receptor locations include schools, parks and playgrounds, day care centers, nursing homes, hospitals, and residential dwelling units. The closest sensitive receptors include the 47 residential structures that are within the project site.

Construction of the proposed project may expose these surrounding sensitive receptors to airborne particulates, as well as a small quantity of construction equipment pollutants (i.e., usually diesel-fueled vehicles and equipment). However, construction contractors would be required to implement Regulation VIII measures, as required by Mitigation Measure AIR-1 above. With implementation of Mitigation Measure AIR-1, project construction emissions would be below the SJVAPCD's significance thresholds. Additionally, due to the linear nature of the project, construction activities at any one receptor location would occur for a limited duration. Once the project is constructed, the project would not be a source of substantial emissions. Therefore, sensitive receptors are not expected to be exposed to substantial pollutant concentrations during project construction or operation, and potential impacts would be considered less than significant.

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

Less Than Significant Impact. During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the project site. The potential for diesel odor impacts is therefore considered less than significant. The WWTP is located in a remote area, relative to the existing structures within the BSR, and it is not anticipated that significant odor issues would result from the conveyance and treatment facilities. In addition, each of the five treatment tanks includes a forced air venting system to minimize buildup of odorous gases. Therefore, the proposed project would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and potential impacts would be considered less than significant.

3.4 BIOLOGICAL RESOURCES

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

3.4.1 Impact Analysis

3.4.1.1 Environmental Setting

LSA prepared a Biological Resources Evaluation (LSA 2024a) for the proposed project that describes and documents potential impacts to biological resources, including special-status species, associated with the proposed project. In addition, the Biological Resources Evaluation contains measures to reduce potentially significant project-related impacts. The analysis below is based on the results of the Biological Resources Evaluation.

Methodology. Prior to conducting the field survey, LSA compiled a list of sensitive plant and wildlife species potentially occurring within the Biological Study Area (BSA) to evaluate potential impacts resulting from project construction. Sources used to compile this list include the California Native Plant Society (CNPS) Online Inventory, the California Natural Diversity Database (CNDDB) referencing the *Millerton Lake East, Shaver Lake, Trimmer, Humphreys Station, Cascadel Point,* and *Auberry* U.S. Geological Survey 7.5 minute quadrangles, and the United States Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) Resource List. These databases contain records of special-status species that have been recorded in the general vicinity of the

project and provide an indication of what species may occur within the BSA. While the National Marine Fisheries Service (NMFS), Google Earth Species list (2016 and 2024) was also consulted, there are no records of listed anadromous fish species, designated critical habitat, or Essential Fish Habitat within the United States Geological Survey 7.5-minute Auberry quadrangle. Thus, a NMFS species list was not generated for the project.

LSA conducted a general biological survey of the BSA on October 23, 2020. The survey focused on identifying any sensitive habitats or special-status plant or wildlife species present within the BSA and determining if project activities would potentially impact any sensitive biological resources. The biologist surveyed the BSA, noting plant communities, examining trees and shrubs closely for any nest structures, and identifying all birds and any other wildlife observed to determine if potential habitat to support special-status species was present. During this survey, vegetation communities within the BSA were classified based on descriptions in *A Manual of California Vegetation – Second Edition* by Sawyer, Keeler-Wolf, and Evens, as appropriate. Names of plant species are consistent with *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) and the Jepson Online Interchange for California Floristics (n.d.).

LSA conducted a botanical survey of the BSA on June 21-22, 2023, in accordance with the California Department of Fish and Wildlife's *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (CDFW 2018). The entirety of the BSA was surveyed and all plant species were identified to a sufficient taxonomic level necessary to determine if they have special status. A comprehensive list of plant species observed within the BSA is included in the Biological Resources Evaluation (LSA 2024a).

A delineation of all aquatic features in the BSA was conducted by LSA on June 19-20, 2023. Current and historical aerial photos were also reviewed prior to the field investigation. All aquatic features in the BSA were delineated in accordance with the 1987 United States Army Corps of Engineers (USACE) Wetlands Delineation Manual (USACE 2018), the 2008 *Regional Supplement – Arid West Region* (USACE 2008), and the USACE *Regulatory Guidance Letter 16-01 regarding Preliminary Jurisdictional Delineations* (October 2016). An aquatic resources delineation report was prepared separately and verified by the USACE on November 13, 2023. The delineation report and preliminary jurisdictional determination from the USACE is included in the Biological Resources Evaluation (LSA 2024a).

Existing Biological Conditions. The BSA is regionally located in the Sierra Nevada foothills with predominant habitats including mixed coniferous forests. Primary land uses in the vicinity consist of undeveloped forests with pockets of development. The BSA itself is in a sparsely developed valley bisected by a dry creek bed (Backbone Creek) and encompasses residential and commercial properties currently being served by septic systems. The surrounding land uses include 47 residential units, as well as other non-residential uses, including the Mono Wind Casino and the associated general store and gas station, gymnasium, tribal administration buildings, the Head Start Center, gaming commission building, family services center, emergency services building, and cemetery. Topography in the BSA, as well as the surrounding region, consists of uneven terrain interspersed with rock outcroppings typical of the Sierra Nevada foothills. The BSA generally slopes from south to north. The elevation ranges from approximately 2,450 to 2,700 feet above mean sea level.

The BSA contains three natural communities: interior live oak woodlands, wetlands (including seeps and wetland meadow habitats), and intermittent drainages (including Backbone Creek and another unnamed intermittent drainage). Three semi-natural communities are also present in the BSA: ruderal areas, ephemeral drainages, and roadside ditches. The remainder of the BSA consists of developed land uses.

Interior Live Oak Woodland. Interior live oak woodland is classified as a natural community and surrounds the entire BSA. However, this community only encroaches into the BSA in areas adjacent to the ruderal road shoulders along the edges of the BSA and in an undeveloped area in the north section of the BSA, totaling approximately 6.46 acres. Within the BSA, this community consists of an overstory dominated by interior live oak (*Quercus wislizeni*) and blue oak (*Quercus douglasii*), and also contains California buckeye (*Aesculus californica*), California bay (*Umbellularia californica),* gray pine (*Pinus sabiniana*), and hop tree (*Ptelea crenulata*). The understory is dominated by a variety of shrubs and herbaceous species including buckbrush (*Ceanothus cuneatus*), whiteleaf manzanita (*Arctostaphylos viscida*), poison oak (*Toxicodendron diversilobum*), California yerba santa (*Eriodictyon californicum*), silvery hairgrass (*Aira caryophyllea*), and *Bromus* sp.

Ruderal. Ruderal areas are relatively unvegetated and consist of pockets of non-native species that colonize and quickly establish in poor soil and disturbed or waste areas. These non-native species generally have fast-growing roots, low nutritional needs, and produce massive amounts of seed. Ruderal vegetation within the BSA, totaling approximately 4.832 acres, occurs primarily along the existing roadway shoulders which experience regular disturbance. Ruderal species observed in the BSA include Italian rye grass (*Festuca perennis*), wild oat (*Avena fatua*), slender oat (*Avena barbata*), brome fescue (*Festuca bromoides*), pigweed amaranth (*Amaranthus albus*), *Bromus* sp., and *Hordeum* sp.

Developed. Developed areas comprising approximately 6.960 acres within the BSA consists of the residential areas, driveways, parking lots, and access roads. These areas are actively maintained to exclude all vegetation and primarily consist of structures, pavement, or packed earth.

Aquatic Resources. A total of 0.164 acre of jurisdictional aquatic features were mapped in the BSA, consisting of wetlands and non-wetland waters of the United States as summarized in Table F and shown in Figure 4.

The aquatic resources delineation was verified by the USACE on November 13, 2023. The delineation report and preliminary jurisdictional determination from the USACE is included in an attachment to the Biological Resources Evaluation (LSA 2024a).

Wetlands. Wetlands within the BSA, totaling 0.122 acre, include vegetated sandbars and fringe wetlands along Backbone Creek, one seep, and two areas of wetland meadow habitat. This habitat is dominated by common spikerush (*Eleocharis macrostachya*), hyssop loosestrife (*Lythrum hyssopifolia*), curly dock (*Rumex crispus*), seep monkeyflower (*Erythranthe guttata*), Italian ryegrass (*Festuca perennis*), mariposa rush (*Juncus dubius*), toad rush (*Juncus bufonius*), and Hood's sedge (*Carex hoodii*).

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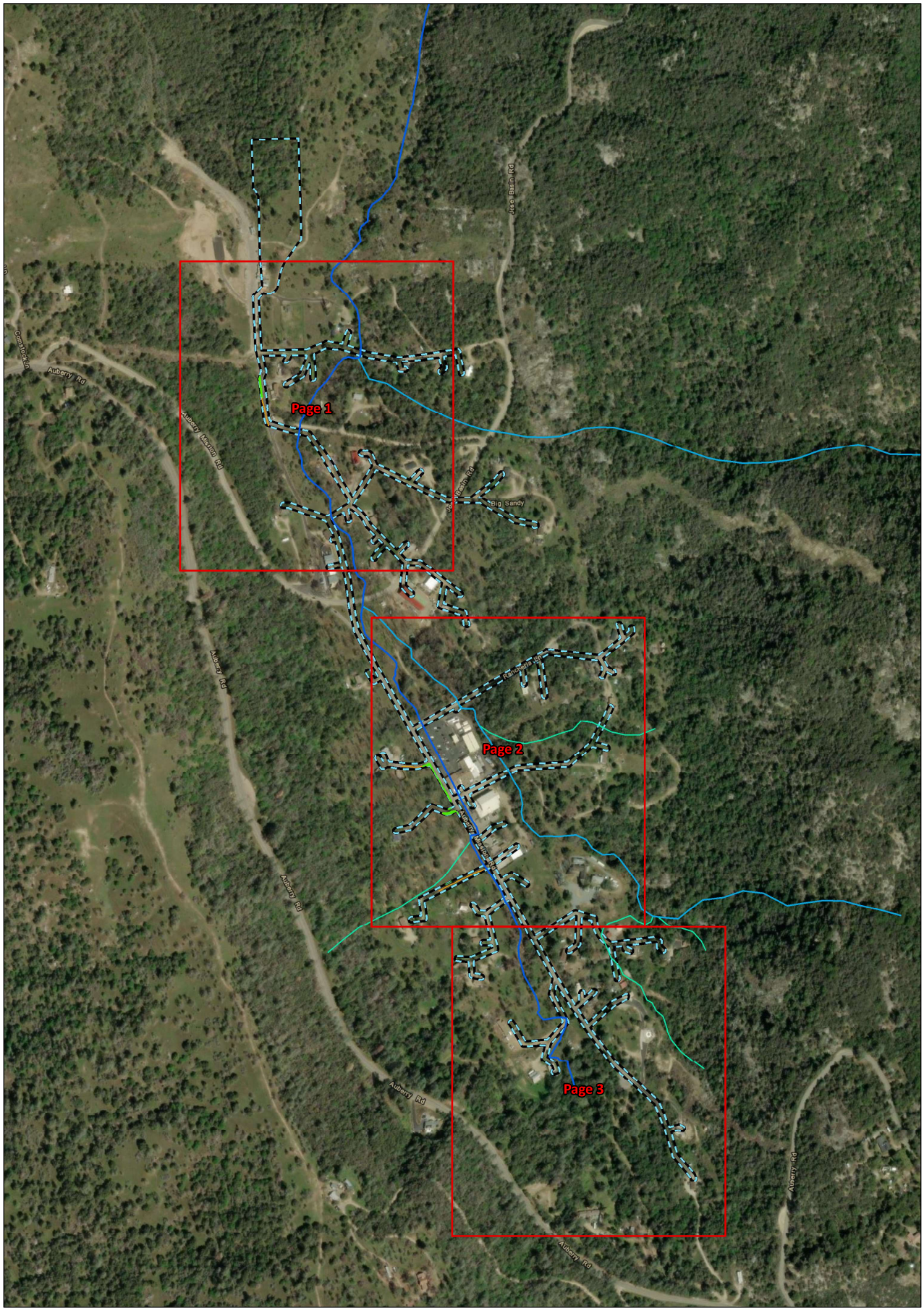

LSA

LEGEND

- Biological Study Area - (18.19 ac)
- Grid Index

Aquatic Resources

- Backbone Creek
- Ephemeral Drainage
- Intermittent Drainage
- Roadside Ditch
- Seep
- Wetland Meadow

0 250 500
FEET

SOURCE: Basemap - Vivid Maxar Aerial Imagery (3/2022); Mapping - LSA (06/2023)

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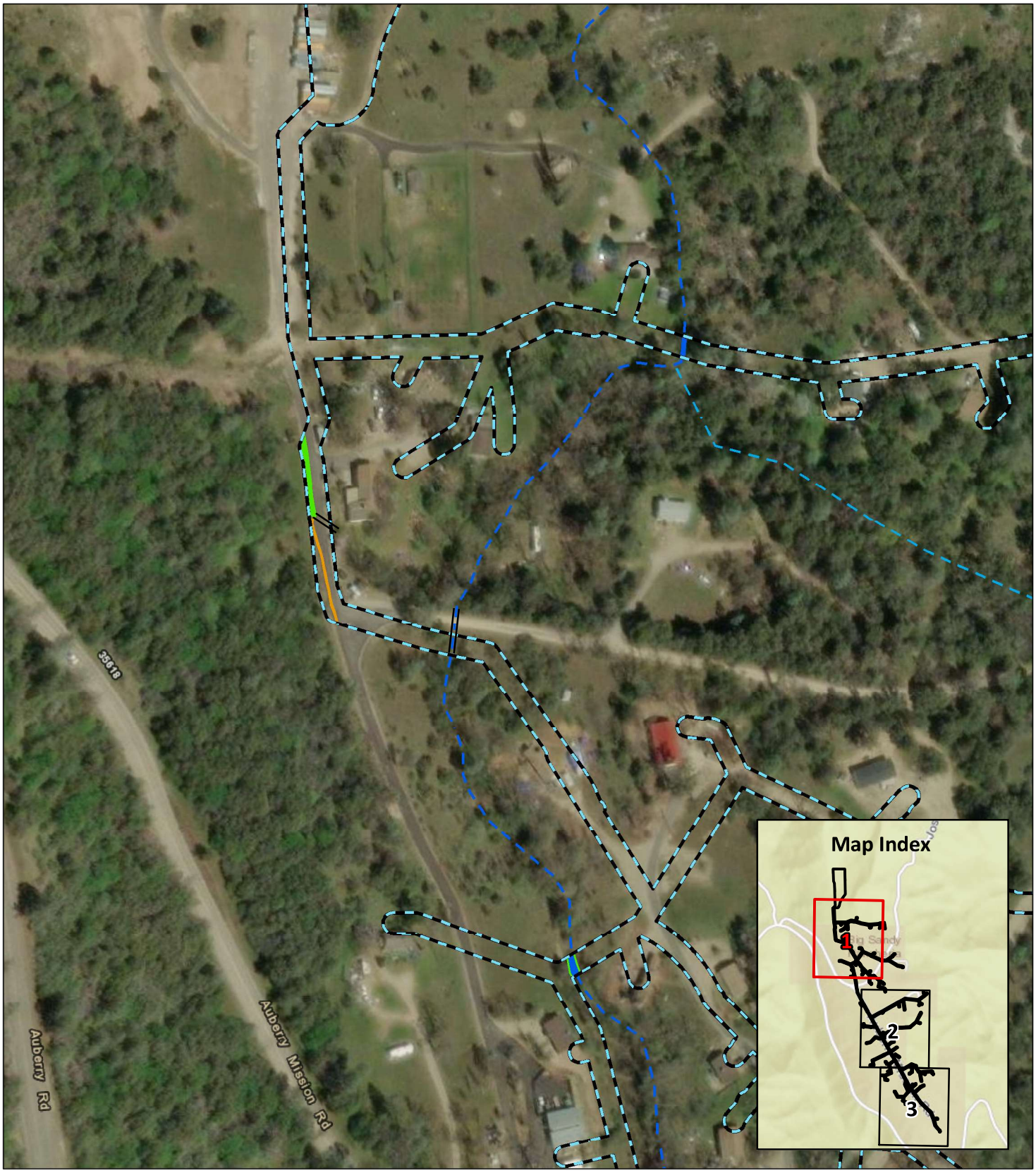
FIGURE 4
Index

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California

Aquatic Resources - Index



LSA

Biological Study Area - (18.19 ac)

Culvert

Aquatic Resources - (0.164 ac)

Backbone Creek (Non-Wetland) - (0.004 ac)

Backbone Creek (Wetland) - (0.035 ac)

Ephemeral Drainage - (0.005 ac)

Intermittent Drainage - (0.004 ac)

Roadside Ditch - (0.029 ac)

Seep - (0.002 ac)

Wetland Meadow - (0.085 ac)

0 100 200

FEET

FIGURE 4

Big Sandy Rancheria Wastewater System Improvements Project

Fresno County, California

Aquatic Resources

SOURCE: Basemap - Vivid Maxar Aerial Imagery (3/2022); Mapping - LSA (6/2023)

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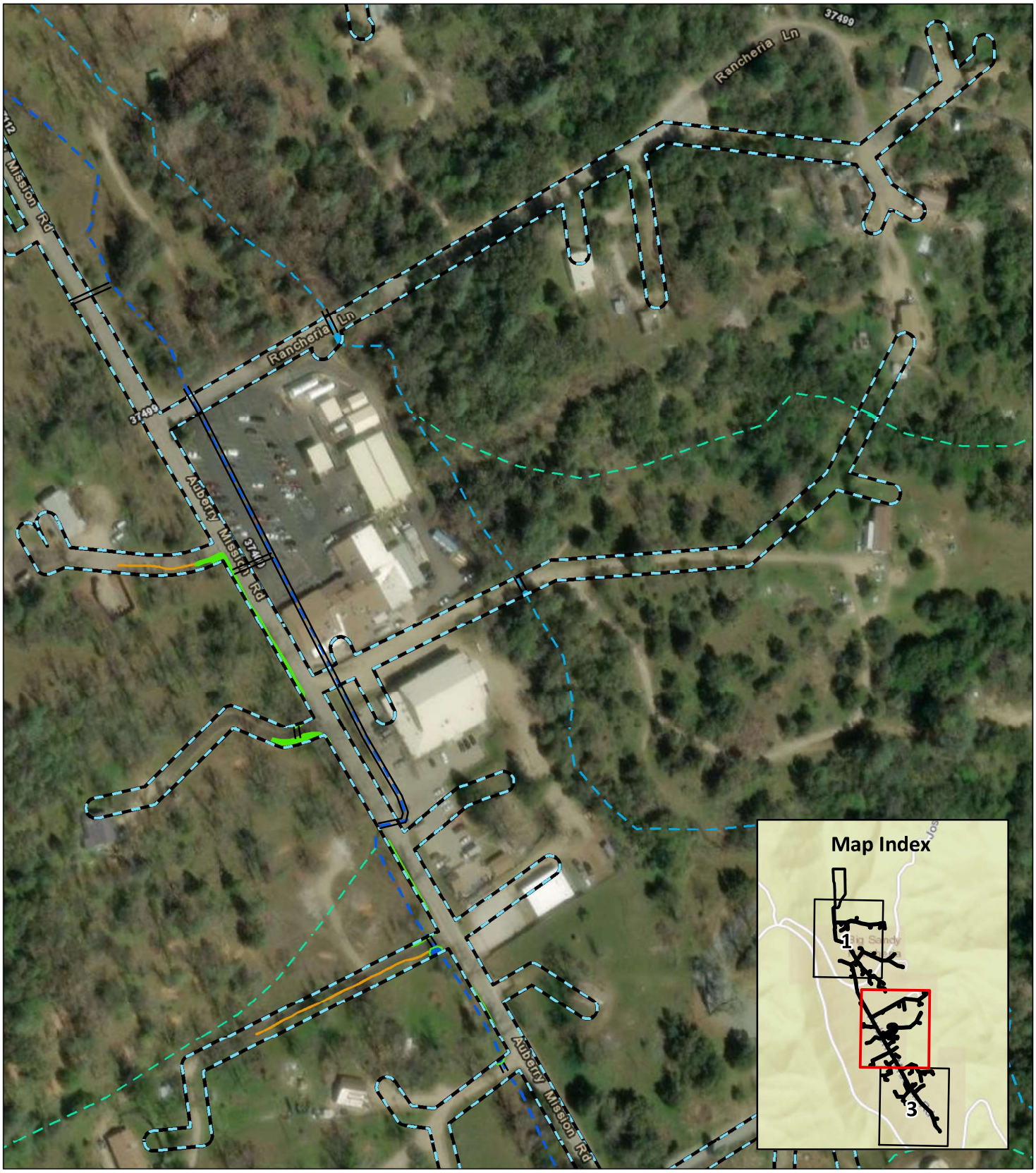

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0 100 200

FEET

FIGURE 4
Page 2 of 3

Big Sandy Rancheria Wastewater System Improvements Project
Fresno County, California

Aquatic Resources

SOURCE: Basemap - Vivid Maxar Aerial Imagery (3/2022); Mapping - LSA (6/2023)

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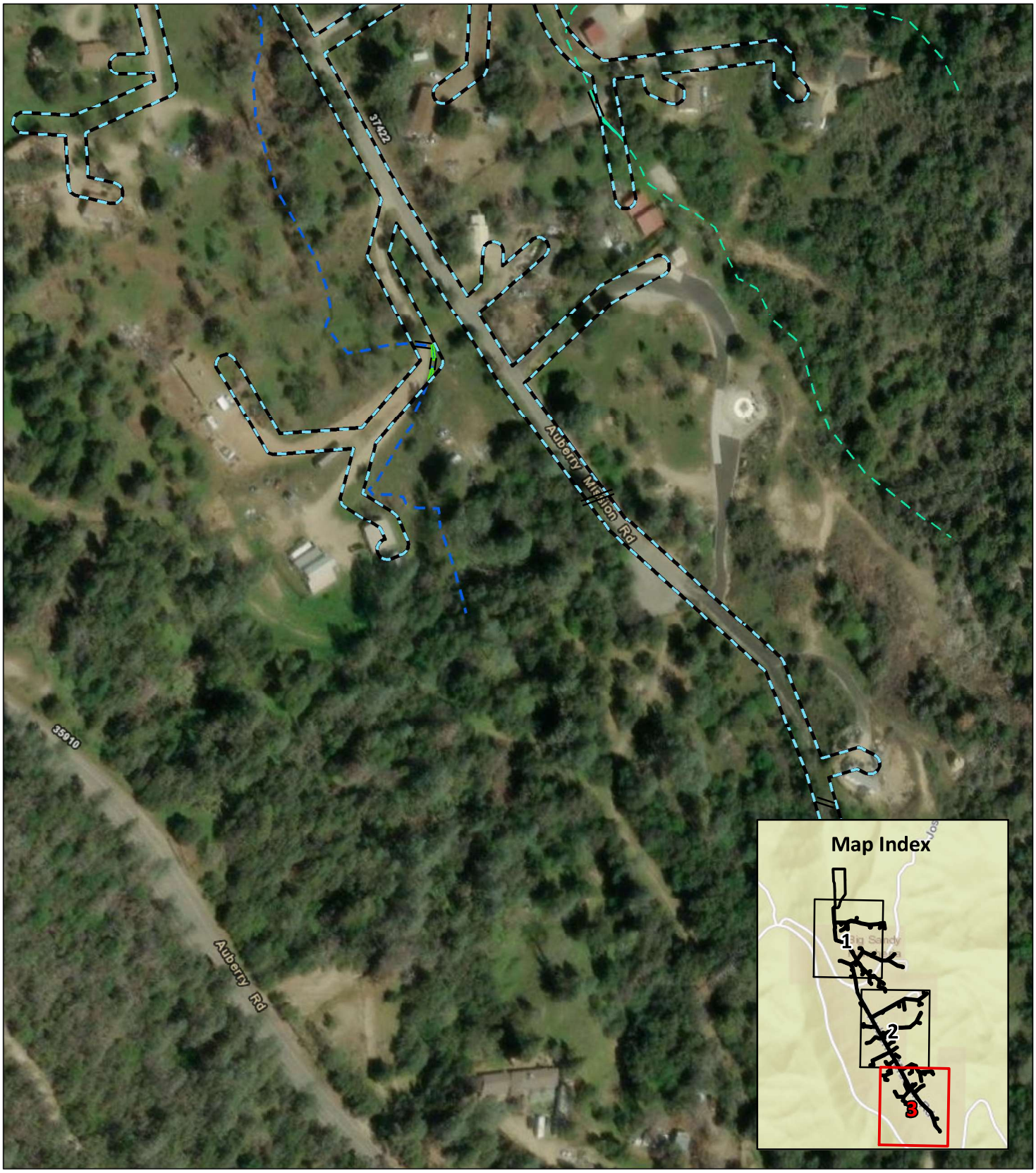

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0 100 200

FEET

FIGURE 4

Big Sandy Rancheria Wastewater System Improvements Project

Fresno County, California

Aquatic Resources

SOURCE: Basemap - Vivid Maxar Aerial Imagery (3/2022); Mapping - LSA (6/2023)

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Table F: Summary of Aquatic Features in the Biological Study Area

Type	Total (acres)
Wetlands	
Backbone Creek	0.035
Wetland Meadow	0.085
Seep	0.002
Wetland Subtotal	*0.122*
Non-Wetland Waters	
Backbone Creek	0.004
Intermittent Drainage	0.004
Ephemeral Drainages	0.005
Roadside Ditches	0.029
Non-Wetland Waters Subtotal	*0.042*
TOTAL	**0.164**

Source: LSA (2023).

Intermittent Drainages. Intermittent drainages in the BSA, totaling 0.008 acre, consist of an unnamed feature and portions of Backbone Creek. The reach of Backbone Creek within the BSA is a low-gradient stream with occasional small pools that crosses through existing culverts under various roads, and generally flows south to north. A few sections of the creek, outside of and adjacent to the BSA, supported a narrow riparian corridor but riparian vegetation was largely absent within the BSA. Backbone Creek crosses the BSA at a total of nine distinct locations; four of the nine locations are completely underground within the BSA. Vegetated portions of the creek are dominated by toad rush, many-flowered monkeyflower (*Erythranthe floribunda*), seep monkeyflower, annual rabbitsfoot grass (*Polypogon monspeliensis*), Italian ryegrass, and western marsh cudweed (*Gnaphalium palustre*).

Ephemeral Drainages Two small ephemeral drainages, totaling 0.005 acre, cross the BSA at three locations; one location is culverted and completely underground in the BSA. These features were unvegetated and dry during field surveys.

Roadside Ditches. Three roadside ditches are present in the BSA, totaling 0.029 acre, two paralleling earthen driveways and one paralleling Auberry Mission Road. This habitat is dominated by toad rush, hyssop loosestrife, seep monkeyflower, and curly dock.

3.4.1.2 Regulatory Setting

Federal Regulations.

Federal Endangered Species Act. The USFWS administers the federal Endangered Species Act (FESA). FESA provides a process for listing species as either threatened or endangered and methods of protecting listed species. The FESA defines as “endangered” any plant or animal species that is in danger of extinction throughout all or a significant portion of its known geographic range. A “threatened” species is a species that is likely to become endangered. A

"proposed" species is one that has been officially proposed by the USFWS for addition to the federal threatened and endangered species list.

Per Section 9 of the FESA, "take" of threatened or endangered species is prohibited. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct (codified at 16 U.S.C.A. § 1532(19). "Take" can include disturbance to habitats used by a threatened or endangered species during any portion of its life history. The presence of any federally threatened or endangered species in a project area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. Under the regulations of the FESA, the USFWS may authorize "take" when it is incidental to, but not the purpose of, an otherwise lawful act.

Federal Clean Water Act – Section 404. The USACE administers Section 404 of the federal Clean Water Act (CWA). This section regulates the discharge of dredge and fill material into waters of the United States. "Discharge of fill material" is defined as the addition of fill material into waters of the United States, including, but not limited to, the following: placement of fill that is necessary for the construction of any structure or impoundment requiring rock, sand, dirt, or other material for the structure's construction; site development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 C.F.R. §328.2[f]).The USACE has established a series of nationwide permits that authorize certain activities in waters of the United States if a proposed activity can demonstrate compliance with standard conditions. Normally, USACE requires an individual permit for an activity that will affect an area greater than or equal to 0.5 acre of waters of the United States. Projects that result in impacts to less than 0.5 acre can normally be conducted pursuant to one of the nationwide permits, if consistent with the standard permit conditions.

Federal Clean Water Act - Section 401. Per Section 401 of the CWA, "any applicant for a Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification in which the discharge originates or will originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the navigable waters at the point where the discharge originates or will originate, that any such discharge will comply with the applicable provisions of sections 1311, 1312, 1313, 1316, and 1317 of this title" (33 U.S.C.A. § 1341(a)(1)). Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 water quality certification. Since the proposed project is located on tribal lands, the USEPA will issue any necessary water quality certification for impacts to waters of the United States.

Waters of the United States. USACE has primary federal responsibility for administering regulations that concern "waters of the U.S." The USACE acts under two statutory authorities, the Rivers and Harbors Act (Sections 9 and 10), which governs specified activities in "navigable waters of the U.S.," Section 404 of the CWA, which governs specified activities in "other waters of the U.S.," including wetlands. The USACE requires that a permit be obtained if a project proposes placing structures within, over, or under navigable waters or discharging dredged or fill material into "waters of the U.S." below the ordinary high-water mark in non-tidal waters. The

USEPA, USFWS, NMFS, and several other agencies can provide comments on USACE permit applications. The federal government defines wetlands in CWA Section 404 as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support (and do support, under normal circumstances) a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR § 328.3(b) and 40 CFR § 230.3). The federal definition of wetlands requires three wetland identification parameters to be present: wetland hydrology, hydric soils, and hydrophytic vegetation.

"Other waters of the U.S." refers to those hydric features that are regulated by the CWA but are not wetlands (33 CFR § 328.4). To be considered jurisdictional, these features must exhibit a defined bed and bank and an ordinary high-water mark. Examples of other waters of the U.S. include rivers, creeks, intermittent and ephemeral channels, ponds, and lakes. Human-made wetland areas that are not regulated under this act include stock watering ponds and created water treatment facilities.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. Under the MBTA, "it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof …" (16 U.S.C.A. § 703(a)).

Bald and Golden Eagle Protection Act. The Bald and Golden Eagle Protection Act (16 U.S.C. § 668-668d), enacted in 1940, and amended several times since, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part (including feathers), nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb." Regulations further define "disturb" as "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior" (50 CFR 22.6).

State Regulations.

California Endangered Species Act. The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA is similar to FESA but pertains to state-listed endangered and threatened species. CESA requires state agencies to consult with California Department of Fish

and Wildlife (CDFW) when preparing CEQA documents. The purpose is to ensure that the state lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species if there are reasonable and prudent alternatives available (California Fish and Game Code [CFGC] Section 2080). For projects that may result in take of state-listed species, CESA directs agencies to consult with CDFW on projects or actions that could affect listed species for CDFW to determine whether jeopardy would occur and to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows CDFW to authorize exceptions to the state's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (CFGC Section 2081).

California State Fish and Game Code. Under CFGC Sections 3503, 3503.5, and 3513, the project proponent is not allowed to conduct activities that would result in the taking, possessing, or destroying of any birds of prey; the taking or possessing of any migratory nongame bird; the taking, possessing, or needlessly destroying of the nest or eggs of any raptors or nongame birds; or the taking of any nongame bird pursuant to CFGC Section 3800. CFGC Section 3513 adopts the federal Department of the Interior take provisions under the MBTA.

California Rare Plant Ranks. The CNPS maintains a list of plant species native to California that have low numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Plants of California. Potential impacts to populations of rare plants, consistent with Section 15380 of the *State CEQA Guidelines*, require consideration under CEQA. Plants in the inventory are assigned a California Rare Plant Rank (CRPR):

- **CRPR 1A**: Plants believed to be extirpated in California and are either rare or extinct elsewhere.
- **CRPR 1B**: Plants rare, threatened, or endangered in California and elsewhere.
- **CRPR 2A**: Plants presumed extirpated in California, but more common elsewhere.
- **CRPR 2B**: Plants rare, threatened, or endangered in California but more common elsewhere.
- **CRPR 3**: Plants about which more information is needed - a review list.
- **CRPR 4**: Plants of limited distribution – a watch list.

Ranks at each level also include a threat rank. Each threat rank is defined as follows:

- **0.1** – Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat).
- **0.2** – Moderately threatened in California (20 - 80 percent of occurrences threatened / moderate degree and immediacy of threat).

- **0.3** – Not very threatened in California (<20 percent of occurrences threatened / low degree and immediacy of threat or no current threats known).

California Public Resources Code (PRC) – Section 21083.4 (b). As part of the determination made pursuant to Section 21080.1, a county shall determine whether a project within its jurisdiction may result in a conversion of oak woodlands that will have a significant effect on the environment. If a county determines that there may be a significant effect to oak woodlands, the county shall require one or more of the following oak woodlands mitigation alternatives to mitigate the significant effect of the conversion of oak woodlands:

- Conserve oak woodlands, through the use of conservation easements.
- Plant an appropriate number of trees, including maintaining plantings and replacing dead or diseased trees.
    - The requirement to maintain trees pursuant to this paragraph terminates seven years after the trees are planted.
    - Mitigation pursuant to this paragraph shall not fulfill more than one-half of the mitigation requirement for the project.
    - The requirements imposed pursuant to this paragraph also may be used to restore former oak woodlands.
- Contribute funds to the Oak Woodlands Conservation Fund, as established under subdivision (a) of Section 1363 of the Fish and Game Code, for the purpose of purchasing oak woodlands conservation easements, as specified under paragraph (1) of subdivision (d) of that section and the guidelines and criteria of the Wildlife Conservation Board. A project applicant that contributes funds under this paragraph shall not receive a grant from the Oak Woodlands Conservation Fund as part of the mitigation for the project.
- Other mitigation measures developed by the county.

Local Regulations.

Fresno County General Plan. The County's General Plan Open Space and Conservation Element includes objectives and policies that work to provide for long-term preservation, enhancement, and enjoyment of biological resources. The following policies included below related to biological resources would apply to the proposed project.

- **Policy OS-F.10:** The County shall require that new developments preserve natural woodlands to the maximum extent possible.
- **Policy OS-F.11:** The County shall promote the preservation and management of oak woodlands by encouraging landowners to follow the Fresno County Oak Management Guidelines shown below and to prepare an Oak Management Plan for their property.

- Develop an Oak Woodland Management Plan to retain existing oaks, preserve agriculture, retain wildlife corridors, and enhance soil and water conservation practices.
- Avoid tree root compaction during construction by limiting heavy equipment in root zones.
- Carefully plan roads, cuts, and fills, building foundations, and septic systems to avoid damage to tree roots.
- Design roads and consolidate utility services to minimize erosion and sedimentation to downstream sources. Also, consider reseeding any disturbed ground.
- Avoid landscaping which requires irrigation within ten (10) feet of the trunk of an existing oak tree to prevent root rot.
- Consider replacing trees whose removal during construction was avoidable.
- Use fire-inhibiting and drought-tolerant and oak-compatible landscaping wherever possible.

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less Than Significant Impact with Mitigation. Potential impacts related to candidate, sensitive, or special-status species would be less than significant with mitigation, as described below.

Special-Status Plant Species. The interior live oak woodland provides potential habitat for the federally threatened Mariposa pussypaws (*Calyptridium pulchellum*); state threatened tree anemone (*Carpenteria californica*); and two CRPR List 1B.2 species, including orange lupine (*Lupinus citrinus var. citrinus*), and slender-stalked monkeyflower (*Erythranthe gracilipes*). As reflected above, a focused botanical survey was conducted within the normal blooming period for these species on June 21-22, 2023. None of these species were observed in the BSA during focused plant surveys or any other surveys; however, Kings River monkeyflower (*Erythranthe acutidens*), a CRPR List 3 (review list) species, was observed in the southern portion of the BSA along the alignment for a new sanitary sewer line just north of the tribal cemetery. While this species does not meet the threshold of rare or endangered per Section 15380 of the *State CEQA Guidelines*, the project will avoid the entirety of this population, and the population will be protected during construction by environmentally sensitive area (ESA) fencing. Therefore, the project would not result in impacts to special-status plants, and this impact would be less than significant under CEQA.

Special-Status Wildlife Species. The special-status wildlife species identified in the record searches were reviewed to determine their potential to occur within the BSA. Species that require specific habitat not present in the BSA were eliminated as potentially occurring and are

not discussed further (e.g., vernal pools, coniferous or riparian forests, chaparral, etc.). Based on the record search review and the field surveys, monarch butterfly (*Danaus plexippus*) and nesting birds have the potential to occur within the BSA, as discussed further below. The BSA is not located within critical habitat for any special-status wildlife species.

Monarch Butterfly. The monarch butterfly was listed as a FESA candidate species on December 17, 2020. Monarchs are not listed as threatened or endangered under the California Endangered Species Act. However, monarch butterflies are listed by the State of California as a California Special Resource because their overwintering habitat is threatened by disturbance and by alteration and destruction of habitat.

Monarch butterflies are a large, conspicuous invertebrate with bright orange wings surrounded by a black border and covered with black veins. Monarch butterflies are considered a habitat generalist, with a strong host plant specialization. Preferred breeding sites are typically thought to be open areas with a diversity of blooming nectar resources along with milkweed (*Asclepias* spp.) for both egg-laying and larval feeding. During the breeding season, typically from June through September, an adult monarch will spend its 2- to 5-week lifespan mating and nectaring on flowers, with females searching for milkweed plants upon which to lay eggs. Eggs are laid singly on host plants, which the caterpillars rely on for food and protective toxins. Once an egg is laid, the full cycle to adulthood may last 20 to 35 days, depending on temperature.

In the fall, western North American monarchs begin migrating to their respective overwintering sites, generally south and west to groves along the California coast into northern Baja California. Groves are populated by a variety of tree species, however groves dominated by blue gum eucalyptus (*Eucalyptus globulus*), Monterey pine (*Pinus radiata*), and Monterey cypress (*Hesperocyparis macrocarpa*) are typically used (Griffiths and Villablanca 2015). Groves provide indirect sunlight for the overwintering monarchs, sources of moisture for hydration, defense against freezing temperatures, and protection against strong winds.

The BSA is located outside of the overwintering range for this species. There are no CNDDB records of monarch butterflies within 10 miles of the BSA, and no monarch butterflies were observed during field surveys. However, the BSA contains two milkweed species, Indian milkweed (*Asclepias eriocarpa*) and narrow leaved milkweed (*Asclepias fascicularis*), and an abundance of other nectar producing species with continuously overlapping blooming periods to support summer breeding monarchs. Therefore, due to the presence of suitable host species and foraging resources monarch butterflies have the potential to occur in the BSA.

In summary, monarch butterflies rely exclusively on milkweed species as a larval host plant, and numerous milkweed plants were observed within the BSA. Monarch butterflies may be directly impacted if eggs, larvae, or chrysalises are present on milkweed plants through vegetation removal or ground disturbing activities if they are present in the project footprint. Adult monarch butterflies may be indirectly impacted through the loss of

nectaring resources. With the implementation of the Mitigation Measure BIO-1, listed below, impacts to monarch butterflies would be less than significant under CEQA.

Mitigation Measure BIO-1: To reduce potential impacts to monarch butterfly during construction, the following measures shall be implemented:

1. Preconstruction surveys shall be conducted during the monarch breeding season (March 16 through November 30) to determine if milkweed plants within the project area are being used for monarch breeding. Surveys shall be conducted by a qualified biologist no more than 14 days prior to ground or vegetation disturbance activities. To maximize the potential to observe monarch butterflies and signs of monarch breeding activity (larvae or pupae), plant surveys shall be conducted at least 2 hours after sunrise and 3 hours before sunset during sunny days with low wind speeds (less than 8 miles per hour) when temperatures are above 60° Fahrenheit, and not during wet conditions (e.g., foggy, raining, or drizzling).The biologist shall search for evidence of monarch eggs, caterpillars, chrysalises, and adults. If no monarch breeding activity is identified, work may proceed as planned.

2. If active monarch breeding is identified, the milkweed stand(s) shall be avoided until the Big Sandy Rancheria develops and implements a salvage and relocation plan that has been prepared by a qualified biologist and is reviewed and approved by the USFWS if the species is listed under FESA at the time construction activities take place. The plan shall include, but not be limited to, the following measures:

    - Specifications for construction timing and sequencing requirements;

    - Establishment of appropriate no-disturbance buffers for milkweed and construction monitoring by a qualified biologist during the breeding period if milkweed is identified and is occupied by monarch butterflies;

    - Restrictions associated with construction practices, equipment, or materials that may harm monarch butterflies (e.g., avoidance of pesticides/herbicides,

best management practices (BMPs) to minimize the spread of invasive plant species);

- Provisions to avoid monarch butterflies if observed away from a milkweed plant during project activity (e.g., ceasing of project activities until the animal has left the active work area on its own volition); and

- Prescription of an appropriate restoration seed mix targeted for the monarch butterfly, including milkweed and native plant species known to be visited by monarch butterflies and containing a mix of flowering plant species with continual floral availability through the entire breeding season for monarch butterfly (early spring to fall).

Nesting Birds. The BSA provides suitable nesting habitat for a number of bird species protected under Section 3503 of the CFGC and the MBTA. Disturbance of migratory birds and raptors during their nesting season (February 1 to August 31) could result in "take" which is prohibited under the MBTA and Section 3513 of the CFGC. CFGC (Section 3503) also prohibits take or destruction of bird nests or eggs.

No active bird nests or nest building activities were observed during the field surveys; however, several nest structures from previous nesting seasons were observed during the October 2020 survey in trees throughout the project area, as well as in the cottonwoods (*Populus* sp.) and shrubs along the Backbone Creek corridor adjacent to the BSA. Additionally, several cavities were observed in trees throughout the site that could be used by early season cavity-nesting bird species, several of which were observed during the survey, such as oak titmouse (*Baeolophus inornatus*), white-breasted nuthatch (*Sitta carolinensis*), and acorn woodpecker (*Melanerpes formicivorus*). Ground nesting birds, such as California towhee (*Melozone crissalis*), killdeer (*Charadrius vociferus*), and mourning dove (*Zenaida macroura*) may also occur within the BSA.

Migratory birds and raptors could nest within the interior live oak woodlands, ruderal areas, or vegetated banks of intermittent drainages within the BSA. Since trees would be removed as a result of project construction, migratory bird species may be impacted if any are nesting in the BSA when construction begins. Construction-related disturbance could also indirectly impact nesting birds by causing adults to abandon active nests, resulting in nest failure, and reduced reproductive success. Therefore, the project has the potential to impact nesting bird species protected under Section 3503 of the CFGC and the MBTA. Implementation of Mitigation Measure BIO-2, listed below, would reduce potential impacts to nesting birds to less than significant.

The project would not adversely affect bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) or otherwise conflict with the federal Bald and Golden Eagle

Protection Act, as the BSA does not provide suitable nesting habitat for bald eagles or golden eagles, which typically nest in mature trees near bodies of water or in rugged, open habitats with canyons and escarpments, respectively.

Mitigation Measure BIO-2: To the extent feasible, initial grading and vegetation removal activities shall occur during the non-nesting season (September 1 to January 31). For any construction activities conducted during the nesting season (February 1 to August 31), a qualified biologist (i.e., experienced in searching for passerine and raptor nests) shall conduct a preconstruction nest survey of all trees or other suitable nesting habitat in and within 250 feet of the limits of construction activities. The survey shall be conducted no more than 7 days prior to the start of work. Survey results shall be documented and submitted to the resource agencies, as required, to document compliance. If no nesting activity is observed, work may proceed as planned. If the survey indicates the presence of nesting birds, the biologist shall determine an appropriately sized buffer around the nest in which no work shall occur until the young have successfully fledged. The size of the nest buffer shall be determined by the biologist and shall be based on the nesting species and its sensitivity to disturbance, the location/orientation of the nest in the nest tree, the distance of the nest from the work area, the line of sight between the nest and the work area, and the nature of the construction activities that will be occurring in proximity to the nest. In general, buffer sizes of up to 250 feet for raptors and 50 feet for other birds should suffice to prevent substantial disturbance to nesting birds, but these buffers shall be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. If a lapse in project-related work of 14 days or longer occurs, another focused survey shall be performed before work can resume.

Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts on special-status wildlife species to less than significant levels.

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

Less Than Significant Impact with Mitigation. Interior live oak woodland is classified as a natural community and surrounds the entire BSA. However, this community only encroaches into the BSA in areas adjacent to the ruderal road shoulders along the edges of the BSA and in an undeveloped area in the north section of the BSA, totaling 6.46 acres. Under PRC 21083.4, counties administering

CEQA must consider mitigation for oak woodland impacted by the project. This state law requires a county to establish a method for requiring oak woodland mitigation. Oak woodland is defined as habitat where a majority of living trees are native oaks and with 10 percent or greater oak canopy cover.

The Fresno County General Plan contains several policies related to the protection of oak woodlands, including Policy OS-F.10, which specifies that new developments preserve natural woodlands to the maximum extent possible, and Policy OS-F.11, which requires that the County promote the preservation and management of oak woodlands by encouraging landowners to voluntarily follow the Fresno County Oak Management Guidelines (1998) and the County adopted Oak Woodlands Management Plan. The Fresno County Oak Woodland Management Guidelines provide guidance for building within oak woodlands. These voluntary guidelines direct landowners to include certain considerations when working within oak woodlands, as listed above in the regulatory setting section.

Approximately 6.23 acres of interior live oak woodland would be impacted by the project, consisting of 2.46 acres of permanent impacts associated with the proposed WWTP and drainfield and 3.77 acres of temporary impacts associated with the installation of the sewer pipelines. The project has been designed to stay within the existing roadway footprint to the maximum extent practicable to avoid tree removals and compaction within the root zones; however, as described in Section 1.0, a total of 85 trees are proposed for removal as a result of project implementation. Approximately 66 trees, including approximately 33 oak trees, would be removed to accommodate the proposed drainfield; approximately 4 oak trees would be removed as a result of construction of the WWTP; and approximately 15 trees, including approximately 13 oak trees, would be removed as a result of the construction of the wastewater collection system. In total, approximately 50 oak trees would be removed as a result of the proposed project. Implementation of the Mitigation Measure BIO-3 would reduce impacts to interior live oak woodland community.

Mitigation Measure BIO-3: To reduce potential impacts to interior live oak woodland during construction, the following measures shall be implemented:

1. Disturbance within and around oak driplines shall be minimized to the maximum extent feasible.

2. For oak trees within a 50-foot radius of the BSA which may be potentially impacted by project construction activities, a qualified arborist or biologist shall provide recommendations to avoid or minimize damage to the root systems during construction (e.g., restricting trenching to areas outside the root zone, flagging avoidance areas, avoiding tree root compaction, etc.).

3. For oak trees within the BSA that area removed as a result of the project, an oak planting and monitoring plan specifying the number and type of plantings, installation guidelines, maintenance and monitoring requirements, and performance

standards for determining planting success shall be prepared by a qualified arborist or biologist. Consistent with PRC Section 21083.4, oak trees removed shall be replaced on-site at a minimum ratio of one tree replaced to every one tree removed and shall be monitored for 7 years to ensure performance standards are met. The species composition shall be similar to those removed.

Implementation of Mitigation Measure BIO-3 would reduce impacts to the interior live oak woodland community to a less than significant level.

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact with Mitigation. As described above, 0.164 acre of jurisdictional aquatic resources are located within the BSA (Figure 4). Of this, approximately 0.04 acre of wetlands and other waters of the United States would be impacted by the project, consisting entirely of temporary impacts. All temporary impacts to aquatic resources would result from the construction of the wastewater collection system and would involve trenching through the ephemeral drainages, roadside ditch, and Backbone Creek to install the new sanitary sewer lines. All other jurisdictional aquatic resources would be avoided via the installation of ESA fencing.

Discharges into water of the U.S. from the project would be regulated by the USACE under Section 404 of the CWA and by the USEPA under Section 401 of the CWA. Prior to project implementation, the project proponent would be required to obtain the required permits from the USACE and the USEPA consistent with the CWA requirements. In addition to any conditions placed on the project by the regulatory agencies, Mitigation Measure BIO-4 shall be implemented to reduce impacts to aquatic resources during construction.

Mitigation Measure BIO-4: To reduce potential impacts to aquatic resources during construction, the following measures must be implemented:

1. Prior to project implementation, the Big Sandy Rancheria shall obtain the required permits from the USACE and the USEPA consistent with CWA requirements.

2. A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared in accordance with typical provisions associated with a Regional General Permit for Construction Activities. The SWPPP shall contain best management practices to minimize effects associated with erosion and siltation during construction, as well as a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.

3. The boundaries of designated work areas in and adjacent to all jurisdictional aquatic resources shall be staked to ensure all vehicles and equipment stay within the designated boundaries. All avoided aquatic resources shall be protected with temporary ESA and silt fencing during construction activities. On-site construction personnel shall be instructed regarding the resource presence, boundaries, and the importance of avoiding impacts to aquatic resources.

4. Vehicle and equipment staging areas shall be designated at least 100 feet from aquatic resource features; any vehicle fueling or other maintenance shall only occur within designated staging areas. No unauthorized construction related materials, wastes, or substances toxic to aquatic life shall be discharged or allowed to leach into any area where they may be washed by rainfall or runoff into waters of the United States.

5. No equipment shall be operated in drainage channels or other waters where there is flowing or standing water. Open trenching shall be conducted through aquatic resource features when dry conditions are present in the stream channel, typically between June 15 and October 15.

6. All temporarily disturbed aquatic resources shall be restored to pre-construction contours.

Implementation of Mitigation Measure BIO-4 would reduce impacts to aquatic resources during project construction to less than significant.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact with Mitigation. As discussed above, since trees would be removed as a result of project construction, migratory bird species may be impacted if any are nesting in the BSA when construction begins. Construction-related disturbance could also indirectly impact nesting birds by causing adults to abandon active nests, resulting in nest failure and reduced reproductive success. Therefore, the project has the potential to impact nesting bird species protected under the MBTA and CFGC. Mitigation Measure BIO-2 would reduce any impacts on nesting birds to less than significant levels. The project would not otherwise impact local wildlife movement or inhibit the ability of local wildlife to access the BSA.

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

Less Than Significant Impact with Mitigation. The proposed project would not conflict with any local policies or ordinances protecting biological resources. As discussed above, the Fresno County General Plan contains several policies related to the protection of oak woodlands, including Policy OS-F.10, which specifies that new developments preserve natural woodlands to the maximum extent possible, and Policy OS-F.11, which requires that the County promote the preservation and management of oak woodlands by encouraging landowners to voluntarily follow the Fresno County Oak Management Guidelines (1998) and the County adopted Oak Woodlands Management Plan. The Fresno County Oak Woodland Management Guidelines also provide guidance for building within oak woodlands. As discussed above, with the implementation of Mitigation Measure BIO-3, the proposed project would not conflict with any of the existing local ordinances. Implementation of this mitigation measure would reduce impacts to less than significant levels.

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

No Impact. The PG&E San Joaquin Valley Operation and Maintenance (O&M) Habitat Conservation Plan (HCP) was approved in 2007 and covers portions of nine counties, including Fresno County. This HCP covers PG&E activities which occur as a result of ongoing O&M that would have an adverse impact on any of the 65 covered species and provides incidental take coverage from the USFWS and CDFW. Therefore, any applicable PG&E activities associated with the proposed project would be covered under the O&M HCP. The proposed project would not conflict with the provisions of the PG&E HCP and the proposed project and would have no impact.

3.5 CULTURAL RESOURCES

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

3.5.1 Impact Analysis

3.5.1.1 Environmental Setting

LSA (2024b) conducted a cultural resources study of the project area. The study includes a records search of files at the Southern San Joaquin Valley Information Center (SSJVIC), a Sacred Lands File (SLF) search at the Native American Heritage Commission (NAHC), Native American outreach, and field survey. An archaeological literature and records search was conducted at the SSJVIC of the California Historical Resources Information System (CHRIS), housed at California State University, Bakersfield, on October 19, 2020, with a quarter-mile buffer around the Area of Potential Effects (APE). The results of this search indicated that seven cultural resource studies were previously completed within the APE, and six studies had been completed within a quarter-mile radius of the APE. The CHRIS search also included searching the lists of resources on or determined eligible for the National Register of Historic Places (National Register), the California Register of Historical Resources (California Register), California State Historical Landmarks, and California Sate Points of Historical Interest. The San Joaquin and Eastern Railroad Grade (P-10-001631/CA-FRE-1631H) is the only resource that was previously recorded within the project area.

The SLF search had positive results, and the NAHC recommended coordination with the Big Sandy Rancheria. Big Sandy Rancheria representatives accompanied LSA archaeologists during both surveys. LSA also reached out to the Big Sandy Rancheria for input during development of the cultural report (LSA 2024b). The SWRCB also consulted with the Big Sandy Rancheria. On June 13, 2024, Chairperson Elizabeth Hutchins-Kipp agreed with the findings in this document.

LSA archaeologists conducted surveys of the project area on October 23, 2020 and November 9, 2023. The survey did not identify any extant portion of the San Joaquin and Eastern Railroad Grade (P-10-001631/CA-FRE-1631H) within the project area. One groundstone feature that is likely a bedrock mortar, designated LSA-MKN2001-S-1, was identified during the survey. Another bedrock mortar (P-10-005931) was also identified within ten feet of the project area.

3.5.1.2 Regulatory Setting

Federal Regulations.

National Historic Preservation Act. The National Historic Preservation Act (NHPA 1966) is the most concise and effective federal law dealing with historic preservation. While federal preservation law does not apply to the proposed project, applicable state and local requirements have been derived from this legislation. The NHPA established guidelines to "preserve important historic, cultural, and natural aspects of our cultural heritage, and to maintain, wherever possible, an environment that supports diversity and a variety of individual choice." The NHPA includes regulations specifically for federal land-holding agencies, but also includes regulations (known as Section 106) that pertain to all projects that are funded, permitted, or approved by any federal agency and which have the potential to affect cultural resources. In addition, the NHPA authorizes the Secretary of the Interior to establish a National Register. The National Register is an inventory of districts, sites, buildings, structures, and objects significant at a national, state, or local level in American history, architecture, archaeology, engineering, and culture. The National Register is wholly maintained by the National Park Service, the Advisory Council on Historic Preservation, and the State Office of Historic Preservation and grants-in-aid programs.

State Regulations.

California Register of Historical Resources. The California Register is an inventory of significant architectural, archaeological, and historical resources in the State of California. Important cultural resources can be listed in the California Register through a number of methods, and listing requires approval from the State Historical Resources Commission. Properties can be nominated to the California Register by local governments, private organizations, or citizens. State Historical Landmarks and National Register-listed properties gain automatic listing in the California Register. The evaluative criteria used by the California Register for determining eligibility are closely based on those developed by the National Park Service for the National Register. In order for a cultural resource to be significant, or in other words eligible, for listing in the California Register, it must reflect one or more of the following criteria (PRC 5024.1c):

- **Criterion 1 (Events):** Resources that are associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California or the United States
- **Criterion 2 (Persons):** Resources that are associated with the lives of persons important to local, California, or national history
- **Criterion 3 (Architecture):** Resources that embody the distinctive characteristics of a type, period, region, or method of construction, or represent the work of a master, or possess high artistic values
- **Criterion 4 (Information Potential):** Resources or sites that have yielded or have the potential to yield information important to the prehistory or history of the local area, California, or the nation

California Environmental Quality Act. CEQA requires that public agencies assess the effects on historical resources of public or private projects that the agencies finance or approve. Historical resources are defined as buildings, sites, structures, objects, areas, places, records, or manuscripts that the Lead Agency determines to have historical significance, including architectural, archaeological, cultural, or scientific significance. CEQA requires that if a project results in an effect that may cause a substantial adverse change in the significance of a historical resource, alternative plans or mitigation measures must be considered. However, only significant historical resources need to be addressed. Therefore, before the assessment of effects or development of mitigation measures, the significance of cultural resources must be determined. The steps that are normally taken in a cultural resources investigation for CEQA compliance are as follows:

1. Identify potential historical resources.
2. Evaluate the eligibility of historical resources.
3. Evaluate the effects of the project on all eligible historical resources.

In addition, properties that are listed in or eligible for listing in the National Register are considered eligible for listing in the California Register and thus are significant historical resources for the purposes of CEQA (PRC Section 5024.1[d][1]).

According to CEQA, a project with an effect that may cause a substantial adverse change in the significance of a historical resource may have a significant impact on the environment (*State CEQA Guidelines* 15064.5[b]). CEQA also states that a substantial adverse change in the significance of a resource means the physical demolition, destruction, relocation, or alteration of an historical resource or its immediate surroundings such that the significance of the resource would be materially impaired. Actions that would materially impair the significance of a historical resource are any actions that would demolish or materially and adversely alter the physical characteristics of a historical resource that convey its historical significance and qualify or justify its eligibility for inclusion in the California Register or in a local register or survey that meet the requirements of PRC Sections 5020.1(k) and 5024.1(g).

Significant Historical Resources under State CEQA Guidelines. In completing an analysis of a project under CEQA, it must first be determined if the project site possesses a historical resource. A site may qualify as a historical resource if it falls within at least one of four categories listed in *State CEQA Guidelines* Section 15064.5(a). The four categories are:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register (PRC Section 5024.1, Title 14 California Code of Regulations [CCR], Section 4850 et seq.).

2. A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1 (g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

3. Any object, building, structure, site, area, place, record, or manuscript that a Lead Agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the Lead Agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the Lead Agency to be "historically significant" if the resource meets the criteria for listing on the California Register (PRC Section 5024.1, Title 14 CCR, Section 4852). These conditions are related to the eligibility criteria for inclusion in the California Register (PRC Sections 5020.1[k], 5024.1, 5024.1[g]). A cultural resource may be eligible for inclusion in the California Register if it:

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

4. The fact that a resource is not listed in, or determined to be eligible for listing in the California Register, is not included in a local register of historical resources (pursuant to PRC Section 5020.1(k)), or identified in an historical resources survey (meeting the criteria in PRC Section 5024.1(g)) does not preclude a Lead Agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

A Lead Agency must consider a resource that has been listed in, or determined to be eligible for listing in the California Register (Category 1) as a historical resource for CEQA purposes. In general, a resource that meets any of the other three criteria listed in *State CEQA Guidelines* Section 15064.5(a) is also considered to be a historical resource unless "the preponderance of evidence demonstrates that the resource is not historically or culturally significant."

Native American Graves Protection and Repatriation Act. In the event that human remains are encountered at any time during project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, they are subject to the provisions of 43 CFR Part 10 Subpart B of the Native American Graves Protection and Repatriation Act, which stipulates the Indian Tribe (Big Sandy Rancheria) will determine the appropriate treatment of remains found on tribal land.

Local Regulations. There are no applicable local regulations related to cultural resources for the proposed project.

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

Less Than Significant Impact with Mitigation. Two potential historical resources were identified in the project area: a groundstone feature which is likely a bedrock mortar (LSA-MKN2001-S-1) and a bedrock mortar (P-10-005931). Both resources will be identified as environmentally sensitive areas and avoided during construction of the project. With the implementation of Mitigation Measure CUL-1, the project will not significantly impact these two resources.

Mitigation Measure CUL-1: Prior to any construction-related activities, fencing shall be installed around LSA-MKN2001-S-1 and P-10-005931 to provide an approximate six-foot exclusionary buffer around each resource. Construction work within 50 feet of each resource should be monitored by an appropriately qualified archaeologist and a representative of the Big Sandy Rancheria to ensure there are no impacts to the resources.

In addition, there is the potential to identify previously undiscovered cultural resources during construction. With the implementation of Mitigation Measures CUL-2 and CUL-3, significant impacts to resources identified during construction will be avoided.

Mitigation Measure CUL-2: Monitoring of construction-related vegetation clearing and staking activities shall be conducted by an appropriately qualified archaeologist and a representative of the Big Sandy Rancheria within areas identified as archaeologically sensitive in the cultural report (LSA 2024b) in order to examine the exposed soil for surficial evidence of cultural resources.

Mitigation Measure CUL-3: If deposits of pre-contact or historic-period archaeological materials are encountered during project activities, all work within 50 feet of the discovery shall be redirected and protective fencing shall be placed to ensure the area is not inadvertently impacted by construction activities. An appropriately qualified archaeologist should assess the situation; immediately notify the State Water Resources Control Board, the Indian Health Service, and the Big Sandy Rancheria; consult with the agencies as appropriate; and make recommendations for the treatment of the discovery. Project personnel shall not collect or move any archaeological materials. Archaeological materials can include flaked-stone tools (e.g., projectile points, knives, and choppers) or obsidian, chert, basalt, or quartzite toolmaking debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, bones, and other cultural materials); and stone-milling equipment (e.g., mortars, pestles, and handstones). Pre-contact archaeological sites often contain human remains.

Historic-period materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse. It is recommended that impacts to archaeological resources be avoided by project activities. The Big Sandy Rancheria shall, in consultation with the State Water Resources Control Board and the Indian Health Service, make a reasonable effort to avoid or minimize significant impacts. If treatment is required, a plan shall be developed in consultation with the State Water Resources Control Board and the Indian Health Service to mitigate, avoid, or minimize impacts to cultural resources. Treatments may consist of, but are not necessarily limited to, systematic recovery and analysis of archaeological deposits; recording the resource; preparation of a report of findings; accessioning recovered archaeological materials at an appropriate curation facility; and community outreach. All reports produced as part of the evaluation and treatment of cultural resources identified during the project shall be submitted to the Big Sandy Rancheria, State Water Resources Control Board, and the Indian Health Service for review and comment. All final documents shall be submitted to the SSJVIC.

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

Less Than Significant Impact with Mitigation. No human remains were identified onsite and there was no evidence found in the course of preparing the cultural resources assessment that the area has been used as a cemetery or burial ground in the past. Regardless, it is possible that human remains may be present at subsurface levels. Implementation of Mitigation Measure CUL-4 would ensure that potentially significant impacts would be reduced to less than significant with mitigation incorporated.

Mitigation Measure CUL-4: In the event that human remains are encountered at any time during project work, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to California Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be Native American, they are subject to the provisions of 43 CFR Part 10 Subpart B of the Native American Graves Protection and Repatriation Act, which stipulates the Indian Tribe (Big Sandy Rancheria) will determine the appropriate treatment of remains found on tribal land.

3.6 ENERGY

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

3.6.1 Impact Analysis

3.6.1.1 Environmental Setting

Electricity. The project site would receive its electricity from PG&E. According to the California Energy Commission (CEC), total electricity consumption in the PG&E service area in 2022 was 104,695.0 GWh (35,245.7 GWh for the residential sector and 69,449.3 GWh for the nonresidential sector) (CEC 2021a). Total electricity consumption in Fresno County in 2022 was 8,384.4 GWh (3,170.5 GWh for the residential sector and 5,213.9 for the nonresidential sector) (CEC 2021b).

Natural Gas. PG&E is the natural gas service provider for the project site. According to the CEC, total natural gas consumption in the PG&E service area in 2022 was 4,449.2 million therms (1,866.2 million therms for the residential sector and 2,583.0 million therms for the nonresidential sector) (CEC 2021d). Total natural gas consumption in Fresno County in 2022 was 319.4 million therms (108.4 million therms for the residential sector and 211.0 million therms for the nonresidential sector) (CEC 2021e).

Fuel. Gasoline is the most used transportation fuel in California, with 97 percent of all gasoline being consumed by light-duty cars, pickup trucks, and sport utility vehicles. According to 2021 data, total gasoline consumption in California was 319,514 thousand barrels (13.4 billion gallons) or 1,613.5 trillion British thermal units (BTU).[1] Of the total gasoline consumption, 302,881 thousand barrels (12.7 billion gallons) or 1,529.5 trillion BTU were consumed for transportation (United States Energy Information Administration 2021). Based on fuel consumption obtained from EMFAC2021, approximately 366.2 million gallons of gasoline and approximately 157.8 million gallons of diesel will be consumed from vehicle trips in Fresno County in 2024.

3.6.1.2 Regulatory Setting

Federal Regulations.

Energy Policy Act of 2005. The Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under this Act, consumers and businesses can obtain federal tax credits

[1] A British thermal unit (BTU) is defined as the amount of heat required to raise the temperature of 1 pound of water by 1 degree Fahrenheit.

for purchasing fuel-efficient appliances and products (including hybrid vehicles), building energy-efficient buildings, and improving the energy efficiency of commercial buildings. Additionally, tax credits are available for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

Corporate Average Fuel Economy Standards. On March 31, 2022, the National Highway Traffic Safety Administration (NHTSA) finalized the Corporate Average Fuel Economy (CAFE) standards for Model Years 2024–2026 Passenger Cars and Light Trucks. The amended CAFE standards would require an industry-wide fleet average of approximately 49 mpg for passenger cars and light trucks in model year 2026, by increasing fuel efficiency by 8 percent annually for model years 2024–2025, and 10 percent annually for model year 2026. The final standards are estimated to save about 234 billion gallons of gas between model years 2030 to 2050.

State Regulations.

Assembly Bill 1575, Warren-Alquist Act. In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted Assembly Bill (AB) 1575 (also known as the Warren-Alquist Act), which created the California Energy Commission. The statutory mission of the CEC is to forecast future energy needs; license power plants of 50 megawatts (MW) or larger; develop energy technologies and renewable energy resources; plan for and direct state responses to energy emergencies; and, perhaps most importantly, promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards. AB 1575 also amended PRC Section 21100(b)(3) and *State CEQA Guidelines* Section 15126.4 to require EIRs to include, where relevant, mitigation measures proposed to minimize the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Thereafter, the California Natural Resources Agency created Appendix F to the *State CEQA Guidelines*. Appendix F assists EIR preparers in determining whether a project will result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F of the *State CEQA Guidelines* also states that the goal of conserving energy implies the wise and efficient use of energy and the means of achieving this goal, including 1) decreasing overall per capita energy consumption; 2) decreasing reliance on fossil fuels such as coal, natural gas, and oil; and 3) increasing reliance on renewable energy sources.

Senate Bill 1389, Energy: Planning and Forecasting. In 2002, the State Legislature passed Senate Bill (SB) 1389, which required the CEC to develop an integrated energy plan every 2 years for electricity, natural gas, and transportation fuels for the California Energy Policy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies a number of strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero emission vehicles (ZEVs) and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled (VMT) and accommodate pedestrian and bicycle access. In compliance with the requirements of SB 1389, the CEC adopts an Integrated Energy Policy Report every 2 years and an update every other year. The most recently adopted reports include the *2023 Integrated Energy Policy Report Update* (CEC 2023). The *Integrated Energy Policy Report* covers a broad range of topics, including decarbonizing buildings,

integrating renewables, energy efficiency, energy equity, integrating renewable energy, updates on Southern California electricity reliability, climate adaptation activities for the energy sector, natural gas assessment, transportation energy demand forecast, and the California Energy Demand Forecast. The *Integrated Energy Policy Report* provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

Renewable Portfolio Standards. SB 1078 established the California Renewable Portfolio Standards program in 2002. SB 1078 initially required that 20 percent of electricity retail sales be served by renewable resources by 2017; however, this standard has become more stringent over time. In 2006, SB 107 accelerated the standard by requiring that the 20 percent mandate be met by 2010. In April 2011, SB 2 required that 33 percent of electricity retail sales be served by renewable resources by 2020. In 2015 Senate Bill (SB 350) established tiered increases to the Renewable Portfolio Standards of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. In 2018, SB 100 increased the requirement to 60 percent by 2030 and required that all the state's electricity to come from carbon-free resources by 2045. SB 100 took effect on January 1, 2019 (CPUC 2020).

Title 24, California Building Code. Energy consumption by new buildings in California is regulated by the Building Energy Efficiency Standards, embodied in Title 24 of the CCR, known as the California Building Code (CBC). The CEC first adopted the Building Energy Efficiency Standards for Residential and Nonresidential Buildings in 1978 in response to a legislative mandate to reduce energy consumption in the state. The CBC is updated every 3 years, and the current 2022 CBC went into effect on January 1, 2023. The efficiency standards apply to both new construction and rehabilitation of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. Title 24 standards are updated every 3 years and was most recently updated in 2022 to include new mandatory measures for residential as well as non-residential uses; the new measures took effect on January 1, 2023.

California Green Building Standards Code Cd. In 2010, the California Building Standards Commission (CBSC) adopted Part 11 of the Title 24 Building Energy Efficiency Standards, referred to as the California Green Building Standards Code (CALGreen Code). The CALGreen Code took effect on January 1, 2011. The CALGreen Code is updated on a regular basis, with the most recent update consisting of the 2022 CALGreen Code standards that became effective January 1, 2023. The CALGreen Code established mandatory measures for residential and non-residential building construction and encouraged sustainable construction practices in the following five categories: (1) planning and design, (2) energy efficiency, (3) water efficiency and conservation, (4) material conservation and resource efficiency, and (5) indoor environmental quality. Although the CALGreen Code was adopted as part of the state's efforts to reduce greenhouse gas (GHG) emissions, the CALGreen Code standards have co-benefits of reducing energy consumption from residential and non-residential buildings subject to the standard.

California Energy Efficiency Strategic Plan. On September 18, 2008, the California Public Utilities Commission (CPUC) adopted California's first Long-Term Energy Efficiency Strategic

Plan, presenting a roadmap for energy efficiency in California. The Plan articulates a long-term vision and goals for each economic sector and identifies specific near-term, mid-term, and long-term strategies to assist in achieving those goals. The Plan also reiterates the following four specific programmatic goals known as the "Big Bold Energy Efficiency Strategies" that were established by the CPUC in Decisions D.07-10-032 and D.07-12-051:

- All new residential construction will be zero net energy (ZNE) by 2020.
- All new commercial construction will be ZNE by 2030.
- 50 percent of commercial buildings will be retrofitted to ZNE by 2030.
- 50 percent of new major renovations of state buildings will be ZNE by 2025.

Local Regulations. There are no applicable local regulations related to energy for the proposed project.

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

Less Than Significant Impact. The proposed project would include the construction and operation of a new WWTP and associated wastewater collection system within the BSR and would demand energy during construction and operation of the project.

Construction-Period Energy Use. The anticipated construction schedule assumes that the proposed project would be built over 9 months. The proposed project would require grading, site preparation, and building activities during construction.

Construction of the proposed project would require energy for manufacturing and transporting building materials, preparation of the site for demolition and grading activities, and building construction. Petroleum fuels (e.g., diesel and gasoline) would be the primary sources of energy for these activities. Energy usage on the project site during construction would be temporary in nature and would be relatively small in comparison to the state's available energy sources. Therefore, construction energy impacts would be less than significant, and no mitigation would be required.

Operational Energy Use. Operation of the proposed project would demand electricity. The proposed project would have minimal to no effect on natural gas demand. The electrical improvements required for the selected project construction would require three new electrical supplies. The new services would be at the wastewater treatment facility and at the two new lift stations.

- **Wastewater Treatment Facility (New supply existing meter location).** The supply for the WWTP would be generated from the existing PG&E utility pole and meter located at Well 7 on the west side of the Comstock Property, approximately 360 feet northwest of the proposed WWTP. The power available is 230-volt, three-phase, and 400 amp.

- **LS-1 (New supply existing meter location).** The supply for LS-1 would be generated by the Brindle Well power pole located approximately 340 feet north of LS-1. The power available is 240-volts single-phase, and 100 amp.

- **LS-2 (Existing building with existing meter).** The power for this lift station would be supplied from the existing Well 5 meter. Service is on the Well 5 building approximately 130 feet north of the lift station. This service is 240-volts single-phase.

Electricity would be obtained from PG&E, which currently provides electricity to properties in the immediate vicinity of the project site. Due to the small electricity demand of the WWTP, it is not anticipated that operation of this facility would significantly impact PG&E's ability to provide electricity in the region. Due to the small electricity demand associated with the proposed project, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of fuel or energy and would incorporate renewable energy or energy efficiency measures into building design, equipment use, and transportation. Impacts would be less than significant, and no mitigation would be required.

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

Less Than Significant Impact. In 2002, the Legislature passed Senate Bill 1389, which required the CEC to develop an integrated energy plan every two years for electricity, natural gas, and transportation fuels, for the California Energy Policy Report. The plan calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. The CEC recently adopted the 2023 Integrated Energy Policy Report. The 2023 Integrated Energy Policy Report provides the results of the CEC's assessments of a variety of energy issues facing California. Many of these issues will require action if the state is to meet its climate, energy, air quality, and other environmental goals while maintaining energy reliability and controlling costs.

As indicated above, energy usage in the project area during construction would be relatively small in comparison to the state's available energy sources and energy impacts would be negligible at the regional level. Once operational, the proposed project would not substantially increase energy use. Because California's energy conservation planning actions are conducted at a regional level, and because the project's total impact to regional energy supplies would be minor, the proposed project would not conflict with California's energy conservation plans as described in the 2023 Integrated Energy Policy Report. Thus, as shown above, the project would avoid or reduce the inefficient, wasteful, and unnecessary consumption of energy and would not result in any irreversible or irretrievable commitments of energy. Impacts would be less than significant.

3.7 GEOLOGY AND SOILS

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

3.7.1 Impact Analysis

3.7.1.1 Environmental Setting

The project site is located on the western flank of the Sierra Nevada foothills, characterized by uneven topography. The project site is generally bisected by a dry creek bed with flow only during large rain events. The project site generally slopes from south to north and encompasses residential and commercial properties currently being served by septic systems.

The long and gradual western slopes of the Sierra Nevada range are associated with the Sierran batholith, which is dominated by granitic outcrops. Most of the project area is comprised of "Coarsegold-Auberry families-Rock outcrop association, 35 to 85 percent slopes" soils. The northern and southern portions of the project area comprise "Auberry family, 35 to 65 percent slopes" soils (California Soil Resource Lab 2020). Both the Coarsegold and Auberry soil series are associated with pre-Quaternary landforms, which predate human occupation.

3.7.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to geology and soils for the proposed project.

State Regulations.

Uniform Building Code. The Uniform Building Code (UBC) ensures all buildings maintain the public health and safety by regulating the design, construction, quality of materials, certain equipment, location, grading, use, occupancy, and maintenance of all buildings and structures. UBC standards address foundation design, shear wall strength, and other structurally related conditions.

Alquist-Priolo Earthquake Fault Zoning. The Alquist-Priolo Earthquake Fault Zoning Act (California Public Resources Code Sections 2621 et seq.) requires the California Geologic Survey to compile maps of traces of active faults and requires a state geologist to delineate earthquake fault zones along faults that are "sufficiently active" and "well defined." The act requires disclosure in real estate transactions and requires cities and counties to withhold development permits for a site in an earthquake fault zone until geologic investigations demonstrate that the site is not threatened by surface displacements from future faulting. An active fault is one showing expression of surface rupture within the last 11,000 years. Pursuant to this act, structures for human occupancy are not allowed within 50 feet of the trace of an active fault. Single family wood-frame or steel-frame dwellings up to two stories high and not part of a development of four or more dwelling units is the only exemption to this Act.

Seismic Hazard Mapping Act. The Seismic Hazard Mapping Act (SHMA) was adopted by the state in 1990 in response to the Loma Prieta Earthquake in 1989. This Act protects the public from the effects of non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, seismically induced landslides, or other ground failure caused by earthquakes. The goal of the act is to minimize loss of life and property by identifying and mitigating seismic hazards. The California Geological Survey has been required under this Act to prepare "seismic hazard zone" maps available to local governments. These maps identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. Buildings designed for human occupancy proposed to be built within a "seismic hazard zone" require a geotechnical investigation and mitigation measures to be implemented. SHMA requires responsible agencies to only approve projects within seismic hazard zones following a site-specific investigation to determine if the hazard is present, and if so, the inclusion of appropriate mitigation(s). Reports must be stamped by a Registered Civil Engineer or Certified Engineering Geologist with a specialty in seismic hazard evaluation. In addition, the SHMA requires real estate sellers and agents provide full disclosure if the property is within a seismic hazard zone at the time of sale. Single family dwellings up to two stories high and part of a development of no more than three units are the only exemption to this Act.

2022 California Building Code. Current law states that every local agency enforcing building regulations, such as cities and counties, must adopt the provisions of the CBC within 180 days of its publication. The publication date of the CBC is established by the California Building Standards Commission, and the code is updated every three years. The CBC is in Title 24, Part 2, of the California Code of Regulations. The most recent building standard adopted by the legislature and used throughout the state is the 2022 CBC, which took effect on January 1, 2023. Local jurisdictions may add amendments based on local geographic, topographic, or climatic conditions. These codes provide minimum standards to protect property and people by

regulating the design and construction of excavations, foundations, building frames, retaining walls, and other building elements to mitigate the effects of seismic shaking and adverse soil conditions. The CBC's provisions for earthquake safety are based on factors such as occupancy type, the types of soil and rock on-site, and the strength of ground motion with a specified probability at the site.

In the context of earthquake hazards, the California Building Code's design standards have a primary objective of assuring public safety and a secondary goal of minimizing property damage and maintaining function during and following a seismic event. Recognizing that the risk of severe seismic ground motion varies from place to place, the California Building Standards Code seismic code provisions will vary depending on location (Seismic Zones 0, 1, 2, 3, and 4; with 0 being the least stringent and 4 being the most stringent). The earthquake design requirements take into account the occupancy category of the structure, Site Class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC.

California Building Code Section 1803 (Requirements for Geotechnical Investigations). Requirements for geotechnical investigations for subdivisions requiring tentative and final maps and for other types of structures are in the California Health and Safety Code, Sections 17953 to 17955, and in Section 1803 of the CBC. Testing of samples from subsurface investigations is required, such as from borings or test pits. Investigations must be conducted by a registered design professional and involve in situ-testing, laboratory testing, or engineering calculations. Studies must be done as needed to evaluate slope stability, soil strength, position, and adequacy of load-bearing soils, the effect of moisture variation on load-bearing capacity, compressibility, liquefaction, differential settlement, and expansiveness.

Local Regulations.

Fresno County General Plan. The General Plan contains policies that address seismic and geological conditions and are applicable to the project.

- **Policy HS-D.3:** The County shall require that a soils engineering and geologic-seismic analysis be prepared by a California-registered engineer or engineering geologist prior to permitting development, including public infrastructure projects, in areas prone to geologic or seismic hazards (i.e., fault rupture, groundshaking, lateral spreading, lurchcracking, fault creep, liquefaction, subsidence, settlement, landslides, mudslides, unstable slopes, or avalanche).

- **Policy HS-D.4:** The County shall require all proposed structures, additions to structures, utilities, or public facilities situated within areas subject to geologic-seismic hazards as identified in the soils engineering and geologic-seismic analysis to be sited, designed, and constructed in accordance with applicable provisions of the Uniform Building Code (Title 24 of the California Code of Regulations) and other relevant professional standards to minimize or prevent damage or loss and to minimize the risk to public safety.

- **Policy HS-D.8:** The County shall require a soils report by a California-registered engineer or engineering geologist for any proposed development, including public infrastructure projects, that requires a County permit and is located in an area containing soils with high "expansive" or "shrink-swell" properties. Development in such areas shall be prohibited unless suitable design and construction measures are incorporated to reduce the potential risks associated with these conditions.

- **Policy HS-D.9:** The County shall seek to minimize soil erosion by maintaining compatible land uses, suitable building designs, and appropriate construction techniques. Contour grading, where feasible, and revegetation shall be required to mitigate the appearance of engineered slopes and to control erosion.

a. Would the project 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 Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The United States Geological Survey (USGS) defines a fault as "active" if it has moved one or more times in the last 10,000 years (USGS n.d.). There are a number of active and potentially-active faults within and adjacent to Fresno County (County of Fresno 2000). Although most of Fresno County is situated within an area of relatively low seismic activity by comparison to other areas of the state, the faults and fault systems that lie along the eastern and western boundaries of the county, as well as other regional faults, have the potential to produce high-magnitude earthquakes throughout the County (County of Fresno 2000). No Alquist-Priolo earthquake zones are mapped in the vicinity of the project site (California Geological Survey 2015a). The nearest inactive fault to the project site is Mount Tom in Mono County, located approximately 47 miles northeast of the project site. The site does not fall within an Alquist-Priolo Fault Zone, and is therefore not subject to any building restrictions. The proposed project would be constructed to standards consistent with CBC guidelines, particularly those pertaining to earthquake design, in order to safeguard against major structural failures and loss of life. Therefore, no people or structures would be exposed to potential substantial adverse effects, including the risk of loss, injury, or death from the rupture of a known earthquake fault as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. As a result, impacts would be less than significant.

ii. Strong seismic ground shaking?

Less Than Significant Impact. As discussed above, due to the distance to the known faults, hazards due to ground shaking would be minimal. Therefore, impacts related to strong seismic ground shaking would be less than significant.

iii. Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Soil liquefaction can occur in seismic conditions. Liquefaction is the temporary transformation of saturated, non-cohesive material from a relatively stable, solid condition to a liquefied state as a result of increased soil pore water pressure. Soil pore water pressure is the water pressure between soil particles. Liquefaction can occur if three factors are present: seismic activity, loose sand or silt, and shallow groundwater.

The County's General Plan does not identify specific areas prone to liquefaction; however, it notes that a soils engineering and geologic-seismic analysis be prepared by a California-registered engineer or engineering geologist prior to permitting development, including public infrastructure projects, in areas prone to geologic or seismic hazards (i.e., fault rupture, groundshaking, lateral spreading, lurchcracking, fault creep, liquefaction, subsidence, settlement, landslides, mudslides, unstable slopes, or avalanche). The project site does not contain many of these qualities that would make an area susceptible to liquefaction; this, combined with the lack of active faults in the area, indicates that the probability of liquefaction occurring on the site is low. As such, the proposed project would not expose people or structures to potential substantial effects associated with seismic-related ground failure, including liquefaction. Therefore, this impact is less than significant.

iv. Landslides?

Less Than Significant Impact. The County's General Plan states that geologic hazards in Fresno County could include landslides. However, the project site is not mapped as a landslide hazard (California Geological Survey 2015b). In addition, the proposed project would include the construction and operation of a new WWTP and associated wastewater collection system. The proposed project would not expose people or structures to potential substantial adverse effects associated with landslides. Therefore, impacts related to landslides would be less than significant.

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

Less Than Significant Impact with Mitigation. Soil erosion is a process whereby soil materials are worn away and transported to another area, either by wind or water. Rates of erosion can vary depending on the soil material and structure, placement, and human activity. Soil containing high amounts of silt can be easily eroded, while sandy soils are less susceptible. Excessive soil erosion can eventually damage building foundations and roadways. Erosion is most likely to occur on sloped areas with exposed soil, especially where unnatural slopes are created by cut-and-fill activities. Soil erosion rates can be higher during the construction phase. Typically, the soil erosion potential is reduced once the soil is graded and covered with concrete, structures, or asphalt.

Implementation of the proposed project would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. Mitigation Measure GEO-1, described below, would reduce the potential for soil erosion.

Mitigation Measure GEO-1: To reduce the potential for soil erosion during construction of the proposed project, an Erosion Control Plan shall be prepared for the project in conformance with the California Storm Water Best Management Practice Handbook for Construction Activity, prior to the start of grading. After construction, any unpaved slopes steeper than 20 percent shall be hydroseeded and/or planted with shallow rooted groundcover to reduce the risk of erosion.

Soil erosion and loss of topsoil would also be minimized through implementation of SJVAPCD Regulation VIII fugitive dust control measures and compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements. With incorporation of Mitigation Measure GEO-1 and compliance with NPDES permit requirements, construction of the proposed project would not result in substantial soil erosion or loss of topsoil.

The project's geotechnical investigation (Moore Twining 2020) identified areas on the Comstock property with adequate percolation to be used for drip fields. Subsurface disposal provides year-round disposal, reduces the potential for contact with wastewater by the public, utilizes percolation through the soil to further enhance treatment, is simple to operate and cost effective to construct and maintain. Furthermore, drip system operation and maintenance costs are lower than the leach field option because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Additionally, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

The unpaved slopes where excavation and trenching would be performed during project construction are at a higher risk for erosion. With the implementation of Mitigation Measure GEO-1, which requires revegetation of slopes greater than 20 percent, this impact would be less than significant.

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

Less Than Significant Impact. See Sections 3.7.1.a.iii and 3.7.1.a.iv above. The proposed project would not require a substantial grade change or change in topography. The project would not result in on- or off-site landslides, lateral spreading, subsidence, liquefaction, or collapse. Therefore, this impact would be less than significant.

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

Less Than Significant Impact. Expansive soils can swell or shrink in response to changes in moisture, which can significantly damage infrastructure located on expansive soils. The project is not located

in an area with high soil expansion potential. Therefore, the project would not create substantial risks to life or property due to expansive soils. Therefore, no impact would occur.

e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Less Than Significant Impact. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. As discussed in the Project Description, prior to abandoning an existing septic system, a permit is required to be submitted and approved by the Fresno County Department of Works and Planning, Development Services and Capital Projects Division. Following approval from Fresno County, demolition of each of the 56 existing septic systems would include the following:

- **Cap Existing Building Sewer Lines and Pump Remaining Waste from Septic Tank.** Prior to connecting to a public sewer, any abandoned septic tank would be capped within 5 feet of the property line. A certified septic hauler would pump any remaining waste from each tank.

- **Fill Septic Tank with Approved Materials.** Each tank would be completely filled with earth, gravel, concrete, or other approved materials. Per the County LAMP, the filling shall not extend above the top of the vertical portions of the sidewalls or above the level of any outlet pipe until inspection has been called and the cesspool, septic tank, or seepage pit has been inspected. After such inspection, the cesspool, septic tank, or seepage pit would be filled to the level of the top of the ground.

- **Owner and Permittee Guidelines.** Within thirty days of connecting the building sewer to a public sewer, the permittee making the connection would fill all abandoned facilities in accordance with the County. The property owner would act in accordance with the County LAMP and OWTS Guidelines.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each septic tank. Following abandonment, Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County. Therefore, once complete, the proposed project would not require the use of septic tanks or other alternative wastewater disposal systems. As such, this impact would be less than significant.

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

Less Than Significant Impact with Mitigation. Paleontological resources are the mineralized (fossilized) remains of prehistoric plant and animal life exclusive of human remains or artifacts. Fossil remains such as bones, teeth, shells, and leaves are found in geologic deposits (rock

formations) where they were originally buried. Fossil remains are considered important as they provide indicators of the earth's chronology and history. These resources are afforded protection under CEQA and are limited and nonrenewable, and they provide invaluable scientific and educational data. Due to the sensitive nature of these paleontological resources, they are not mapped.

Implementation of the proposed project would require ground disturbing construction activities that may inadvertently encounter and damage paleontological resources. Should this occur, project construction may result in the destruction of a unique paleontological site, resulting in a potentially significant impact. Mitigation Measure GEO-2 would reduce this impact to less than significant.

Mitigation Measure GEO-2: The Big Sandy Rancheria shall inform its contractor(s) of the sensitivity of the project area for paleontological resources. Should paleontological resources be encountered during project subsurface construction activities, all ground-disturbing activities within 25 feet shall be redirected and a qualified paleontologist shall be contacted to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. If found to be significant, and project activities cannot avoid the paleontological resources, adverse effects to paleontological resources shall be mitigated. Mitigation may include monitoring, recording the fossil locality, data recovery and analysis, a final report, and accessioning the fossil material and technical report to a paleontological repository. Public educational outreach may also be appropriate. Upon completion of the assessment, a report documenting methods, findings, and recommendations shall be prepared and submitted to the Big Sandy Rancheria for review, and (if paleontological materials are recovered) a paleontological repository, such as the University of California Museum of Paleontology. The Big Sandy Rancheria shall verify that the above directive has been included in the appropriate contract documents.

3.8 GREENHOUSE GAS EMISSIONS

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

3.8.1 Impact Analysis

3.8.1.1 Environmental Setting

The following discussion describes existing GHG emissions in Fresno County and the SJVAB, beginning with a discussion of typical GHG types and sources, impacts of global climate changes, the regulatory framework surrounding these issues, and current emission levels.

Global Climate Change. Greenhouse gas emissions (GHGs) are present in the atmosphere naturally, are released by natural sources, or form from secondary reactions taking place in the atmosphere. Over the last 200 years, humans have caused substantial quantities of GHGs to be released into the atmosphere. These extra emissions are increasing GHG concentrations in the atmosphere and enhancing the natural greenhouse effect, which is believed to be causing global warming. Although manmade GHGs include naturally occurring GHGs such as carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O), some gases like hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF_3), and sulfur hexafluoride (SF_6) are completely new to the atmosphere.

Certain gases, such as water vapor, are short-lived in the atmosphere. Others remain in the atmosphere for significant periods of time, contributing to climate change in the long term. Water vapor is excluded from the list of GHGs above because it is short-lived in the atmosphere and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

These gases vary considerably in terms of Global Warming Potential (GWP), which is a concept developed to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG; the definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of carbon dioxide equivalent (CO_2e).

3.8.1.2 Regulatory Setting

Federal Regulations. The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the USEPA has the authority to regulate CO_2 emissions under the CAA. While there currently are no adopted federal regulations for the control or reduction of GHG emissions, the USEPA commenced several actions in 2009 to implement a regulatory approach to global climate change.

This includes the 2009 USEPA final rule for mandatory reporting of GHGs from large GHG emission sources in the United States. Additionally, the USEPA Administrator signed an endangerment finding action in 2009 under the Clean Air Act, finding that six GHGs (CO_2, CH_4, N_2O, HFCs, PFCs, SF_6) constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change, leading to national GHG emission standards.

State Regulations. The CARB is the lead agency for implementing climate change regulations in the state. Since its formation, the CARB has worked with the public, the business sector, and local governments to find solutions to California's air pollution problems. Key efforts by the state are described below.

Assembly Bill 32 (2006), California Global Warming Solutions Act. California's major initiative for reducing GHG emissions is AB 32, passed by the state legislature on August 31, 2006. This effort aims at reducing GHG emissions to 1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 million metric tons (MMT) of CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the state's projected business-as-usual 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main state strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change. The Scoping Plan was approved by the CARB on December 11, 2008, and contains the main strategies California will implement to achieve the reduction of approximately 169 MMT CO_2e, or approximately 30 percent, from the state's projected 2020 emissions level of 596 MMT CO_2e under a business-as-usual scenario (this is a reduction of 42 MMT CO_2e, or almost 10 percent from 2002–2004 average emissions). The Scoping Plan also includes CARB-recommended GHG reductions for each emissions sector of the state's GHG inventory. The Scoping Plan calls for the largest reductions in GHG emissions to be achieved by implementing the following measures and standards:

- Improved emissions standards for light-duty vehicles (estimated reductions of 31.7 MMT CO_2e);
- The Low-Carbon Fuel Standard (15.0 MMT CO_2e);
- Energy efficiency measures in buildings and appliances and the widespread development of combined heat and power systems (26.3 MMT CO_2e); and
- A renewable portfolio standard for electricity production (21.3 MMT CO_2e).

The CARB approved the First Update to the Climate Change Scoping Plan on May 22, 2014. The First Update identifies opportunities to leverage existing and new funds to further drive GHG

emission reductions through strategic planning and targeted low carbon investments. The First Update defines CARB climate change priorities until 2020 and sets the groundwork to reach long-term goals set forth in EOs S-3-05 and B-16-2012. This Update highlights California's progress toward meeting the "near-term" 2020 GHG emission reduction goals as defined in the initial Scoping Plan. It also evaluates how to align the state's "longer-term" GHG reduction strategies with other state policy priorities for water, waste, natural resources, clean energy, transportation, and land use. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by Executive Order (EO) B-30-15 and codified by SB 32.

The 2022 scoping Plan (CARB 2022) was approved in December 2022 and assesses progress toward achieving the SB 32 2030 target and laying out a path to achieve carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

Senate Bill 375 (2008). SB 375, the Sustainable Communities and Climate Protection Act, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the State of California on September 30, 2008. On September 23, 2010, the CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the Metropolitan Planning Organization (MPOs); the targets require a 6 to 15 percent reduction by 2020 and between 13 to 19 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs such as the Fresno Council of Governments will work with local jurisdictions in the development of Sustainable Communities Strategy (SCS) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. Pursuant to SB 375, the Central Valley/San Joaquin reduction targets for per capita vehicular emissions were 6 to 13 percent by 2020 and are 13 to 16 percent by 2035 as shown in Table G.

Executive Order B-30-15 (2015). Governor Jerry Brown signed EO B-30-15 on April 29, 2015, which added the immediate target of:

- GHG emissions should be reduced to 40 percent below 1990 levels by 2030.

All state agencies with jurisdiction over sources of GHG emissions were directed to implement measures to achieve reductions of GHG emissions to meet the 2030 and 2050 targets. CARB was directed to update the AB 32 Scoping Plan to reflect the 2030 target, and therefore, is moving forward with the update process. The mid-term target is critical to help frame the suite of policy measures, regulations, planning efforts, and investments in clean technologies and infrastructure needed to continue reducing emissions.

Table G: Senate Bill 375 Regional Greenhouse Gas Emissions Reduction Targets

Metropolitan Planning Organization	By 2020 (%)	By 2035 (%)
San Francisco Bay Area	10	19
San Diego	15	19
Sacramento	7	19
Central Valley/San Joaquin	6–13	13–16
Los Angeles/Southern California	8	19

Source: California Air Resources Board (2018).

Senate Bill 350 (2015) Clean Energy and Pollution Reduction Act. SB350, signed by Governor Jerry Brown on October 7, 2015, updates, and enhances AB 32 by introducing the following set of objectives in clean energy, clean air, and pollution reduction for 2030:

- Raise California's renewable portfolio standard from 33 percent to 50 percent; and
- Increasing energy efficiency in buildings by 50 percent by the year 2030.

The 50 percent renewable energy standard will be implemented by the California Public Utilities Commission for the private utilities and by the CEC for municipal utilities. Each utility must submit a procurement plan showing it will purchase clean energy to displace other non-renewable resources. The 50 percent increase in energy efficiency in buildings must be achieved using existing energy efficiency retrofit funding and regulatory tools already available to state energy agencies under existing law. The addition made by this legislation requires state energy agencies to plan for and implement those programs in a manner that achieves the energy efficiency target.

Senate Bill 32, California Global Warming Solutions Act of 2016, and Assembly Bill 197. In summer 2016 the Legislature passed, and the Governor signed, SB 32, and Assembly Bill 197 (AB 197). SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's April 2015 EO B-30-15. SB 32 builds on AB 32, described above, and keeps us on the path toward achieving the state's 2050 objective of reducing emissions to 80 percent below 1990 levels, consistent with an IPCC analysis of the emissions trajectory that would stabilize atmospheric GHG concentrations at 450 parts per million CO_2e and reduce the likelihood of catastrophic impacts from climate change.

The companion bill to SB 32, AB 197, provides additional direction to CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 meant to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

Senate Bill 100 (SB 100). On September 10, 2018, Governor Brown signed SB 100, which raises California's Renewables Portfolio Standard (RPS) requirements to 60 percent by 2030, with interim targets, and 100 percent by 2045. The bill also establishes a state policy that eligible renewable energy resources and zero-carbon resources supply 100 percent of all retail sales of electricity to California end-use customers and 100 percent of electricity procured to serve all

state agencies by December 31, 2045. Under the bill, the state cannot increase carbon emissions elsewhere in the western grid or allow resource shuffling to achieve the 100 percent carbon-free electricity target.

Executive Order B-55-18. Executive Order B-55-18, signed September 10, 2018, sets a goal "to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net negative emissions thereafter." Executive Order B-55-18 directs CARB to work with relevant state agencies to ensure future Scoping Plans identify and recommend measures to achieve the carbon neutrality goal. The goal of carbon neutrality by 2045 is in addition to other statewide goals, meaning not only should emissions be reduced to 80 percent below 1990 levels by 2050, but that, by no later than 2045, the remaining emissions be offset by equivalent net removals of CO2e from the atmosphere, including through sequestration in forests, soils, and other natural landscapes.

Assembly Bill (AB) 1279. AB 1279 was signed in September 2022 and codifies the state goals of achieving net carbon neutrality by 2045 and maintaining net negative GHG emissions thereafter. This bill also requires California to reduce statewide GHG emissions by 85 percent compared to 1990 levels by 2045 and directs CARB to work with relevant state agencies to achieve these goals.

Regional Regulations. Fresno County is located within the SJVAB, which is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAPCD has regulatory authority over certain stationary and industrial GHG emission sources and provides voluntary technical guidance on addressing GHGs for other emission sources in a CEQA context. District initiatives related to GHGs are described below.

Climate Change Action Plan. The San Joaquin Valley Air Pollution Control District Climate Change Action Plan (CCAP) was adopted on August 21, 2008. The CCAP includes suggested best performance standards (BPS) for proposed development projects. However, the SJVAPCD's CCAP was adopted in 2009 and was prepared based on the state's 2020 GHG targets, which are now superseded by state policies (i.e., the 2019 California Green Building Code) the 2030 GHG targets, established in SB 32, and the 2045 carbon neutrality goals included in AB 1279.

San Joaquin Valley Carbon Exchange and Rule 2301. The SJVAPCD initiated work on the San Joaquin Valley Carbon Exchange in November 2008. The Exchange was implemented with the adoption of Amendments to Rule 2301 Emission Reduction Credit Banking on January 19, 2012. The purpose of the carbon exchange is to quantify, verify, and track voluntary GHG emissions reductions generated within the San Joaquin Valley. The SJVAPCD incorporated a method to register voluntary GHG emission reductions with amendments to Rule 2301. The purposes of the amendments to the rule include the following:

- Provide an administrative mechanism for sources to bank voluntary GHG emission reductions for later use.

- Provide an administrative mechanism for sources to transfer banked GHG emission reductions to others for any use.

- Define eligibility standards, quantitative procedures, and administrative practices to ensure that banked GHG emission reductions are real, permanent, quantifiable, surplus, and enforceable.

The SJVAPCD is participating in a new program developed by the California Air Pollution Control Officers Association (CAPCOA) to encourage banking and use of GHG reduction credits referred to as the CAPCOA Greenhouse Gas Reduction Exchange (GHGRx). The GHGRx provides information on GHG credit projects within participating air districts. The SJVAPCD is one of the first to have offsets available for trading on the GHGRx.

Local Regulations. There are no applicable local regulations related to greenhouse gases for the proposed project.

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

Less Than Significant Impact. This section discusses the proposed project's potential impacts related to the release of GHG emissions for both project construction and operation. Section 15064.4 of the *State CEQA Guidelines* states that: "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project." In performing that analysis, the lead agency has discretion to determine whether to use a model or methodology to quantify GHG emissions, or to rely on a qualitative analysis or performance-based standards. In making a determination as to the significance of potential impacts, the lead agency then considers the extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting, whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project, and the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

Neither the County of Fresno, nor the SJVAPCD has developed or adopted numeric GHG significance thresholds. Therefore, this analysis evaluates the GHG emissions based on the project's consistency with state GHG reduction goals.

Construction Greenhouse Gas Emissions. During project construction, GHGs would be emitted through the operation of construction equipment and from worker and builder supply vendor vehicles, each of which typically uses fossil-based fuels to operate. The combustion of fossil-based fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment. Exhaust emissions from on-site construction activities would vary daily as construction activity levels change.

As discussed in Section 1.0, Project Description, construction of the proposed project, including the WWTP and wastewater collection system, is expected to take place over a period of 9 months starting in 2025. Construction of the WWTP and the wastewater collection system would take place concurrently.

The SJVAPCD does not have an adopted threshold of significance for construction related GHG emissions. However, lead agencies are encouraged to quantify and disclose GHG emissions that would occur during construction. Using CalEEMod, it is estimated that construction of the proposed project would generate a total of approximately 435 metric tons of CO_2e. When considered over the 30-year life of the project, the total amortized construction emissions for the proposed project would be 14.5 metric tons of CO_2e per year. As such, construction of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

Operational Greenhouse Gas Emissions. Long-term GHG emissions are typically generated from mobile, area, waste, and water sources as well as indirect emissions from sources associated with energy consumption. Mobile-source GHG emissions would include maintenance worker trips to and from the site. Area-source emissions would be associated with activities such as landscaping and maintenance on the project site. Energy source emissions are typically generated at off-site utility providers as a result of increased electricity demand generated by a project. Waste source emissions generated by the proposed project include energy generated by land filling and other methods of disposal related to transporting and managing project generated waste. In addition, water source emissions associated with the proposed project are generated by water supply and conveyance, water treatment, water distribution, and wastewater treatment.

The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Once operational, it is anticipated that inspection and maintenance of the WWTP would occur; however, because the operation of the project would generate an insignificant number of vehicle trips, mobile source GHG emissions would be minimal. In addition, the proposed project would result in energy source GHG emissions associated with the electrical improvements; however, these emissions are also expected to be minimal. Therefore, the proposed project would not result in a significant source of operational GHG emissions. As such, operation of the proposed project would not generate GHG emissions that would have a significant impact on the environment and construction-related impacts would be less than significant.

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

Less Than Significant Impact. The SJVAPCD has adopted a CCAP, which includes suggested BPS for proposed development projects. Appendix J of the SJVAPCD Final Staff Report for the CCAP contains GHG reduction measures; however, these measures are intended for commercial, residential, and mixed-use projects and wouldn't be applicable to the proposed project. Therefore, the following discussion evaluates the proposed project according to the goals of the 2022 Scoping Plan, EO B-30-15, SB 32, and AB 197.

EO B-30-15 added the immediate target of reducing GHG emissions to 40 percent below 1990 levels by 2030. CARB released a second update to the Scoping Plan, the 2017 Scoping Plan (CARB 2017), to reflect the 2030 target set by EO B-30-15 and codified by (SB 32. SB 32 affirms the importance of

addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in EO B-30-15. SB 32 builds on AB 32 and keeps us on the path toward achieving the state's 2050 objective of reducing emissions to 80 percent below 1990 levels. The companion bill to SB 32, AB 197, provides additional direction to the CARB related to the adoption of strategies to reduce GHG emissions. Additional direction in AB 197 intended to provide easier public access to air emissions data that are collected by CARB was posted in December 2016.

In addition, the 2022 Scoping Plan assesses progress toward the statutory 2030 target, while laying out a path to achieving carbon neutrality no later than 2045. The 2022 Scoping Plan focuses on outcomes needed to achieve carbon neutrality by assessing paths for clean technology, energy deployment, natural and working lands, and others, and is designed to meet the state's long-term climate objectives and support a range of economic, environmental, energy security, environmental justice, and public health priorities.

The 2022 Scoping Plan focuses on building clean energy production and distribution infrastructure for a carbon-neutral future, including transitioning existing energy production and transmission infrastructure to produce zero-carbon electricity and hydrogen, and utilizing biogas resulting from wildfire management or landfill and dairy operations, among other substitutes. The 2022 Scoping Plan states that in almost all sectors, electrification will play an important role. The 2022 Scoping Plan evaluates clean energy and technology options and the transition away from fossil fuels, including adding four times the solar and wind capacity by 2045 and about 1,700 times the amount of current hydrogen supply. As discussed in the 2022 Scoping Plan, EO N-79-20 requires that all new passenger vehicles sold in California be zero-emission by 2035 and all other fleets transition to zero-emission as fully possible by 2045 to reduce the percentage of fossil fuel combustion vehicles.

Energy efficient measures are intended to maximize energy efficiency building and appliance standards, pursue additional efficiency efforts including new technologies and new policy and implementation mechanisms, and pursue comparable investment in energy efficiency from all retail providers of electricity in California. In addition, these measures are designed to expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings. As discussed in Section 3.6.1.b, energy usage on the project site during construction would be temporary in nature. In addition, energy usage associated with operation of the proposed project would be relatively small in comparison to the state's available energy sources and energy impacts would be negligible at the regional level. Therefore, the proposed project would not conflict with applicable energy measures.

Water conservation and efficiency measures are intended to continue efficiency programs and use cleaner energy sources to move and treat water. Increasing the efficiency of water transport and reducing water use would reduce GHG emissions. The purpose of the proposed project is to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. Therefore, the proposed project would not conflict with any of the water conservation and efficiency measures.

The goal of transportation and motor vehicle measures is to develop regional GHG emissions reduction targets for passenger vehicles. As specified by the 2022 Scoping Plan, GHG emissions from new cars will be reduced by 34 percent from 2016 levels by 2025. Specific regional emission targets for transportation emissions would not directly apply to the proposed project. Therefore, the proposed project would not conflict with the identified transportation and motor vehicle measures.

The proposed project would comply with existing state regulations adopted to achieve the overall GHG emissions reduction goals identified in AB 32, the AB 32 Scoping Plan, EO B-30-15, SB 32, and AB 197 and would be consistent with applicable state plans and programs designed to reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs and impacts would be less than significant.

3.9 HAZARDS AND HAZARDOUS MATERIALS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 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 Impact Analysis

3.9.1.1 Environmental Setting

The project site is developed within residential and commercial properties and is zoned within the RC 40 Zoning District of Fresno County. The project site is located approximately 0.6 miles from SR 168. The nearest schools to the project site are in the community of Auberry, approximately one mile west of the project site.

Hazardous Sites Near Proposed Project. The California Environmental Protection Agency (CalEPA) is required to compile, maintain, and update lists annually of hazardous material releases under California Government Code Section 65962.5. The California Department of Toxic Substances Control (DTSC) is responsible for maintaining the Hazardous Waste and Substances Site List (Cortese List) along with other state and local government agencies to provide additional hazardous material release information for annual updates. The DTSC also maintains the online EnviroStor database, which includes records of hazardous material release sites along with other categories of sites or facilities specific to each agency's jurisdiction. A review of the DTSC's online EnviroStor database (DTSC 2024) and the Cortese List (CalEPA 2024) indicates that the closest active hazardous materials'

sites are located approximately two miles northwest of the site, and not in the immediate vicinity of the project site.

3.9.1.2 Regulatory Setting

Federal Regulations.

Toxic Substances Control Act. Established in 1976 and amended on December 31, 2002, the Toxic Substances Control Act (TSCA) (15 United States Code [USC] Section 2601-2692) grants the USEPA power to require proper reporting, recordkeeping, and testing requirements related to chemical substances and/or mixtures. Specifically, the TSCA addresses the production, importation, use, and disposal of specific chemicals, including polychlorinated biphenyls (PCBs), asbestos, radon, and lead-based paints (LBP). The TSCA establishes the USEPA's authority to require the notification of the use of chemicals, require testing, maintain a TSCA inventory, and require those importing chemicals under Sections 12(b) and 13 to comply with certification and/or other reporting requirements. This federal legislation also phased out the use of asbestos-containing materials in new building materials and sets requirements for the use, handling, and disposal of asbestos-containing materials. Disposal standards for LBP wastes are also detailed in the TSCA.

Hazardous Materials Transportation Act – Safe Transport of Hazardous Materials. The United States Department of Transportation (DOT) regulates hazardous materials transportation between states under CFR Title 49, Chapter 1, Part 100-185. Within California, Caltrans and the California Highway Patrol (CHP) enforce federal law. Together, these agencies determine driver training requirements, load labeling procedures, and specifications for container types to be used.

Federal Emergency Management Agency. With respect to emergency planning, the Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management at the federal, state, and local levels. Enforcement of these laws and regulations is delegated to state and local environmental regulatory agencies.

Resource Conservation and Recovery Act. The 1976 Federal Resource Conservation and Recovery Act (RCRA) and the 1984 RCRA Amendments regulate the treatment, storage, and disposal of hazardous and non-hazardous wastes. The legislation mandated that hazardous wastes be tracked from the point of generation to their ultimate fate in the environment. This includes detailed tracking of hazardous materials during transport and permitting of hazardous material handling facilities.

The 1984 RCRA amendments provide the framework for a regulatory program designed to prevent releases from underground storage tanks (USTs). The program establishes tank and leak detection standards, including spill and overflow protection devices for new tanks. The tanks must also meet performance standards to ensure that the stored material will not corrode the tanks. Owners and operators of USTs had until December 1998 to meet the new tank standards.

State Regulations.

California Health and Safety Code and Code of Regulations. Business emergency plans and chemical inventory reporting is mandated under California Health and Safety Code Chapter 6.95 and CCR, Title 19, Section 2729. Businesses are required to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. If a business uses hazardous materials in certain quantities (standalone or in use with other product), an emergency plan must be provided.

California Environmental Protection Agency. CalEPA is authorized by the USEPA to enforce and implement certain laws and regulations regarding hazardous materials. Under CalEPA, the DTSC protects the state and people from hazardous waste exposure under RCRA and the California Health and Safety Code. The DTSC requirements include written programs and response plans such as the preparation of a Hazardous Materials Business Plan (HMBP). Programs under the DTSC includes aftermath clean-up of improper hazardous waste management, evaluation of samples taken from sites, regulation enforcement regarding use, storage, and disposal of hazardous materials and encouragement of pollution prevention.

California Division of Occupational Safety and Health. Cal OSHA is the state-level agency responsible for ensuring workplace safety and is responsible for adoption and enforcement of workplace safety standards and safety practices. If a site is contaminated, a Site Safety Plan must be created and implemented for the safety of workers. A Site Safety Plan establishes policies, practices, and procedures for workers and the public to follow to prevent exposure to hazardous materials originating from a contaminated site or building.

California Building Code. The CBC, contained in CCR Title 24, Part 2, identifies building design standards and includes standards for fire safety. The CBC is updated every three years, with the most recent version of the code effective January 1, 2023. The CBC is effective statewide; however, local jurisdictions may adopt more restrictive standards based on locality's conditions. A local city and country building official must check plans for commercial and residential buildings to ensure compliance with the CBC. Fire safety compliance with the CBC includes fire sprinkler installation in all new residential, high rise, and hazardous materials buildings; establishment of fire-resistant standards for fire doors, building materials, and certain types of construction; and debris and vegetation clearance within a prescribed distance from occupied structures in wildfire hazard areas.

California Department of Forestry and Fire Protection (CAL FIRE). PRC 4201-4204 and Government Code 51175-89 requires CAL FIRE to evaluate fire threat potential and hazard severity according to areas of responsibility (i.e., state and local). Evaluations are based on topography, fire history, and climate, and include fire threat rankings. In 2012, CAL FIRE produced the Strategic Plan for California that contains goals, objectives, and policies to prepare and mitigate for the effects of fire on California's natural and built environments. The Strategic Plan was updated in 2019 to reaffirm, with minor adjustments, the Mission, Vision, and Values of the 2012 Strategic Plan.

California Fire Code. The California Fire Code (CFC) is updated every 3 years with the most current update effective January 1, 2023. The CFC contained in CCR Title 24, Part 9 incorporates by adoption the International Fire Code of the International Code Council with California amendments. Local jurisdictions can also adopt more restrictive standards based on local conditions, as previously mentioned with the CBC. The CFC regulates building standards, fire department access, fire protection systems and devices, fire and explosion hazard safety, hazardous material storage and use, and building inspection standards.

Local Regulations.

Fresno County General Plan. The General Plan contains policies with respect to managing hazardous materials and addressing potential hazards related to accidental releases of hazardous materials applicable to the project.

- **Policy HS-F.1:** The County shall require that facilities that handle hazardous materials or hazardous wastes be designed, constructed, and operated in accordance with applicable hazardous materials and waste management laws and regulations.

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

Less Than Significant Impact. Hazardous materials are chemicals that could potentially cause harm during an accidental release and are defined as being toxic, corrosive, flammable, reactive, an irritant, or strong sensitizer. Hazardous substances include all chemicals regulated under the United States Department of Transportation (DOT 2018) "hazardous materials" regulations and the USEPA "hazardous waste" (USEPA 2012) regulations. Hazardous wastes require special handling and disposal because of their potential to damage public health and the environment.

Construction. Exposure to hazardous materials during the construction of the project could result from the improper handling or use of hazardous substances or an inadvertent release resulting from an unforeseen event (e.g., fire, flood, or earthquake). The severity of any such exposure is dependent upon the type, amount, and characteristic of the hazardous material involved; the timing, location, and nature of the event; and the sensitivity of the individual or environment affected.

Project construction would likely require the use of limited quantities of hazardous materials, such as fuels, oils, lubricants, and solvents. The small quantities of hazardous materials that would be transported, used, or disposed of would be well below reportable quantities. The improper use, storage handling, transport, or disposal of hazardous materials during construction could result in accidental release exposing construction workers, the public and the environment, including soil and/or ground or surface water to adverse effects. Construction activities would be conducted with standard construction practices and in accordance with all applicable California Division of Occupational Safety and Health Administration and other safety regulations to minimize the risk to the public. Compliance with federal, state, and local hazardous materials laws and regulations would minimize the risk to the public presented by these potential hazards during construction of the project. Transportation of any hazardous

materials generated by excavation is regulated by the federal Department of Transportation and Caltrans. As such, transportation of hazardous materials off-site must be handled by licensed hazardous waste haulers.

Operation. Operation and maintenance of the wastewater collection and treatment systems would also involve the transport, use, storage, and disposal of small quantities of hazardous materials (e.g., cleaners, fuels, lubricants, hydraulic fluids). Any business with hazardous materials storage, use, handling, or disposal is required to comply with federal, state, and local requirements for managing hazardous materials and wastes. Businesses that use hazardous materials are required to submit a Hazardous Materials Business Plan to the local Certified Unified Program Agency (CUPS), which performs inspections to ensure compliance with hazardous materials labeling, training, and storage regulations. Operation of the sewer collection system would not emit or handle hazardous or acutely hazardous materials.

In summary, compliance with existing safety regulations and widely accepted industry standards would minimize the hazard to the public and the environment. Construction and operation of the project would be required to comply with the Uniform Fire Code and local building codes for the storage of hazardous materials and construction of structures containing hazardous materials. Therefore, potential impacts associated with the transport, use, storage, handling, and disposal of hazardous materials during operation of the project would be less than significant, and no mitigation is required.

b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant Impact. See Response 3.9.1.a, above. Compliance with existing safety regulations and industry standards would minimize the hazard to the public and the environment. As such, the proposed project would not result in a significant hazard to the public or the environment through a reasonably foreseeable upset or accident condition related to the release of hazardous materials. This impact would be less than significant.

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

No Impact. The project site is not located within 0.25 mile of an existing school. The nearest school is in Auberry, approximately three miles from the project site. Therefore, the proposed project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school. No impact would occur, and no mitigation is required.

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

No Impact. According to the California DTSC EnviroStor database (2024), the project site is not located on a federal superfund site, state response site, voluntary cleanup site, school cleanup site, evaluation site, school investigation site, military evaluation site, tiered permit site, or corrective action site. The project site is not included on the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (CalEPA 2024). As a result, no impacts related to this issue are anticipated, and no mitigation is required. There would be no impact.

e. Would the project be 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?

No Impact. The proposed project is not located within two miles of a public or public use airport. The Kindsvater Ranch Airport is the closest private airport and is located approximately three miles south of the project site. In addition, the public use Fresno Yosemite International Airport is located approximately 13 miles southwest of the project site. The proposed project would construct and operate wastewater collection and treatment systems and would not result in a safety hazard or excessive noise for people residing or working in the project area. As a result, no impact would occur.

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

No Impact. The proposed project would not result in interference with any adopted emergency response plans or evacuation plans. The proposed project would be located within the BSR. Regional access to the BSR is via SR 168 and Auberry Road. The proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would impede or obstruct emergency response plans or evacuation plans. Therefore, development and operation of the proposed project is not anticipated to interfere with any emergency evacuation plan, and no impact would occur. Therefore, no impacts would occur as a result of project implementation and no mitigation would be required.

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

Less Than Significant Impact. According to the California Department of Forestry and Fire Protection Very High Fire Hazard Severity Zone (VHFHSZ) Map for Fresno County, portions of the project site are located within the high and very high wildfire threat area. However, the proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, this impact would be less than significant.

3.10 HYDROLOGY AND WATER QUALITY

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or 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 erosion or siltation on- or off-site;	☐	☒	☐	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. Impede or redirect flood flows?	☐	☐	☐	☐
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 Impact Analysis

3.10.1.1 Environmental Setting

The project site is generally bisected by Backbone Creek, which consists of a dry creek bed with flow only during large rain events. The largest body of water near the project site is Millerton Lake, located approximately 11.5 miles southwest of the project site. The project site is located within the San Joaquin River Hydrologic Region.

3.10.2 Regulatory Setting

Federal Regulations.

Clean Water Act. CWA, enacted in 1977, provides the framework for regulating discharges of pollutants into water and regulating surface water quality standards. The USEPA is the federal responsible agency and is authorized under the CWA to implement water-quality regulations to reduce water contamination and restore the integrity of the nation's waters. Under Section 402(p) of the CWA, otherwise known as the NPDES, stormwater discharges are regulated to prevent water pollution. The proposed project would require coverage under the USEPA's Construction General Permit.

The CWA, under Section 303(d) also requires each state to identify waterbodies or segments of waterbodies that are considered "impaired" if they do not meet one or more of the water-quality standards established by the state. Impaired waters are considered polluted and need further attention to support their beneficial uses. A total maximum daily load (TMDL) must be established for the pollutant causing the conditions of impairment. TMDL is the maximum amount of a pollutant that a waterbody can receive and still meet water-quality standards. Categories 5, 4a, and 4b are considered part of Section 303(d), indicating water quality parameters are not being met. Section 401 requires a federal permit if an activity may result in discharge to "waters of the United States". Discharge must comply with other provisions of the act. Discharging other pollutants into waters of the United States are covered in Sections 402 and 403.

National Pollutant Discharge Elimination System Permit. Section 402 of the CWA established the NPDES to control water pollution by regulating point sources that discharge pollutants into Waters of the United States. As the project is on tribal lands, the USEPA will be the implementing authority under the NPDES program. The USEPA signed its 2022 Construction General Permit (CGP) for stormwater discharges from construction activities on January 18, 2022. The 2022 CGP will provide permit coverage for construction stormwater discharges associated with the proposed project. Stormwater discharges from construction sites with a disturbed area of one or more acres are required to obtain either individual NPDES permits for stormwater discharges or be covered by the CGP. Coverage under the CGP is accomplished by completing and filing a Notice of Intent with the USEPA. Each applicant under the CGP is required to both prepare a SWPPP prior to the commencement of grading activities and to ensure implementation of the SWPPP during construction activities. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction activities. BMPs may include programs, technologies, processes, practices, and devices that control, prevent, remove, or reduce pollution. The SWPPP would also address BMPs developed specifically to reduce pollutants in stormwater discharges following the completion of construction activities.

National Flood Insurance Program. The National Flood Insurance Act passed in 1968 and is mandated by FEMA to evaluate flood hazards. The Flood Disaster Protection Act of 1973 also supports this act. Flood Insurance Rate Maps (FIRMs) for local and regional planners are provided by FEMA to promote sound land use and floodplain development and identify potential flood areas based on current conditions. Flood Insurance Studies are conducted by FEMA engineers and cartographers in order to delineate Special Flood Hazard Areas (SFHAs) on FIRMs.

State Regulations.

Water Discharge Requirements. Waste discharges that can be exempted from the CCR requirements are issued waste discharge requirements (WDRs) and are regulated by the SWRCB's WDR Program. Typical discharge types include domestic or municipal wastewater, food processing related wastewater, and industrial wastewater. State regulations addressing the treatment, storage, processing, or disposal of waste are contained in Title 27, CCR, section

20005 et seq. Discharges that qualify for exemption from Title 27 must be consistent with the exemptions provided in Title 27 section 20090.

Local Regulations.

Fresno County General Plan. The Fresno County General Plan includes policies that address hydrology and water quality applicable to the proposed project, described below.

- **Policy PF-E.11:** The County shall encourage project designs that minimize drainage concentrations and maintain, to the extent feasible, natural site drainage patterns.

- **Policy PF-E.16:** The County shall minimize sedimentation and erosion through control of grading, cutting of trees, removal of vegetation, placement of roads and bridges, and use of off-road vehicles. The County shall discourage grading activities during the rainy season, unless adequately mitigated, to avoid sedimentation of creeks and damage to riparian habitat.

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

Less Than Significant Impact. Potential impacts related to water quality standards, waste discharge requirements, and surface and groundwater quality would be less than significant, as described below.

Construction. Pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. Any of these pollutants have the potential to be transported via storm water runoff into receiving waters.

Because the project would disturb more than 1 acre of soil, the project is subject to the requirements of the USEPA's 2022 CGP. On-site construction activities subject to the CGP include clearing, grading, excavation, and soil stockpiling. The CGP also requires the development of a SWPPP by a Qualified SWPPP Developer. A SWPPP identifies all potential pollutants and their sources, including erosion, sediments, and constructions materials and must include a list of BMPs to reduce the discharge of construction-related stormwater pollutants. A SWPPP must include a detailed description of controls to reduce pollutants and outline maintenance and inspection procedures. Typical sediment and erosion BMPs include protecting storm drain inlets and establishing and maintaining construction exits and perimeter controls to avoid tracking sediment off-site onto adjacent roadways. A SWPPP also defines proper building material staging and storage areas, paint and concrete washout areas, describes proper equipment/vehicle fueling and maintenance practices, measures to control equipment/vehicle washing and allowable non-stormwater discharges, and includes a spill prevention and response plan.

Required compliance with relevant regulations regarding stormwater during construction would ensure that the proposed project would result in less than significant impacts to water quality during construction.

Operation. The proposed project would construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. Wastewater treatment would consist of two components: treatment of wastewater at a WWTP and disposal of wastewater through subsurface disposal via drip fields.

The project includes the construction and operation of a packed bed aerobic system that consists of a reactor with media and effluent recirculation chamber to keep the media wet. Similar to a biological filtration process, the packed bed consists of textile-covered plastic media which promotes growth of microorganisms on the surfaces. Such forms of the treatment provide a high tolerance for variances in flow while providing stable treatment.

The wastewater treatment system would consist of two phases. In the first phase, two 15,000-gallon flow equalization tanks would sequentially (series configuration) provide primary treatment. The influent would then be pumped into the second phase, where flow would be directed to five treatment tanks that would be controlled by a pump station that adjusts the load accordingly to provide a treated effluent of less than 10 mg/L of BOD5 and TSS. Finally, the treated effluent would be pumped to the disposal fields that would cover approximately two acres of surface area and utilize approximately 43,200 linear feet of drip piping, as described below.

The proposed WWTP would be the Model AX-Max 300-42 AdvanTex Pod to treat the projected wastewater flow. Each AX-Max 300-42 pod is rated for an average wastewater flow of 15,000 gpd in typical residential wastewater. The AdvanTex system would be supplied with its own control panel which would be installed inside a new fiberglass control building structure on site. Each of the five treatment tanks has a forced air venting system to minimize buildup of odorous gases.

The proposed project would include a shallow drip distribution system to dispose of treated effluent. Shallow drip distribution systems are used in places where conventional trench systems are not suitable or where steep slopes of heavily forested areas make it difficult to install trenches, mounds, or at-grade systems. Constraints and obstacles such as shallow bedrock, high-water table and low-permeability soils are less problematic for subsurface drip lines. This system would consist of pressurized small-diameter tubing buried below ground, as mandated by regulatory agencies, including integrated emitters with each trickling up to two gallons per hour. Critical factors that affect the design of drip distribution systems include soil texture and structure, depth to restrictive layer, and surface slope. Since effluent dispersal occurs near the ground surface, a minimum 3 feet separation distance between drip line and groundwater table is more achievable. However, the presence and location of bedrock, water table depth, and the down-gradient area through which the effluent flows would be considered when evaluating the feasibility of implementing a subsurface drip system.

The proposed wastewater collection system would connect the existing residences and structures to the proposed WWTP. The connections to residential structures would be made with 4-inch PVC pipe to the nearest sewer main. The wastewater collection system was designed to avoid as many trees as possible. Manholes or cleanouts would be located at all alignment changes and would be 48 inches in diameter to allow maintenance access.

The proposed project would include the construction of two lift stations. LS-1 would be located at the northern region of the project site and would convey wastewater flows to the proposed WWTP. LS-2 would be located the north-central region and would pump flows received by most of the gravity system to the WWTP. Each lift station would include a primary pump, backup pump, and force main to connect to the wastewater collection system.

The existing septic systems would be abandoned after the proposed WWTP and wastewater collection system have been constructed and each respective residence or structure is connected to the proposed wastewater collection system. To prevent accumulation of water, the abandonment of each existing septic tank would include coring a hole in the bottom of each septic tank. Following abandonment, Big Sandy Rancheria or each respective owner would submit a report detailing the abandonment to Fresno County.

The purpose of the proposed project is to provide treatment systems to protect the community's water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. Regulatory requirements for the WWTP would ultimately be determined by the selected effluent disposal method and will be influenced by the type of treatment processes implemented. Typical requirements in WDRs include constituent effluent limits for pollutants, monitoring, and reporting; separation distances from groundwater; setback distances from surrounding wells (private, drinking, agricultural, etc.); and fence lines for each discharge method. As part of any land-based discharge, groundwater monitoring wells would be required both up gradient and down gradient of the discharge area(s). By monitoring the quality in wells, the impacts of the wastewater disposal can be observed. In addition, by providing wastewater service to the residences, groundwater quality would be improved. As such, implementation of the proposed project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality and impacts would be less than significant.

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

Less Than Significant Impact. The geotechnical investigation (Moore Twining 2020) encountered groundwater in two of the 15 borings drilled along the pipeline alignments. No free ground water was encountered in the proposed drain field area. Zones of wet, unstable soils and free groundwater may be encountered during the construction. If encountered during construction, dewatering and control of groundwater and stabilization of the wet, unstable soil conditions would be required. Soil stabilization may require aeration of the soils and/or the placement of rock and geotextile fabric. The in-ground structures would be designed to resist uplift created by high ground water. With dewatering and control of groundwater and stabilization, the reduction in infiltration would not be

substantial. Therefore, construction of the project would result in a less than significant impact associated with depleting groundwater supplies or substantially interfering with groundwater recharge, and no mitigation is required.

The sewer collection system portion of the project would consist of PVC sewer mains, manholes and prefabricated fiberglass lift stations. The wastewater treatment portion would include partially buried fiberglass tanks, fiberglass wet-wells and an effluent disposal field.

The geotechnical investigation identified areas on the Comstock property with adequate percolation to be used for drip fields. Subsurface disposal provides year-round disposal, reduces the potential for contact with wastewater by the public, utilizes percolation through the soil to further enhance treatment, is simple to operate and cost effective to construct and maintain. Furthermore, drip system operation and maintenance costs are lower than the leach field option because the drip field does not require maintenance and operation of solenoid valves and distribution valves within each zone. Drip field systems are also shallower and would take full advantage of the soil layers between the dispersal system and existing rock layers at the Comstock property. Furthermore, given the sloping terrain and presence of trees surrounding the Comstock property, a drip field system would provide a distinct advantage in minimizing distribution system clogging that could potentially occur with a leach field system in the similar surrounding environment.

The proposed project would not prevent water from infiltrating into the groundwater nor would it result in direct additions or withdrawals to existing groundwater. As such, operation of the project would result in a less than significant impact associated with depleting groundwater supplies or substantially interfering with groundwater recharge.

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

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

Less Than Significant Impact with Mitigation. Implementation of the proposed project would include grading activities that could result in short-term soil erosion during the construction period. Exposed soils are considered erodible when subjected to concentrated surface flow or wind. As discussed under Section 3.7.1.b above, Mitigation Measure GEO-1 would reduce the potential for soil erosion. In addition, soil erosion and loss of topsoil would be minimized through implementation of SJVAPCD Regulation VIII fugitive dust control measures and compliance with the NPDES permit requirements. With incorporation of Mitigation Measure GEO-1 and compliance with NPDES permit requirements, construction of the proposed project would not result in substantial soil erosion or loss of topsoil. This impact would be less than significant with mitigation incorporated.

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

Less Than Significant Impact. The project site is not within a 100-year flood hazard area as mapped on the FEMA FIRM. The proposed project would construct and operate wastewater collection and treatment systems. The risk from flooding would be low. In addition, the proposed project would not prevent water from infiltrating into the groundwater. Therefore, implementation of the proposed project would not substantially increase the rate or amount of surface runoff that would result in flooding on or off site. This impact would be less than significant.

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. See Response 3.10.1.c.ii above. Implementation of the proposed project would not substantially increase the rate or amount of surface runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. This impact would be less than significant.

iv. Impede or redirect flood flows?

Less Than Significant Impact. See Response 3.10.1.c.ii above. The project site is not within a 100-year flood hazard area. The proposed project would construct and operate wastewater collection and treatment systems. The risk from flooding would be low. Therefore, implementation of the proposed project would not impede or redirect flood flows, and a less than significant impact would occur.

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

No Impact. As indicated above, the project site is not located within a FEMA designated 100-year floodplain. In addition, the project site is generally level and is not immediately adjacent to any hillsides. Furthermore, no enclosed bodies of water are in close enough proximity that would create a potential risk for seiche or a tsunami at the project site. Therefore, there would be no impact related to potential hazards from inundation from food, tsunami, or seiche.

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

Less Than Significant Impact. As discussed in Response 3.10.1.a, pollutants of concern during construction include sediment, trash, petroleum products, concrete waste (dry and wet), sanitary waste, and chemicals. Each of these pollutants on its own or in combination with other pollutants can have a detrimental effect on water quality. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion and sedimentation compared to existing conditions. In addition, chemicals, liquid products, petroleum products (such as paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction. These

pollutants may percolate to shallow groundwater from construction activities. However, required compliance with state and local regulations regarding stormwater during construction would ensure that the proposed project would result in less than significant impacts to water quality during construction.

During operation of the proposed project, the proposed project would provide treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. Regulatory requirements for the WWTP would ultimately be determined by the selected effluent disposal method and will be influenced by the type of treatment processes implemented. Typical requirements in WDRs include constituent effluent limits for pollutants, monitoring, and reporting; separation distances from groundwater; setback distances from surrounding wells (private, drinking, agricultural, etc.); and fence lines for each discharge method. As part of any land-based discharge, groundwater monitoring wells would be required both up gradient and down gradient of the discharge area(s). By monitoring the quality in wells, the impacts of the wastewater disposal can be observed. In addition, by providing wastewater service to the residences, groundwater quality would be improved. As such, the proposed project would not conflict with or obstruct the implementation of a water quality control plan or sustainable groundwater management plan and impacts would be less than significant.

3.11 LAND USE AND PLANNING

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

3.11.1 Impact Analysis

3.11.1.1 Environmental Setting

The project site is approximately 18.2 acres in size and is located in eastern Fresno County, approximately one mile east of the census-defined community of Auberry. The project encompasses residential and commercial properties currently being served by septic systems. The project site is zoned within the RC 40 Zoning District of Fresno County. The RC District is intended to provide for the conservation and protection of natural resources and natural habitat areas.

3.11.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to land use and planning for the proposed project.

State Regulations.

The Cortese-Knox-Hertzberg Local Government Reorganization Act. The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Government Code Section 56300 et seq.) governs the establishment and revision of local government boundaries. The Act was a comprehensive revision of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 1985. The Act is a policy of the state to encourage orderly growth and development that is essential to the social, fiscal, and economic well-being of the state. The intent of the Act is to promote orderly development while balancing competing state interests of discouraging urban sprawl, preserving open space and prime agricultural lands, and efficiently extending government services.

Local Regulations.

County of Fresno Zoning Ordinance. The County's zoning ordinance establishes zoning districts and regulations applicable to each district to establish orderly development in Fresno County. The zoning ordinance classifies the project site within the County's RC 40 Zoning District. This district is intended to provide for the conservation and protection of natural resources and natural habitat areas.

a. Would the project physically divide an established community?

Less Than Significant Impact. The project site is approximately 18.2 acres in size and is located within the BSR approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The proposed project would make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including the following: 47 residential structures, as well as other non-residential uses, including the Mono Wind Casino and the associated general store and gas station, gymnasium, tribal administration buildings, the Head Start Center, gaming commission building, family services center, emergency services building, and cemetery. The project would provide a total of 57 service connections The proposed project would involve infrastructure improvements and would not encroach upon or divide an established community. This impact would be less than significant.

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

Less Than Significant Impact. The project site is on tribal-owned land held in trust by the federal government, within the RC 40 Zoning District of Fresno County. The proposed project includes the construction and operation of a new WWTP and associated wastewater collection system. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The RC designation does not explicitly allow major utilities; however, the County would process any approvals and permits necessary to allow the WWTP through actions that may include either issuance of a special use permit or a zoning map amendment to allow major utilities. The proposed project would be generally compatible with the RC designation, and would not generate significant noise, odor, or other concerns that would interfere with adjacent land uses. Therefore, development of proposed infrastructure improvements would result in a less than significant impact on land use.

3.12 MINERAL RESOURCES

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

3.12.1 Impact Analysis

3.12.1.1 Environmental Setting

The principal minerals produced near the project site include sand and gravel, mined southwest of the project site along the San Joaquin River corridor; decomposed granite, extracted west of Pine Flat Lake on the floodplain of the Kings River; and dimension stone quarried west of Shaver Lake. No mineral resource locations or mineral producing locations are known to occur within the project site (County of Fresno 2000).

3.12.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to mineral resources for the proposed project.

State Regulations.

Surface Mining and Reclamation Act. In 1975, the California Legislature enacted the Surface Mining and Reclamation Act (SMARA), which, among other things, provided guidelines for the classification and designation of mineral lands. Areas are classified on the basis of geologic factors without regard to existing land use and land ownership. The areas are categorized into four Mineral Resource Zones (MRZs):

- **MRZ-1:** An area where adequate information indicates that no significant mineral deposits are present, or where it is judged that little likelihood exists for their presence.
- **MRZ-2:** An area where adequate information indicates that significant mineral deposits are present, or where it is judged that a high likelihood exists for their presence.
- **MRZ-3:** An area containing mineral deposits, the significance of which cannot be evaluated.
- **MRZ-4:** An area where available information is inadequate for assignment to any other MRZ zone.

Of the four categories, lands classified as MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are designated by the State of California Mining and Geology Board as being "regionally significant." Such designations require that a Lead Agency's land use decisions involving designated areas are to be made in accordance with its mineral resource management policies and that it considers the importance of the mineral resource to the region or the state as a whole, not just to the Lead Agency's jurisdiction.

Local Regulations.

Fresno County General Plan. The General Plan includes policies that address mineral resources and are applicable to the project.

- **Policy OS-C.1:** The County shall not permit incompatible land uses within the impact area of existing or potential surface mining areas.
- **Policy OS-C.2:** The County shall not permit land uses incompatible with mineral resource recovery within areas designated as Mineral Resource Zone 2 (MRZ-2).
- **Policy OS-C.10:** The County shall not permit land uses that threaten the future availability of mineral resource or preclude future extraction of those resources.

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

Less Than Significant Impact. SMARA regulates surface mining in California. SMARA was adopted in 1975 to protect the state's need for a continuing supply of mineral resources and to protect the public and environmental health. There are no known or recorded mineral resources within the project site; therefore, construction and operation of the proposed project could not adversely affect known or recorded mineral resources. This impact would be less than significant.

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

No Impact. The project site is not located within an area known to contain locally-important mineral resources. No impacts related to the loss of availability of a locally-important mineral resource recovery site as delineated on a local general plan, specific plan, or other land use plan would occur as a result of project implementation.

3.13 NOISE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within 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 Impact Analysis

3.13.1.1 Environmental Setting

Sound levels in decibels (dB) are calculated on a logarithmic basis. An increase of 10 dB represents a 10-fold increase in acoustic energy, while 20 dB is 100 times more intense and 30 dB is 1,000 times more intense. Each 10 dB increase in sound level (L_e) is perceived as approximately a doubling of loudness; and similarly, each 10 dB decrease in L_e is perceived as half as loud. Sound intensity is normally measured through the A-weighted sound level (dBA). This scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. The dBA is the basis for 24-hour sound measurements that better represent human sensitivity to sound at night.

As noise spreads from a source, it loses energy so that the farther away the noise receiver is from the noise source, the lower the perceived noise level would be. Geometric spreading causes the L_e to attenuate or be reduced, resulting in a 6 dB reduction in the noise level for each doubling of distance from a single point source of noise to the noise sensitive receptor of concern.

There are many ways to rate noise for various time periods, but an appropriate rating of ambient noise affecting humans also accounts for the annoying effects of sound. Equivalent continuous sound level (L_{eq}) is the total sound energy of time varying noise over a sample period. However, the predominant rating scales for human communities in the State of California are the L_{eq}, the community noise equivalent level (CNEL), and the day-night average level (L_{dn}) based on dBA. CNEL is the time varying noise over a 24-hour period, with a 5 dBA weighting factor applied to the hourly L_{eq} for noises occurring from 7:00 p.m. to 10:00 p.m. (defined as relaxation hours) and 10 dBA weighting factor applied to noise occurring from 10:00 p.m. to 7:00 a.m. (defined as sleeping hours). $L_{dn)}$ is similar to the CNEL scale, but without the adjustment for events occurring during the evening relaxation hours. CNEL and L_{dn} are within one dBA of each other and are normally exchangeable. The noise adjustments are added to the noise events occurring during the more sensitive hours.

Noise is usually defined as unwanted sound. Noise consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, or sleep. Several noise measurement scales exist that are used to describe noise in a particular location. A dB is a unit of measurement that indicates the relative intensity of a sound.

A project would have a significant noise effect if it would substantially increase the ambient noise levels for adjoining areas or conflict with adopted environmental plans and goals of applicable regulatory agencies, including, as appropriate, Fresno County. Fresno County addresses noise in the County's General Plan and Ordinance Code, described below under Section 3.13.1.2, Regulatory Setting.

Certain land uses are considered more sensitive to noise than others. Examples of these land uses include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. The closest sensitive receptors to the project site include the 47 residential structures that would abandon the septic tanks and be connected to the wastewater service.

3.13.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to noise for the proposed project.

State Regulations. There are no applicable state regulations related to noise for the proposed project.

Local Regulations.

Fresno County General Plan. The Health and Safety Element of the County's General Plan (County of Fresno 2000) works to protect residential and other noise-sensitive uses from exposure to harmful or annoying noise levels; to identify maximum acceptable noise levels compatible with various land use designations; and to develop a policy framework necessary to achieve and maintain a healthful noise environment. Applicable Health and Safety Element policies include the following:

- **Policy HS-G.1:** The County shall require that all proposed development incorporate design elements necessary to minimize adverse noise impacts on surrounding land uses.

- **Policy HS-G.4:** So that noise mitigation may be considered in the design of new projects, the County shall require an acoustical analysis as part of the environmental review process where:

    a. Noise sensitive land uses are proposed in areas exposed to existing or projected noise levels that are "generally unacceptable" or higher according to the Chart HS-1: "Land Use Compatibility for Community Noise Environments;"

    b. Proposed projects are likely to produce noise levels exceeding the levels shown in the County's Noise Control Ordinance at existing or planned noise-sensitive uses.

- **Policy HS-G.7:** Where existing noise-sensitive uses may be exposed to increased noise levels due to roadway improvement projects, the County shall apply the following criteria to determine the significance of the impact:

  a. Where existing noise levels are less than 60 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 5 dB L_{dn} increase in noise levels will be considered significant;

  b. Where existing noise levels are between 60 and 65 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 3 dB L_{dn} increase in noise levels will be considered significant; and

  c. Where existing noise levels are greater than 65 dB L_{dn} at outdoor activity areas of noise-sensitive uses, a 1.5 dB L_{dn} increase in noise levels will be considered significant.

- **Policy HS-G.8:** The County shall evaluate the compatibility of proposed projects with existing and future noise levels through a comparison to Chart HS-1, "Land Use Compatibility for Community Noise Environments."

Fresno County Code of Ordinances. The County also addresses noise in the Code of Ordinances in Chapter 8.40, Noise Control. Section 8.40.040 establishes the exterior daytime and nighttime noise standards and Section 8.40.050 establishes the interior daytime and nighttime noise standards. Table H below shows the exterior noise standards, and Table I shows the interior noise standards.

Table H: Exterior Noise Standards

Category	Cumulative Number of minutes in any 1-hour time period	Noise Level Standards, dBA	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	30	50	45
2	15	55	50
3	5	60	55
4	1	65	60
5	0	70	65

Source: County of Fresno (2020).

Table I: Interior Noise Standards

Category	Cumulative Number of minutes in any 1-hour time period	Noise Level Standards, dBA	
		Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
1	5	45	35
2	1	50	40
3	0	55	45

Source: County of Fresno (2020).

In addition, as indicated in Section 8.40.060 of the Code of Ordinances, construction noise is permitted by Fresno County when activities occur between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday.

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

Less Than Significant Impact with Mitigation. The following section describes how the short-term construction and long-term operational noise impacts of the proposed project would be less than significant with mitigation.

Short-Term (Construction) Noise Impacts. Planned improvements under the proposed project would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Table J lists typical construction equipment noise levels (L_{max}) recommended for noise impact assessments, based on a distance of 50 feet between the equipment and a noise receptor, obtained from the Federal Highway Administration (FHWA) Roadway Construction Noise Model. Construction-related short-term noise levels would be higher than existing ambient noise levels currently in the project area but would no longer occur once construction of the project is completed.

Two types of short-term noise impacts could occur during construction of the proposed project. The first type involves construction crew commutes and the transport of construction equipment and materials to the site, which would incrementally increase noise levels on roads leading to the site. As shown in Table J, there would be a relatively high single-event noise exposure potential at a maximum level of 84 dBA L_{max} with trucks passing at 50 feet.

The second type of short-term noise impact is related to noise generated during grading and construction on the project site. Construction is performed in discrete steps, or phases, each with its own mix of equipment and, consequently, its own noise characteristics. These various sequential phases would change the character of the noise generated on-site. Therefore, the noise levels vary as construction progresses. Despite the variety in the type and size of construction equipment, similarities in the dominant noise sources and patterns of operation allow construction-related noise ranges to be categorized by work phase.

Table J lists maximum noise levels recommended for noise impact assessments for typical construction equipment, based on a distance of 50 feet between the equipment and a noise receptor. Typical noise levels range up to 85 dBA L_{max} at 50 feet during the noisiest construction phases. The site preparation phase, which includes excavation and grading of the site, tends to generate the highest noise levels because the noisiest construction equipment is earthmoving equipment. Earthmoving equipment includes excavating machinery such as backfillers, bulldozers, draglines, and front loaders. Earthmoving and compacting equipment includes compactors, scrapers, and graders.

Table J: Typical Construction Equipment Noise Levels

Equipment Description	Acoustical Usage Factor (%)	Maximum Noise Level (L_{max}) at 50 Feet[1]
Backhoes	40	80
Compactor (ground)	20	80
Compressor	40	80
Cranes	16	85
Dozers	40	85
Dump Trucks	40	84
Excavators	40	85
Flat Bed Trucks	40	84
Forklift	20	85
Front-end Loaders	40	80
Graders	40	85
Impact Pile Drivers	20	95
Jackhammers	20	85
Pick-up Truck	40	55
Pneumatic Tools	50	85
Pumps	50	77
Rock Drills	20	85
Rollers	20	85
Scrapers	40	85
Tractors	40	84
Welder	40	73

Source: Roadway Construction Noise Model (FHWA 2006).
Note: Noise levels reported in this table are rounded to the nearest whole number.
[1] Maximum noise levels were developed based on Spec 721.560 from the Central Artery/Tunnel (CA/T) program to be consistent with the City of Boston's Noise Code for the "Big Dig" project.
L_{max} = maximum instantaneous sound level

Project construction is expected to require the use of scrapers, bulldozers, and water trucks/pickup trucks. Noise associated with the use of construction equipment is estimated to be between 55 dBA L_{max} and 85 dBA L_{max} at a distance of 50 feet from the active construction area for the site preparation phase. As shown in Table J, the maximum noise level generated by each scraper is assumed to be approximately 85 dBA L_{max} at 50 feet. Each dozer would generate approximately 85 dBA L_{max} at 50 feet. The maximum noise level generated by water trucks/pickup trucks is approximately 55 dBA L_{max} at 50 feet from these vehicles. Each doubling of the sound sources with equal strength increases the noise level by 3 dBA. Assuming that each piece of construction equipment operates at some distance from the other equipment, the worst-case combined noise level during this phase of construction would be 88 dBA L_{max} at a distance of 50 feet from the active construction area. Based on a usage factor of 40 percent, the worst-case combined noise level during this phase of construction would be 84 dBA L_{eq} at a distance of 50 feet from the active construction area.

As identified above, the closest sensitive receptors include the 47 residential structures that would abandon the septic tanks and be connected to the wastewater service. These residences could be exposed to noise levels exceeding 88 dBA L_{max} and 84 dBA L_{eq} when construction is occurring. However, construction equipment would operate at various locations within the

project site and would only generate maximum noise levels when operations occur closest to the receptor.

Construction noise is permitted by Fresno County when activities occur between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday. In addition, Mitigation Measure NOI-1 would be required to limit construction activities to the permitted hours and would reduce potential construction period noise impacts for the indicated sensitive receptors to less than significant levels.

Mitigation Measure NOI-1: The project contractor shall implement the following measures during construction of the proposed project:

- Equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards.
- Place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the active project site.
- Locate equipment staging in areas that would create the greatest possible distance between construction-related noise sources and noise-sensitive receptors nearest the active project site during all construction activities.
- Ensure that all general construction related activities are restricted to between the hours of 6:00 a.m. and 9:00 p.m. Monday through Friday and between the hours of 7:00 a.m. and 5:00 p.m. on Saturday and Sunday.
- Designate a "disturbance coordinator" at the County who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator would determine the cause of the noise complaint (e.g., starting too early, bad muffler) and would determine and implement reasonable measures warranted to correct the problem.

Implementation of Mitigation Measure NOI-1 would limit construction hours and require the construction contractor to implement noise reducing measures during construction, which would reduce short-term construction noise impacts to a less than significant level.

Operational Noise. The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. Of the infrastructure improvements associated with the proposed project, only operation of the proposed WWTP has

the potential to generate an increase in the ambient noise environment. The components of this facility that would generate the most noise would be the pumps. The proposed WWTP would utilize one pump, which is conservatively anticipated to generate 81 dBA L_{max} at 50 feet from the pump. Using a 6 dBA attenuation factor, the noise level at the nearest sensitive noise receptor would be 49.5 dBA L_{max}, which would not exceed the County's exterior noise level standards of 70 dBA L_{max} during the daytime (7:00 a.m. to 10:00 p.m.) or 65 dBA during the nighttime (10:00 p.m. to 7:00 a.m.). Therefore, noise from operation of proposed project would result in less than significant operational noise impacts.

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

Less Than Significant Impact. Construction of the proposed project would involve ground clearing, excavation, foundations, erection, and finishing activities but would not involve the use of construction equipment that would result in substantial ground-borne vibration or ground-borne noise on properties adjacent to the project site. No pile driving, blasting, or significant grading activities are proposed. Furthermore, project operation associated with infrastructure improvements would not generate substantial ground-borne noise and vibration. Therefore, the project would not result in the generation of excessive ground-borne noise or ground-borne vibration and impacts are considered less than significant, and no mitigation would be 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?

No Impact. The proposed project is not within two miles of a public or public use airport. The Kindsvater Ranch Airport is the closest private airport and is located approximately three miles south of the project site. In addition, the public use Fresno Yosemite International Airport is located approximately 13 miles southwest of the project site. Aircraft noise is occasionally audible at the project site; however, no portion of the project site lies within the 60 dBA CNEL noise contours of any public airport nor does any portion of the project site lie within two miles of any private airfield or heliport. Therefore, the proposed project would not result in the exposure of people residing or working in the project area to excessive noise levels. As a result, a less than significant impact would occur.

3.14 POPULATION AND HOUSING

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (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 Impact Analysis

3.14.1.1 Environmental Setting

The project site is approximately 18.2 acres in size and is in eastern Fresno County. The project site includes 47 existing residences, as well as commercial buildings like the Mono Wind Casino and associated gas station, and administrative and support buildings for operations of the Big Sandy Rancheria.

3.14.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to population and housing for the proposed project.

State Regulations.

California Department of Housing and Community Development (HCD). Housing is one of the most-important parts of any community and housing-planning has wide-reaching impacts on the environment, education, health, and the economy. HCD plays a critical role in the housing-planning process, which was designed to ensure that communities plan for housing that meets the needs of everyone in California's communities. Since 1969, California has required that all local governments (cities and counties) adequately plan to meet the housing needs of everyone in the community. This process starts with the state determining how much housing at a variety of affordability levels is needed for each region in the state, and then regional governments developing a methodology to allocate that housing need to local governments. California's local governments then adopt housing plans (called housing elements) as part of their "general plan" (also required by the state) to show how the jurisdiction will meet local housing needs.

Local Regulations.

Fresno County General Plan. The Fresno County General Plan was last updated in 2000 and does not contain any goals, policies, or implementation measures related to Population and Housing as these topics are addressed under CEQA. However, in February of 2013, the Fresno COG assembled a Regional Housing Needs Allocation Technical Committee with representatives

from all Fresno County local governments. This committee prepared a Fresno County Multi-Jurisdictional 2023-2031 Housing Element for Fresno County governments with the goal of creating regional coordination to address countywide housing issues and needs.

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

No Impact. The proposed project would include a WWTP and collection system and does not include any proposed homes or businesses. Thus, the proposed project would not result in direct population growth and would not increase permanent residency within the site. In addition, the proposed project would replace existing septic systems to improve groundwater recharge and protect residents and would not induce substantial indirect population growth by increasing the availability of wastewater treatment. Therefore, the proposed project would not directly or indirectly induce population growth and there would be no impact.

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

No Impact. The proposed project would connect existing residential units to a new WWTP by constructing a new wastewater collection system with new pipes. No existing residential units would be demolished in order to construct new wastewater pipelines. Therefore, the proposed project would not displace existing housing or require the construction of replacement housing and would result in no impact.

3.15 PUBLIC SERVICES

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

3.15.1 Impact Analysis

3.15.1.1 Environmental Setting

Fire Protection. The Fresno County Fire Protection District (FCFPD) provides primary fire protection and emergency medical services to the project site and surrounding areas. Station 74 and Station 75 are the fire stations closest to the project site, located approximately 7 miles southwest and 5.7 miles southeast of the project site respectively. The primary responsibility of the FCFPD is to provide continuous fire protection and emergency medical services to more than half of the County, covering an area of approximately 2,655 square miles, including approximately 220,000 people (Fresno County Fire Protection District. n.d.-a). There are 37 fire fighters plus Chief Officers, prevention staff, emergency communication operators, as well as other personnel serving for daily emergency response operations at the FCFPD's 17 full time fire stations. The FCFPD provides a full range of emergency responses services including but not limited to, structural fire suppression, wildland fire suppression, response to hazardous materials incidents, urban search and rescue, water rescue, vehicle extrication, technical rescue as well as basic life support medical services (Fresno County Fire Protection District. n.d.-b).

Police Protection. Under Public Law 280, the State of California and other local law enforcement agencies have criminal enforcement authority on tribal lands. Public and private lands surrounding the project site are under the jurisdiction of the Fresno County Sheriff's Office (FCSO) Area 4. Area 4 comprises the eastern mountain region of Fresno County, including the project site, and covers approximately 2,734 square miles. Within the area there are several small rural communities, numerous lakes, rivers, and recreation areas. Public safety services are delivered to the project site and surrounding areas by specialty units of the FCSO that include the Search & Rescue Unit, Boating Unit, Dive Team, Off-Road Unit, and Canine Unit. Area 4's northeastern substation is located in the census-designated community of Auberry, approximately 1.2 miles west of the project site.

School Services. The project is located within the Big Creek Elementary School District's service area. The Big Creek Elementary School District is a pre-K through eighth grade school district located in the central Sierra Nevada Mountains, within Fresno County. The school district encompasses more than 650 square miles and includes many popular lakes, recreational sites, and the China Peak Ski Resort. The school serves approximately 70 students (Big Creek Elementary School District 2014).

3.15.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to public services for the proposed project.

State Regulations. There are no applicable state regulations related to public services for the proposed project.

Local Regulations.

Fresno County General Plan. Modern development requires a wide range of publicly provided facilities and services. The Fresno County General Plan seeks to provide for the logical and efficient extension of these services as new development occurs. The General Plan includes policies that seek to ensure public facilities and services are available in a timely fashion to serve new development. The following policies would be applicable to the project.

- **Policy PF-A.1:** The County shall ensure through the development review process that public facilities and services would be developed, operational, and available to serve new development. The County shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary public facilities would be installed or adequately financed and maintained (through fees or other means).

- **Policy PF-B.1:** The County shall require that new development pay its fair share of the cost of developing new facilities and services and upgrading existing public facilities and services; exceptions may be made when new development generates significant public benefits (e.g., low income housing) and when alternative sources of funding can be identified to offset foregone revenues.

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

i. Fire protection?
ii. Police protection?
iii. Schools?
iv. Parks?
v. Other public facilities?

No Impact. The project site is located in an area that is already served by public service systems. Police protection services are provided by the FCSO. Fire protection and emergency response services for the project site are provided by the FCFPD. The project site is served by the Big Creek Elementary School District. In addition, the County provides several types of parks and other public facilities.

The proposed project includes: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The proposed project would not result in an increase in population or facilities that would require the provision of new or additional fire or police services, schools, parks, or other public facilities, or result in the need for physically altered facilities. Therefore, the project would have no impacts associated with public services.

3.16 RECREATION

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

3.16.1 Impact Analysis

3.16.1.1 Environmental Setting

In general, tourists and residents in Fresno County participate in a variety of recreational activities (e.g., camping, fishing, hiking, etc.) utilizing the natural resources of the region. Major recreational facilities near the project site include Millerton Lake State Recreation Area, Shaver Lake, Pine Flat Recreation Area, Choinumni Park (County Park), and the Sierra National Forest.

3.16.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to recreation for the proposed project.

State Regulations. There are no applicable state regulations related to recreation for the proposed project.

Local Regulations.

Fresno County General Plan. The Fresno County General Plan Open Space and Conservation Element discusses policies to enhance recreational opportunities in the County by encouraging further development of public and private recreational opportunities. The following General Plan policies would be applicable to the project.

- **Policy OS-H.2:** The County shall strive to maintain a standard of five (5) to eight (8) acres of County-owned improved parkland per one thousand (1,000) residents in the unincorporated areas.

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

No Impact. The proposed project would include infrastructure improvements and would not generate population growth that would result in an increase in the use of existing neighborhood and

regional parks or other recreational facilities. Therefore, there would be no impact to parks or recreational facilities that would occur as a result of the proposed project.

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

No Impact. The proposed project would not result in a substantial increase in the use of parks or other recreational facilities, and the proposed project would not require the construction or expansion of existing recreational facilities. Therefore, the project would result in a less than significant impact on recreational facilities.

3.17 TRANSPORTATION

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Conflict or be inconsistent with CEQA Guidelines §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 Impact Analysis

3.17.1.1 Environmental Setting

The project site is approximately 18.2 acres in size, and is located approximately one mile east of Auberry, a census-defined place in eastern Fresno County. The project is located approximately 20 miles northeast of the Fresno-Clovis metropolitan area. Regional access to the project site is via SR 168 and Auberry Road.

3.17.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to transportation for the proposed project.

State Regulations.

Senate Bill 743. On September 27, 2013, Governor Jerry Brown signed SB 743 into law and codified a process that changed transportation impact analysis as part of CEQA compliance. SB 743 directs the California Office of Planning and Research (OPR) to administer new CEQA guidance for jurisdictions that removes automobile vehicle delay and level of service (LOS) or other similar measures of vehicular capacity or traffic congestions from CEQA transportation analysis. SB 743 requires the analysis of VMT or other measures that "promote the reduction of greenhouse gas emissions, the development of multi-modal transportation networks, and a diversity of land uses," to be used as a basis for determining significant impacts to circulation in California. The goal of SB 743 is to appropriately balance the needs of congestion management with statewide goals related to reducing GHG emissions, encourage infill development, and promote public health through active transportation.

Local Regulations. There are no applicable local regulations related to transportation for the proposed project.

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

Less Than Significant Impact. The proposed project would include a WWTP and collection system. Construction of the proposed project, including the WWTP and wastewater collection system, is expected to take place over a period of 9 months starting in 2025. Construction of the WWTP and the wastewater collection system would take place concurrently. Implementation of the proposed project would involve the transportation of construction equipment, materials, and workers commuting to the site, which would generate a small temporary increase in overall daily traffic volumes. However, the increase would not be substantial and would not increase congestion.

Once operational, the Tribe's utilities maintenance staff would conduct operation and maintenance of the water system. As such, minimal trips are anticipated due to the proposed project. Due to the limited addition of project-related traffic, the proposed project is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the vicinity of the project site. As such, the addition of project traffic is not anticipated to generate a significant number of trips that would result in the deficiency of existing intersections within the project site vicinity. In addition, implementation of the proposed project would not disrupt or otherwise prevent roadway improvements, including the addition of bike paths or sidewalks in the vicinity of the project site. The project would also not disrupt existing transit services. Therefore, the proposed project would not conflict with any plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system or congestion management program. This impact would be less than significant.

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

Less Than Significant Impact. The intent of SB 743 is to align CEQA transportation study methodology with and promote the statewide goals and policies for reducing VMT and GHGs. Three objectives of SB 743 related to development are to reduce GHGs, diversify land uses, and focus on creating a multimodal environment.

VMT is defined as the product of a number of trips and those trips' lengths. The Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory), circulated by the OPR, acknowledges that lead agencies should set criteria and thresholds for VMT and transportation impacts. The Technical Advisory also notes that land uses may have a less than significant impact if located within low VMT areas of a region and suggests the use of screening maps to make a determination.

As the proposed project would only include a WWTP and collection system, operation of the proposed project is not anticipated to generate a significant number of trips. The Fresno COG provides a VMT analysis guide (COG 2020), which includes screening criteria for projects that satisfy certain criteria (e.g. project size, location, development type), may be eligible for screening. Projects that have been screened out are considered to have a less than significant impact on regional VMT without having to perform VMT analysis. Based on Fresno COG's screening criteria, projects that generate less than 500 average daily trips can be screened out. Due to the limited addition of project-related traffic, the project is expected to generate less than 500 average daily trips. As such,

implementation of the proposed project would result in less than significant VMT impacts, and no mitigation would be required.

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

No Impact. The proposed project would not change the existing roadway design. As such, the proposed project would not include any sharp curves or other roadway design elements that would create dangerous conditions. Therefore, the project would not substantially increase hazards due to a design feature, and there would be no impact.

d. Would the project result in inadequate emergency access?

No Impact. The proposed project would not result in the development of structures or alteration of existing roadways that would impede or obstruct emergency response plans or evacuation plans. Therefore, development and operation of the proposed project is not anticipated to interfere with emergency access, and no impact would occur.

3.18 TRIBAL CULTURAL RESOURCES

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

3.18.1 Impact Analysis

3.18.1.1 Environmental Setting

On May 8, 2024, a project notification letter with an invitation to consult on the project was sent by email to representatives of the one tribe on the SWRCB's AB 52 list for Fresno County: the Santa Rosa Rancheria Tachi Yokut Tribe. No response has been received from the tribe.

Big Sandy Rancheria representatives accompanied LSA archaeologists during both surveys. LSA also reached out to the Big Sandy Rancheria for input during development of the cultural report (LSA 2024b).

Because the Big Sandy Rancheria is the project proponent and the project would take place on rancheria land, an AB 52 letter was also sent to Big Sandy representatives on May 8, 2024. The SWRCB consulted with the tribe and provided the tribe the opportunity to review the mitigation measures proposed in this document. On June 13, 2024, Chairperson Elizabeth Hutchins-Kipp agreed with the findings in this document.

Two potential tribal cultural resources, including a groundstone feature that is likely a bedrock mortar (LSA-MKN2001-S-1) and a bedrock mortar (P-10-005931), were identified within or close to the project area.

3.18.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to tribal cultural resources for the proposed project.

State Regulations.

Assembly Bill 52. AB 52, the Native American Historic Resource Protection Act, sets forth a proactive approach intended to reduce the potential for delay and conflicts between Native American and development interests. Projects subject to AB 52 are those that file a Notice of Preparation for an EIR or Notice of Intent to adopt a Negative or Mitigated Negative Declaration on or after July 1, 2015. AB 52 adds tribal cultural resources (TCR) to the specific cultural resources protected under CEQA. Under AB 52, a TCR is defined as a site, feature, place, cultural landscape (must be geographically defined in terms of size and scope), sacred place, or object with cultural value to a California Native American tribe that is either included or eligible for inclusion in the California Register, or included in a local register of historical resources. A Native American tribe or the Lead Agency, supported by substantial evidence, may choose at its discretion to treat a resource as a TCR. AB 52 also mandates Lead Agencies to consult with Native American tribes, if requested by the tribe, and sets the principles for conducting and concluding consultation.

Local Regulations. There are no applicable local regulations related to tribal cultural resources for the proposed project.

a. 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:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? Or

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public 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. Two potential tribal cultural resources, LSA-MKN2001-S-1 and P-10-005931, were identified within or close to the project area. There is also potential to identify previously unidentified tribal cultural resources during construction of the project. With the implementation of Mitigation Measures CUL-1 through CUL-4, impacts to these resources will be less than significant.

3.19 UTILITIES AND SERVICE SYSTEMS

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

3.19.1 Impact Analysis

3.19.1.1 Environmental Setting

Electricity and Natural Gas. The PG&E would serve as the electricity provider for the proposed project. No natural gas use is expected from the proposed project. PG&E would be contacted by Big Sandy Rancheria representatives to arrange three new electrical service connections required for operations of the proposed wastewater treatment facility and the two new lift stations.

Water and Wastewater. Water supply in the BSR is supplied through public and private groundwater wells. The proposed project would not include the construction or alteration of water supply infrastructure, or result in direct additions or withdrawals to existing groundwater.

Wastewater at the project site is currently managed through individual septic systems servicing individual buildings and residences. The proposed project would construct and operate wastewater collection and treatment systems to replace the existing individual septic tanks in the project site.

Solid Waste. The following landfills and waste management facilities service the project site.

> ***American Avenue Landfill.*** The 440-acre American Avenue Landfill in Kerman, California, is a sanitary landfill owned and operated by Fresno County. It is currently expected to reach capacity and be closed in 2031. This facility is located approximately 47 miles southwest of the project site. Waste types permitted in this facility include agricultural, asbestos, construction/ demolition, industrial, and mixed municipal waste, with a permitted throughput capacity of 2,200 tons per day (CalRecycle 2019a).

Fresno County Regional Household Hazardous Waste Facility. The County of Fresno's Regional Household Hazardous Waste Facility is available for the safe disposal of waste chemicals and substances associated with residential and business operations. This facility is located approximately 31 miles southwest of the project site (County of Fresno n.d.-c).

Shaver Lake Transfer Station. The Shaver Lake Transfer Station is a 1-acre site in Shaver Lake, California, operated in partnership with the County of Fresno, Granite Solid Waste, and the United States Forest Service. This facility is located approximately 8.8 miles northeast from the project site. As a transfer station, this facility is utilized to receive solid wastes, temporarily store, separate, convert, or otherwise process the materials in the solid wastes, or to transfer the solid wastes directly from smaller to larger vehicles for transport, and those facilities utilized for transformation. Permitted throughput capacity for this facility is 15 tons per day (CalRecycle 2019b).

3.19.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to utilities and service systems for the proposed project.

State Regulations.

California Green Building Standards Code—Part 11, Title 24. The CALGreen Code requires covered projects to recycle and/or salvage for reuse a minimum 65 percent of the nonhazardous construction and demolition waste or meet a local construction and demolition waste management ordinance, whichever is more stringent.

Assembly Bill 939, California Integrated Waste Management Act. California's Integrated Waste Management Act of 1989 requires cities and counties to reduce the amount of waste disposed of in landfills. The Local Government Construction and Demolition (C&D) Guide of 2002 (SB 1374) amended this act to include construction and demolition material. The County created the County of Fresno's C&D Debris Recycling Program to fulfill requirements under these bills.

Beginning January 1, 2014, the County of Fresno required permit applicants to submit a Waste Management Plan for approval prior to issuance of permit for projects. The Waste Management Plan required as part of the County's C&D Debris Recycling Program is designed to assist County compliance with state mandates, and to provide builders with a means of documenting the waste reduction requirements included in the California Green Building Standards Code (CALGreen).

Local Regulations.

Fresno County General Plan. The County's General Plan contains policies related to utilities and service systems applicable to the project.

- **Policy OS-A.28:** The County shall only approve new wastewater treatment facilities that will not result in degradation of surface water or groundwater. The County shall generally require treatment to tertiary or higher levels.

- **Policy PF-F.4:** The County shall ensure that all new development complies with applicable provisions of the County Integrated Waste Management Plan.

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. The proposed project would include a WWTP and collection system. Construction and operation of the proposed WWTP and collection system would have minimal to no effect on water supply, natural gas, and telecommunications facilities. Therefore, no exceedance of the capacities of these services would occur that would result in a significant environmental effect. Development of the proposed project has the potential to impact solid waste services during construction, wastewater services, and electrical services.

As identified in the Project Description, the Big Sandy Rancheria proposes to construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings. The Big Sandy Rancheria plans to make wastewater service available to every residence within the BSR boundary, as well as to all community buildings with water service, including 47 residential structures, the Mono Wind Casino and associated general store and gas station, gymnasium, tribal administration buildings, the Head Start Center, gaming commission building, family services center, emergency services building, and cemetery. A total of 57 service connections would be provided. The proposed project would more reliably accommodate existing treatment demand and would not involve an expansion of capacity to accommodate new growth. Therefore, the project would not disrupt capacity to existing users or result in an increase in capacity to serve additional customers. The proposed project would not result in construction of facilities that would result in significant environmental effects. Therefore, impacts would be less than significant, and no mitigation would be required.

As discussed in Section 3.6.1.a., operation of the proposed project would demand electricity. The electrical improvements required for the selected project construction would require three new electrical supplies. The new services would be at the wastewater treatment facility and at the two new lift stations. Electricity would be obtained from PG&E, which currently provides electricity to properties in the immediate vicinity of the project site. Due to the small electricity demand associated with the proposed project, the proposed project would not result in construction of facilities that would result in significant environmental effects. Therefore, impacts would be less than significant, and no mitigation would be required.

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

Less Than Significant Impact. See Section 3.19.1.a above. The proposed project would include a WWTP and collection system. The proposed project would construct and operate wastewater collection and treatment systems to protect the community water system from contamination and replace the existing individual septic tanks for residences and other non-residential buildings.

Construction and operation of the proposed project would not result in direct additions or withdrawals to existing groundwater and as such would not result in impacts on water supply. Therefore, no exceedance of the capacities of these services would occur that would result in a significant impact. Therefore, the proposed project would have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years and impacts would be less than significant.

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

Less Than Significant Impact. The proposed project includes the construction and operation of a WWTP that is specifically designed to provide treatment to the existing structures that would be connected to the WWTP. The capacity of the WWTP has been for the existing uses, however, should expansion of the WWTP be required to serve future, currently unplanned commitments, the treatment capacity of the proposed WWTP could be expanded through modular design. As a result, the proposed project would have adequate capacity to serve the projected demand, and a less than significant impact would occur.

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. Project construction would generate wastes including construction materials, trenching spoils, and general refuse, and these wastes would need to be disposed of in local or regional facilities. Waste generated from construction could include non-hazardous metal waste, non-hazardous non-metal waste (concrete rubble, organic waste [vegetation], boxes and crates, refuse from construction workers), trenching spoils (rubble and soils), and hazardous wastes. It is not anticipated that construction waste would exceed the capacity of local landfills or the transfer station.

The American Avenue Landfill (i.e. American Avenue Disposal Site 10-AA-0009) is the County's regional landfill near Kerman. The American Avenue Landfill has a maximum permitted capacity of 32,700,000 cubic yards and a remaining capacity of 29,358,535 cubic yards, with an estimated closure date of August 31, 2031. The maximum permitted throughput is 2,200 tons per day (CalRecycle 2019a). This facility is able to accept all types of solid waste and recycling. In addition, the County of Fresno's Regional Household Hazardous Waste Facility is available for drop off of various chemicals and substances for safe disposal. The Shaver Lake Transfer Station is operated in partnership with the County of Fresno, Granite Solid Waste, and the United States Forest Service.

The quantity of solid waste materials associated with the project would be limited to the construction period and would not pose a significant impact upon existing landfills. Typical wastewater treatment typically includes monitoring of solid waste and sludge buildup to determine appropriate dredging intervals (usually every 10 to 15 years). However, since the proposed project is intended to be paired with primary and secondary treatment using a packaged filter media system, regular dredging would not be required. Any solid waste generated by the operation of the WWTP

would be disposed over via applicable waste regulations. Impacts related to solid waste disposal are considered less than significant.

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

Less Than Significant Impact. The proposed project would be required to comply with all federal, state, and local regulations related to solid waste. Furthermore, the proposed project would be required to comply with all standards related to solid waste diversion, reduction, and recycling during project construction and operation. The proposed project would comply with all federal, state, and local statutes and regulations related to solid waste. As such, any impacts would be less than significant.

3.20 WILDFIRE

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

3.20.1 Impact Analysis

3.20.1.1 Environmental Setting

The project site is located within a VHFHSZ (CAL FIRE 2023). The rural, mainly undeveloped character of the BSR and the presence of vegetation that can act as fuel for wildfires exacerbates wildfire risk in the project site.

3.20.1.2 Regulatory Setting

Federal Regulations. There are no applicable federal regulations related to wildfire for the proposed project.

State Regulations.

California Department of Forestry and Fire Protection. CAL FIRE publishes maps that predict the threat of fire for each county within the state. Local Responsibility Areas and State or Federal Responsibility Areas are classified as either VHFHSZ or non-VHFHSZ based on factors including fuel availability, topography, fire history, and climate. The 2019 Strategic Fire Plan for California was generated by CAL FIRE to provide guidelines and objectives to account for associated fire impacts.

California Fire Code. The California Fire Code includes regulations for emergency planning, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. Several fire safety requirements include: installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors,

building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildfire hazard areas.

California Health and Safety Code §13000 et seq. and California Building Code. State fire regulations are set forth in §13000 et seq. of the California Health and Safety Code, which is divided into "Fires and Fire Protection" and "Buildings Used by the Public." The regulations provide for the enforcement of the CBC and mandate the abatement of fire hazards.

Executive Order N-05-19. On January 9, 2019, Governor Gavin Newsom announced an Executive Order (EO) that requires CAL FIRE and other state agencies to compile policy and regulatory recommendations concerning wildfire mitigation, emphasizing environmental sustainability and public health. The EO requires the incorporation of socioeconomic analysis when conducting risk management of wildfires and mandates that agencies identify geographic areas with populations that are more vulnerable to the impacts of wildfires.

Local Regulations. There are no applicable local regulations related to wildfire for the proposed project.

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

Less Than Significant Impact. Wildland fires occur in geographic areas that contain the types and conditions of vegetation, topography, weather, and structure density susceptible to risks associated with uncontrolled fires that can be started by lightning, improperly managed campfires, cigarettes, sparks from automobiles, and other ignition sources. As discussed in Section 3.9.1.g, above, according to the California Department of Forestry and Fire Protection VHFHSZ Map for Fresno County, portions of the project site are located within the high and very high wildfire threat area. However, the proposed project would construct and operate wastewater collection and treatment systems. The proposed project would not result in the development of structures or alteration of existing roadways that would substantially impair an adopted emergency response plan or emergency evacuation plan. Therefore, this impact would be less than significant.

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

Less Than Significant Impact. As stated previously, the project site is in a VHFHSZ. However, the proposed project, which involves the construction and operation of a wastewater collection and treatment system, would not exacerbate wildfire risks due to slope and prevailing winds, thereby exposing project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. As a result, a less than significant impact would occur, and no mitigation would be required.

c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Less Than Significant Impact. The proposed project would construct and operate wastewater collection and treatment systems. Planned improvements would include: 1) the proposed WWTP site; 2) proposed wastewater collection pipelines and lift stations; 3) abandonment of existing septic systems; and 4) electrical improvements to facilitate the new components. The electrical improvements required for the selected project construction would require three new electrical supplies. The new services would be at the wastewater treatment facility and at the two new lift stations. The proposed project would not include new distribution lines but would require new service lines. The new service lines would be built to current California standards and would require PG&E electricity connection approvals. Implementation of the proposed project, including new power lines, is not expected to exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. As such, a less than significant impact would occur, and no mitigation would be required.

d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. Landslides and other forms of mass wasting, including mud flows, debris flows, and soil slips, occur as soil moves downslope under the influence of gravity. Landslides are frequently triggered by intense rainfall or seismic shaking but can also occur as a result of erosion and downslope runoff caused by rain following a fire. As previously discussed in Section 3.7.1.a.iv, the County's General Plan states that geologic hazards in Fresno County could include landslides. However, the project site is not mapped as a landslide hazard (California Geological Survey 2015a). In addition, the proposed project would include the construction and operation of a new WWTP and associated wastewater collection system. Therefore, the proposed project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. As a result, a less than significant impact would occur, and no mitigation would be required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
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 which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Impact Analysis

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

Less Than Significant Impact with Mitigation. Implementation of the mitigation measures recommended in this Initial Study would ensure that construction and operation of the proposed project would not substantially degrade the quality of the environment; reduce the habitat, population, or range of a plant or animal species; or eliminate important examples 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)?

Less Than Significant Impact with Mitigation. The potential impacts of the project are individually limited and are not cumulatively considerable. Implementation of mitigation measures recommended in this report would reduce potentially significant impacts that could become cumulatively considerable.

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

Less Than Significant Impact with Mitigation. The proposed project would be constructed and operated in accordance with all applicable regulations governing hazardous materials, noise, and geotechnical considerations. Because all potentially significant impacts of the proposed project are expected to be mitigated to less than significant levels, it is unlikely that implementation of the proposed project would cause substantial adverse effects on human beings. Therefore, implementation of the proposed project would not result in significant human health risks.

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5.0 REFERENCES

Baldwin, Bruce G., et. al., Ed. 2012. *The Jepson Manual: Vascular Plants of California, Second Edition*. University of California Press.

Big Creek Elementary School District. 2014. Single School District Plan to Meet the Requirements of The Local Educational Agency Plan and Single Plan for Student Achievement. Website: https://www.bigcreekschool.com/files/user/2/file/2013_Single_School_District_Plan_Big_Creek_Elementary_School_20140519__1_.pdf (accessed February 2024).

California Air Resources Board (CARB). 2017. *California's 2017 Climate Change Scoping Plan*. November.

_____. *2022 Scoping Plan*. November 16. Website: https://ww2.arb.ca.gov/sites/default/files/2022-12/2022-sp.pdf (accessed February 2024).

California Department of Fish and Wildlife. 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. State of California Natural Resources Agency. March 20.

California Department of Forestry and Fire Protection (CAL FIRE). 2023. Fresno County State Responsibility Area Fire Hazard Severity Zones. Website: https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones/fire-hazard-severity-zones-maps-2022 (accessed January 2024).

California Department of Resources Recycling and Recovery (CalRecycle). 2019a. SWIS Facility/Site Summary, American Avenue Disposal Site (10-AA-0009). Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Summary/352 (accessed January 2024).

_____. 2019b. SWIS Facility/Site Activity Details - Shaver Lake Transfer Station (10-AA-0010). Website: https://www2.calrecycle.ca.gov/SolidWaste/Site/Details/353 (accessed January 2024).

California Department of Toxic Substances Control (DTSC). 2024. EnviroStor. Website: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=big+sandy+rancheria (accessed February 2024).

California Energy Commission (CEC). 2020. *2019 Integrated Energy Policy Report*. California Energy Commission. Docket # 19-IEPR-01. February.

_____. 2021a. Electricity Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/elecbyutil.aspx (accessed November 2023).

_____. 2021b. Electricity Consumption by County. Website: http://www.ecdms.energy.ca.gov/elecbycounty.aspx (accessed November 2023).

_____. 2021c. 2021 Integrated Energy Policy Report. Docket Number: 21-IEPR-01.

_____. 2021d. Gas Consumption by Entity. Website: http://www.ecdms.energy.ca.gov/gasbyutil.aspx (accessed February 2024).

_____. 2021e. Gas Consumption by County. Website: http://www.ecdms.energy.ca.gov/gasbycounty.aspx (accessed February 2024).

_____. 2022a. 2022 Total System Electric Generation. Website: https://www.energy.ca.gov/data-reports/energy-almanac/california-electricity-data/2022-total-system-electric-generation (accessed November 2023).

_____. 2022b. 2020 Integrated Energy Policy Report Update. Docket Number: 22-IEPR-01.

_____. *2023 Integrated Energy Policy Report Update*. California Energy Commission. Docket Number: 23-IEPR-01.

California Environmental Protection Agency (CalEPA). 2024. Cortese List Data Resources. Website: https://calepa.ca.gov/sitecleanup/corteselist/ (accessed February 2024).

California Geological Survey. 2015a. CGS Information Warehouse: Regulatory Maps. Website: https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps (accessed December 2020).

_____. 2015b. Landslide Inventory. Website: https://maps.conservation.ca.gov/cgs/lsi/app/ (accessed December 2020).

California Native Plant Society (CNPS). 2020. Inventory of Rare and Endangered Vascular Plants of California – Online Edition, V8-03 0.39. Sacramento, California.

California Public Utilities Commission (CPUC). 2020. Renewables Portfolio Standard (RPS) Program. Website: https://www.cpuc.ca.gov/rps/ (accessed October 2023).

California Soil Resource Lab. 2020 "Online Soil Survey." California Soil Resource Laboratory. Website: http://casoilresource.lawr.ucdavis.edu (accessed December 15, 2020).

County of Fresno. 2000. *Fresno County General Plan*. October.

_____. 2020. Fresno County Ordinance Code. October 28.

_____. n.d.-a. Probation. Website: https://www.co.fresno.ca.us/departments/probation (accessed January 2024).

_____. n.d.-b. District Attorney. Website: https://www.co.fresno.ca.us/departments/district-attorney (accessed January 2024).

_____. n.d.-c. Public Works & Planning - Household Hazardous Waste. Website: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/resources-and-parks-division/recycling-and-solid-waste-disposal/household-haz.

Fresno Council of Governments (COG). 2020. Welcome to Fresno COG's VMT Analysis Guide. Website: www.fresnocog.org/project/vmt-analysis/ (accessed December 2020).

Fresno County Fire Protection District. n.d.-a. Our History. Website: https://www.fresnocountyfire.org/about-us (accessed January 2024).

_____. n.d.-b. District Operations. Website: https://www.fresnocountyfire.org/fcfpd-annual-report (accessed January 2024).

Fresno Superior Court. 2006. 2006 Annual Report. Website: http://www.fresno.courts.ca.gov/_pdfs/Annual%20Report/2006%20Annual%20Report.pdf (accessed January 2024).

Griffiths J., Villablanca F. 2015. Managing monarch butterfly overwintering groves: making room among the eucalyptus. California Fish and Wildlife 101:40-50.

Jackson, Rob, and Mary O'Neill. 2020. Personal communication with Katie Vallaire of LSA. December.

Jepson Online Inventory for California Floristics (eds.) 2020. Jepson eFlora. Website: http://ucjeps.berkeley.edu/eflora/.

LSA. 2024a. Biological Resources Evaluation for the Big Sandy Rancheria Wastewater System Improvements Project, Fresno County, California.

_____. 2024b. Historic Property Identification Report, Big Sandy Rancheria Wastewater System Improvements Project, Big Sandy Rancheria, Fresno County, California.

MKN & Associates. 2020. BSR Wastewater System Improvements Preliminary Engineering Report. August.

Moore Twining Associates, Inc. 2020. Geotechnical Engineering Investigation Proposed Underground Sewer Piping System for the Big Sandy Rancheria, Fresno County, California. February.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 1996a. Portable Equipment Registration. Amended May 16. Website: https://www.valleyair.org/rules/currntrules/r2280.pdf (accessed January 2024).

_____. 1996b. Rule 4202. Particulate Matter - Emission Rate. Amended December 17. Website: https://www.valleyair.org/rules/currntrules/r4202.pdf (accessed February 2024).

_____. 2004. Rule 8011. Indirect Source Review. Amended August 19. Website: https://www.valleyair.org/rules/currntrules/r8011.pdf (accessed February 2024).

_____. 2007. *2007 PM_{10} Maintenance Plan and Request for Redesignation*. Website: www.valleyair.org/Air_Quality_Plans/docs/Maintenance%20Plan10-25-07.pdf (accessed January 2021).

_____. 2009. *Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects Under CEQA*. December 17. Website: www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf (accessed December 2020).

_____. 2015a. Rule 9510. Indirect Source Review. Adopted December 21, 2017, Effective March 21. Website: https://www.valleyair.org/rules/currntrules/r9510.pdf (accessed February 2024).

_____. 2015b. *Guidance for Assessing and Mitigating Air Quality Impacts* (GAMAQI). March 19. Website: https://www.valleyair.org/transportation/GAMAQI.pdf (accessed February 2024).

_____. 2016. *2016 Plan for the 2008 8-Hour Ozone Standard*. June 16. Website: www.valleyair.org/Air_Quality_Plans/Ozone-Plan-2016.htm (accessed January 2021).

_____. 2018. *2018 Plan for the 1997, 2006, and 2012 $PM_{2.5}$ Standards*. November 15. Website: http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf (accessed January 2021).

Sawyer, John O., et al. 2008. *A Manual of California Vegetation: Second Edition*. California Native Plant Society. Sacramento, California.

United States Army Corps of Engineers. 1987. Corps of Engineers Wetlands Delineation Manual. Technical Report Y-97-1. Vicksburg, Mississippi: U.S. Army Corps of Engineers Waterways Experiment Station.

United States Army Corps of Engineers. 2016. Regulatory Guidance Letter No. 16-01. Subject: Jurisdictional Determinations. October 2016.

United States Department of Housing and Urban Development. n.d. Mission. Website: https://www.hud.gov/about/mission (accessed December 2023).

United States Department of Transportation (DOT). 2018. Regulations and Compliance. Website: www.phmsa.dot.gov/regulations-and-compliance (accessed October 2020).

United States Energy Information Administration (EIA). 2021. California State Profile and Energy Estimates. Table F3: Motor gasoline consumption, price, and expenditure estimates, 2021. Website: www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_fuel/html/fuel_mg.html&sid=CA (accessed February 2024).

_____. 2022. Electricity Explained. Website: https://www.eia.gov/energyexplained/electricity/ (accessed November 2023).

United States Environmental Protection Agency (USEPA). 2012. Hazardous Waste Regulations. Website: www.epa.gov/osw/laws-regs/regs-haz.htm (accessed October 2020).

United States Geological Survey (USGS). n.d. Earthquake Hazards Program. Website: https://www.usgs.gov/glossary/earthquake-hazards-program#:~:text=Active%20fault,in%20the%20last%2010%2C000%20years (accessed February 2024).

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APPENDIX A

CALEEMOD OUTPUTS

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Big Sandy Rancheria Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Big Sandy Rancheria Project
Construction Start Date	9/2/2024
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	30.4
Location	37.08594258097449, -119.46673980500384
County	Fresno
City	Unincorporated
Air District	San Joaquin Valley APCD
Air Basin	San Joaquin Valley
TAZ	2507
EDFZ	5
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Road Widening	< 0.005	Mile	2.40	0.00	0.00	—	—	—

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.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.03	59.2	47.1	0.07	1.93	1.65	3.58	1.77	0.21	1.98	—	7,889	7,889	0.32	0.07	7,920
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.01	59.3	46.8	0.07	1.93	1.65	3.58	1.77	0.21	1.98	—	7,863	7,863	0.32	0.07	7,893
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.38	11.1	8.78	0.01	0.36	0.31	0.68	0.34	0.04	0.37	—	1,469	1,469	0.06	0.01	1,475
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.07	2.02	1.60	< 0.005	0.07	0.06	0.12	0.06	0.01	0.07	—	243	243	0.01	< 0.005	244

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

2024	2.03	59.2	47.1	0.07	1.93	1.65	3.58	1.77	0.21	1.98	—	7,889	7,889	0.32	0.07	7,920
2025	1.05	30.5	24.1	0.04	0.99	0.76	1.75	0.91	0.10	1.01	—	4,242	4,242	0.17	0.04	4,258
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.01	59.3	46.8	0.07	1.93	1.65	3.58	1.77	0.21	1.98	—	7,863	7,863	0.32	0.07	7,893
2025	2.00	59.2	46.7	0.07	1.93	1.65	3.58	1.77	0.21	1.98	—	7,860	7,860	0.32	0.07	7,890
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.38	11.1	8.78	0.01	0.36	0.31	0.68	0.34	0.04	0.37	—	1,469	1,469	0.06	0.01	1,475
2025	0.30	8.52	6.74	0.01	0.29	0.19	0.48	0.27	0.02	0.30	—	1,144	1,144	0.05	0.01	1,148
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.07	2.02	1.60	< 0.005	0.07	0.06	0.12	0.06	0.01	0.07	—	243	243	0.01	< 0.005	244
2025	0.06	1.55	1.23	< 0.005	0.05	0.03	0.09	0.05	< 0.005	0.05	—	189	189	0.01	< 0.005	190

3. Construction Emissions Details

3.1. Linear, Grubbing & Land Clearing (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	5.37	4.42	0.01	0.26	—	0.26	0.24	—	0.24	—	632	632	0.03	0.01	634
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.29	0.24	< 0.005	0.01	—	0.01	0.01	—	0.01	—	34.6	34.6	< 0.005	< 0.005	34.8
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	0.05	0.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.74	5.74	< 0.005	< 0.005	5.76
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.30	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	46.5	46.5	< 0.005	< 0.005	47.3
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.34	2.34	< 0.005	< 0.005	2.38
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.39	0.39	< 0.005	< 0.005	0.39
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
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

3.3. Linear, Grading & Excavation (2024) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.86	59.1	45.6	0.07	1.93	—	1.93	1.77	—	1.77	—	7,644	7,644	0.31	0.06	7,670
Dust From Material Movement	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.86	59.1	45.6	0.07	1.93	—	1.93	1.77	—	1.77	—	7,644	7,644	0.31	0.06	7,670
Dust From Material Movement	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—
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

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.34	10.8	8.29	0.01	0.35	—	0.35	0.32	—	0.32	—	1,391	1,391	0.06	0.01	1,396
Dust From Material Movement	—	—	—	—	—	0.26	0.26	—	0.03	0.03	—	—	—	—	—	—
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	1.96	1.51	< 0.005	0.06	—	0.06	0.06	—	0.06	—	230	230	0.01	< 0.005	231
Dust From Material Movement	—	—	—	—	—	0.05	0.05	—	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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.17	0.09	1.52	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	232	232	0.01	0.01	236
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	14.0
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.12	1.23	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	206	206	0.01	0.01	209
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.4	13.4	< 0.005	< 0.005	14.0
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.02	0.23	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	38.9	38.9	< 0.005	< 0.005	39.5

Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.44	2.44	< 0.005	< 0.005	2.55
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.43	6.43	< 0.005	< 0.005	6.54
Vendor	< 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	0.42
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

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

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.86	59.1	45.6	0.07	1.93	—	1.93	1.77	—	1.77	—	7,645	7,645	0.31	0.06	7,671
Dust From Material Movement	—	—	—	—	—	1.45	1.45	—	0.16	0.16	—	—	—	—	—	—
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	1.16	0.89	< 0.005	0.04	—	0.04	0.03	—	0.03	—	150	150	0.01	< 0.005	150
Dust From Material Movement	—	—	—	—	—	0.03	0.03	—	< 0.005	< 0.005	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.21	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	24.8	24.8	< 0.005	< 0.005	24.9
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.14	0.10	1.13	0.00	0.00	0.20	0.20	0.00	0.05	0.05	—	202	202	0.01	0.01	205
Vendor	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.2	13.2	< 0.005	< 0.005	13.8
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.09	4.09	< 0.005	< 0.005	4.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.26	0.26	< 0.005	< 0.005	0.27
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.68	0.68	< 0.005	< 0.005	0.69
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.04	0.04	< 0.005	< 0.005	0.04
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

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

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	30.5	23.1	0.04	0.99	—	0.99	0.91	—	0.91	—	4,090	4,090	0.17	0.03	4,104
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.95	30.5	23.1	0.04	0.99	—	0.99	0.91	—	0.91	—	4,090	4,090	0.17	0.03	4,104
Dust From Material Movement	—	—	—	—	—	0.62	0.62	—	0.07	0.07	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	5.85	4.44	0.01	0.19	—	0.19	0.18	—	0.18	—	784	784	0.03	0.01	787
Dust From Material Movement	—	—	—	—	—	0.12	0.12	—	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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	1.07	0.81	< 0.005	0.03	—	0.03	0.03	—	0.03	—	130	130	0.01	< 0.005	130
Dust From Material Movement	—	—	—	—	—	0.02	0.02	—	< 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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.06	0.93	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	152	152	< 0.005	0.01	154
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
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	0.75	0.00	0.00	0.14	0.14	0.00	0.03	0.03	—	135	135	0.01	0.01	137
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
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
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.7	26.7	< 0.005	< 0.005	27.2
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.42	4.42	< 0.005	< 0.005	4.50
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
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

3.9. Linear, Paving (2025) - Unmitigated

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

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.58	15.6	12.4	0.02	0.67	—	0.67	0.63	—	0.63	—	1,769	1,769	0.07	0.01	1,775
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
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	1.49	1.19	< 0.005	0.06	—	0.06	0.06	—	0.06	—	170	170	0.01	< 0.005	170
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.27	0.22	< 0.005	0.01	—	0.01	0.01	—	0.01	—	28.1	28.1	< 0.005	< 0.005	28.2
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
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.04	0.65	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	106	106	< 0.005	< 0.005	108
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
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

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	9.35	9.35	< 0.005	< 0.005	9.51
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
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
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.55	1.55	< 0.005	< 0.005	1.57
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
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

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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	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	9/2/2024	9/27/2024	5.00	20.0	—
Linear, Grading & Excavation	Linear, Grading & Excavation	9/30/2024	1/10/2025	5.00	75.0	—

Linear, Drainage, Utilities, & Sub-Grade	Linear, Drainage, Utilities, & Sub-Grade	1/13/2025	4/18/2025	5.00	70.0	—
Linear, Paving	Linear, Paving	4/21/2025	6/6/2025	5.00	35.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Linear, Grubbing & Land Clearing	Crawler Tractors	Diesel	Tier 2	1.00	8.00	87.0	0.43
Linear, Grubbing & Land Clearing	Excavators	Diesel	Tier 2	2.00	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	Crawler Tractors	Diesel	Tier 2	1.00	8.00	87.0	0.43
Linear, Grading & Excavation	Excavators	Diesel	Tier 2	3.00	8.00	36.0	0.38
Linear, Grading & Excavation	Graders	Diesel	Tier 2	2.00	8.00	148	0.41
Linear, Grading & Excavation	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Linear, Grading & Excavation	Rubber Tired Loaders	Diesel	Tier 2	1.00	8.00	150	0.36
Linear, Grading & Excavation	Scrapers	Diesel	Tier 2	2.00	8.00	423	0.48
Linear, Grading & Excavation	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Grading & Excavation	Tractors/Loaders/Backhoes	Diesel	Tier 2	4.00	8.00	84.0	0.37
Linear, Drainage, Utilities, & Sub-Grade	Air Compressors	Diesel	Tier 2	1.00	8.00	37.0	0.48

Linear, Drainage, Utilities, & Sub-Grade	Generator Sets	Diesel	Tier 2	1.00	8.00	14.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Graders	Diesel	Tier 2	1.00	8.00	148	0.41
Linear, Drainage, Utilities, & Sub-Grade	Plate Compactors	Diesel	Tier 2	1.00	8.00	8.00	0.43
Linear, Drainage, Utilities, & Sub-Grade	Pumps	Diesel	Tier 2	1.00	8.00	11.0	0.74
Linear, Drainage, Utilities, & Sub-Grade	Rough Terrain Forklifts	Diesel	Tier 2	1.00	8.00	96.0	0.40
Linear, Drainage, Utilities, & Sub-Grade	Scrapers	Diesel	Tier 2	1.00	8.00	423	0.48
Linear, Drainage, Utilities, & Sub-Grade	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Drainage, Utilities, & Sub-Grade	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37
Linear, Paving	Pavers	Diesel	Tier 2	1.00	8.00	81.0	0.42
Linear, Paving	Paving Equipment	Diesel	Tier 2	1.00	8.00	89.0	0.36
Linear, Paving	Rollers	Diesel	Tier 2	2.00	8.00	36.0	0.38
Linear, Paving	Signal Boards	Electric	Average	0.00	8.00	6.00	0.82
Linear, Paving	Tractors/Loaders/Backhoes	Diesel	Tier 2	3.00	8.00	84.0	0.37

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Linear, Grubbing & Land Clearing	—	—	—	—
Linear, Grubbing & Land Clearing	Worker	7.50	7.70	LDA,LDT1,LDT2
Linear, Grubbing & Land Clearing	Vendor	0.00	4.00	HHDT,MHDT
Linear, Grubbing & Land Clearing	Hauling	0.00	20.0	HHDT

Linear, Grubbing & Land Clearing	Onsite truck	—	—	HHDT
Linear, Grading & Excavation	—	—	—	—
Linear, Grading & Excavation	Worker	37.5	7.70	LDA,LDT1,LDT2
Linear, Grading & Excavation	Vendor	1.00	4.00	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	25.0	7.70	LDA,LDT1,LDT2
Linear, Drainage, Utilities, & Sub-Grade	Vendor	0.00	4.00	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	17.5	7.70	LDA,LDT1,LDT2
Linear, Paving	Vendor	0.00	4.00	HHDT,MHDT
Linear, Paving	Hauling	0.00	20.0	HHDT
Linear, Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

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

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Linear, Grubbing & Land Clearing	0.00	0.00	2.40	0.00	—
Linear, Grading & Excavation	0.00	0.00	2.40	0.00	—
Linear, Drainage, Utilities, & Sub-Grade	0.00	0.00	2.40	0.00	—

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
Road Widening	2.40	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	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)

8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Construction will begin in fall/winter of 2024 and occur for for 9 months (approximately 200 construction workdays)
Construction: Off-Road Equipment	Construction defaults, assuming Tier 2 engines