

MEADOW VISTA COUNTY WATER DISTRICT BEAR RIVER CANAL ALTERNATIVE WATER SUPPLY IMPROVEMENTS PROJECT

Draft Initial Study/Mitigated Negative Declaration

October 2026

Prepared for:

Meadow Vista County Water District
17000 Placer Hills Road
Meadow Vista, CA 95722



Prepared by:

RCH Group, Inc.
PO Box 516
Rancho Murieta, CA 95683
916.782.4427



TABLE OF CONTENTS

MEADOW VISTA COUNTY WATER DISTRICT BEAR RIVER CANAL ALTERNATIVE WATER SUPPLY IMPROVEMENTS PROJECT DRAFT INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

	<u>Page</u>
ENVIRONMENTAL CHECKLIST	1
Aesthetics	18
Agricultural and Forest Resources	19
Air Quality	21
Biological Resources	25
Cultural Resources	29
Energy	32
Geology and Soils	33
Greenhouse Gas Emissions	38
Hazards and Hazardous Materials	44
Hydrology and Water Quality	46
Land Use and Land Use Planning	50
Mineral Resources	50
Noise	51
Population and Housing	59
Public Services	60
Recreation	61
Transportation	62
Tribal Cultural Resources	64
Utilities and Service Systems	66
Wildfire	67
Mandatory Findings of Significance	69

APPENDICES

- A. Air Quality Supporting Information
- B. Biological Resources Assessment
- C. Cultural Resources Assessment (Confidential)
- D. Noise Supporting Information

LIST OF FIGURES

Figure 1.	Vicinity Map	4
Figure 2.	Project Overview	5
Figure 3.	Tree Removal Plan	7
Figure 4.	Turnout/Roadway Grading	8
Figure 5.	Preliminary Turnout/Site Plan.....	9
Figure 6.	Turnout Structure	10
Figure 7.	Discharge Manifold.....	12
Figure 8.	Stormwater Basin	14
Figure 9	Noise Measurement Locations	54

LIST OF TABLES

Table 1	Estimated Maximum Daily Construction Emissions	23
Table 2	Estimated Maximum Daily Operational Emissions	24
Table 3	Typical Noise Levels.....	52
Table 4	Existing Noise Levels.....	53
Table 5	Typical Construction Equipment Noise Levels (Lmax).....	56
Table 6	Operational Equipment Predicted Noise Levels.....	57

ENVIRONMENTAL CHECKLIST

DRAFT INITIAL STUDY

1. **Project Title:** Bear River Canal Alternative Water Supply Improvements Project
2. **Lead Agency Name and Address:** Meadow Vista County Water District (MVCWD)
17000 Placer Hills Road
Meadow Vista, CA 95722
3. **Contact Person and Phone Number:** Cassandra Barnhill, General Manager
(530) 878-0828
4. **Project Location:** APN #073-050-015-000 and #073-050-017-000
142 Hillside Drive
Applegate, California 95703
5. **Project Sponsor:** Meadow Vista County Water District (MVCWD)
Cassandra Barnhill, General Manager
(530) 878-0828
6. **General Plan Designation:** Rural Residential 1 - 2.3 Acre Minimum
7. **Zoning:** APN# 073-050-015-000: O, RS-AG-B-100 (Open Space, Residential Single-Family, combining Agriculture, combining minimum building site of 100,000 square feet)

APN# 073-050-017-000: O (Open Space)

8. Description of Project:

Purpose and Need

The Meadow Vista County Water District (District), acting as the Project Applicant and California Environmental Quality Act (CEQA) Lead Agency, proposes the Bear River Canal Alternative Water Supply Improvements Project (Project) to improve the reliability and resiliency of potable water service for the Meadow Vista community. The Project would provide an alternative raw water supply to the District's existing Water Treatment Plant (WTP) during planned maintenance outages, emergency interruptions, or other disruptions affecting the District's primary raw water source from the Bowman Feeder Canal.

The District's WTP has a permitted treatment capacity of approximately 2.4 million gallons per day (MGD), equivalent to approximately 3.7 cubic feet per second (cfs). The current maximum-day demand is approximately 2.1 MGD, or approximately 3.2 cfs. The WTP is the sole source of

treated water for the Meadow Vista community and serves approximately 1,400 service connections.

Under normal operating conditions, the WTP receives raw water from Placer County Water Agency (PCWA)'s Bowman Feeder Canal. The Bowman Feeder Canal is supplied by PCWA's Boardman Canal conveyance system, which conveys water through a network of canals and related facilities serving PCWA Zone 3. The District purchases raw water from PCWA, treats the water at the plant and provides storage and distribution facilities to serve District customers.

Pacific Gas & Electric (PG&E) operates the Bear River Canal as part of its water conveyance and hydroelectric-generation infrastructure. The Bear River Canal is regulated by the Federal Energy Regulatory Commission (FERC). The Boardman/Bowman Feeder Canal system and the Bear River Canal are separate conveyance systems owned and operated by PCWA. The proposed Project provides an alternative and independent raw water diversion from the Bear River Canal to the District's WTP; it would not interconnect the two canal systems.

The District is at the end of PCWA's Boardman/Bowman Feed canal and is the largest water treatment plant supplied by the Boardman Canal conveyance system. When a planned maintenance outage or emergency outage occurs on the Boardman system, raw water deliveries to the District's WTP are interrupted or reduced. During such outages, the District must rely on treated-water storage, conservation measures, and operational coordination with PCWA until the canal is returned to service and raw water deliveries are restored.

Planned maintenance activities, including canal cleaning, flume repair, maintenance, and guniting result in interruptions that generally last from a few hours to 36-hours. These planned outages are usually scheduled ahead with the water purveyors, including the District, and can usually be accommodated utilizing treated water storage and/or operating the WTP at a reduced rate.

Unplanned outages occur due to storm damage, downed trees, vegetative debris, snow and ice, wildland fire, or infrastructure damage. These outages are unplanned and can jeopardize the community's treated water supply. During a major snowstorm in 2020, damage to Boardman Canal infrastructure suspended raw water deliveries for approximately ten days, resulting in a regional water supply emergency and substantial drawdown of the District's treated-water storage. Had the outage occurred in high demand periods of spring, summer and early fall the system would almost certainly run out of treated water in storage.

Following a Boardman/Bowman system outage, PCWA must manage raw water deliveries to all the treatment plants along the Boardman Canal that rely on the source of supply. The District is the last, and largest WTP on the system, and is the last to receive water due to its geographic location at the end of the canal. The proposed Project would reduce the immediate operational pressure to restore raw water delivery to the District through the Boardman system and would provide PCWA with added flexibility to restore or support other potable water systems during maintenance activities and emergency conditions and increase the region's water supply reliability.

Existing agreements between PCWA and PG&E provide for a potential point of delivery on the Bear River Canal near Meadow Vista. The alternative supply would be used only when the Bowman Feeder Canal is unavailable and only when PG&E determines that sufficient Bear River Canal capacity is available. The Project would be designed and constructed at no expense to PG&E and would comply with applicable PG&E standards, technical requirements, safety requirements, and FERC license conditions.

The proposed Project would allow the District to divert raw water from the Bear River Canal and convey the water to the existing WTP for treatment. The Project would improve supply reliability during outages but would not increase the existing WTP treatment capacity, expand the District's service area, increase customer demand, or enable new development within the District's service area.

Project Objectives

The Project objectives are to:

- Provide an alternative raw water source during planned and unplanned interruptions of the Boardman/Bowman Feeder Canal system that jeopardize the community's water supply.
- Maintain operation of the District's existing WTP during emergency supply interruptions.
- Reduce dependence on treated-water storage during extended outages.
- Improve operational flexibility for the District, PCWA, and regional water providers during emergency conditions.
- Increase the reliability and resilience of potable water service for the Meadow Vista community.

Project Location and Setting

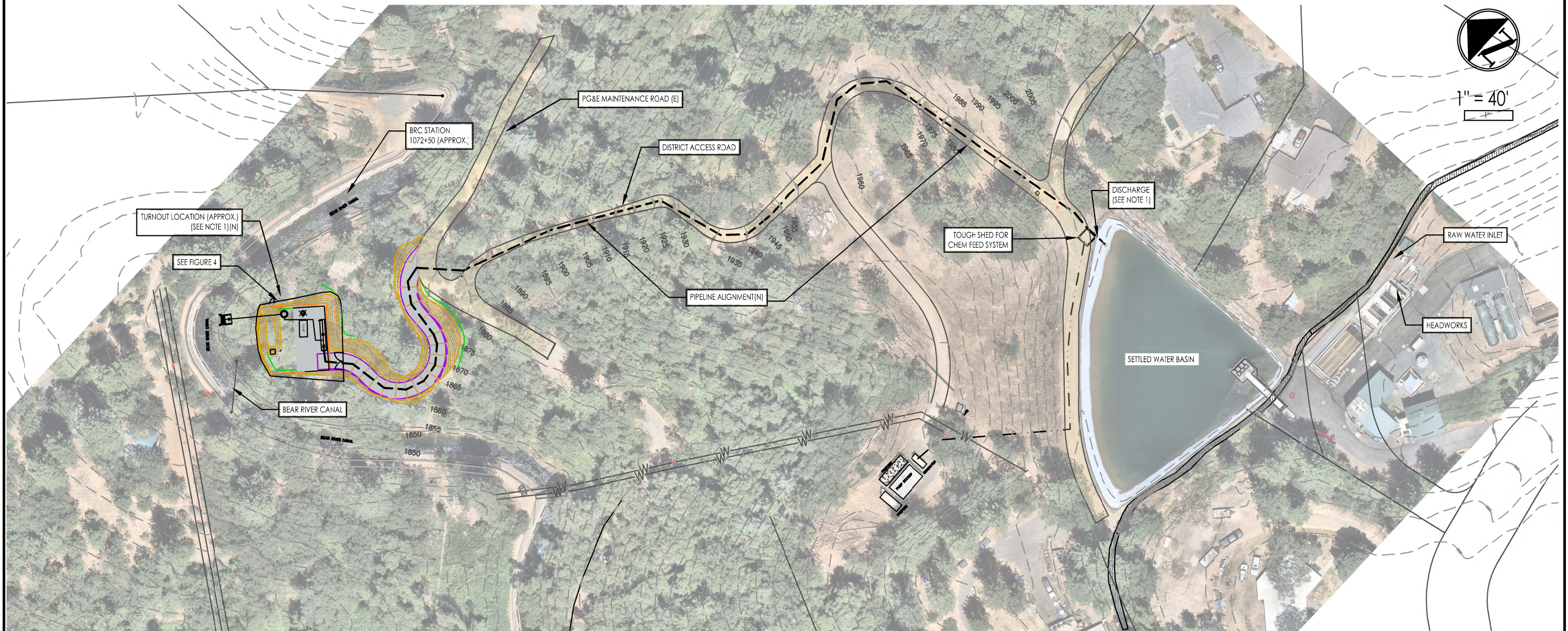
The Project is located at the District's existing Water Treatment Plant property at 142 Hillside Drive, Applegate, California, within unincorporated Placer County. The Project area encompasses portions of Assessor's Parcel Numbers 073-050-015-000 and 073-050-017-000 and includes approximately 1.6 acres of disturbance. The proposed canal turnout would be located between PG&E canal station placards approximately 1075+00 and 1075+50, near approximate coordinates 38.989528 N, -121.011544 W.

The Bear River Canal traverses or is immediately adjacent to the District's WTP property. Existing access to the site is available from a PG&E maintenance road and existing District access roads. The Project area consists of undeveloped land containing oak and pine woodland, shrubs, grasses, and existing WTP facilities. **Figure 1** shows the Project's regional location and vicinity map and **Figure 2** provides a Project Overview.



-  District Boundary
-  Project Parcels
-  Roads

FIGURE 1 VICINITY MAP
Meadow Vista County Water District
Bear River Canal Alternative Water Supply



Project Overview and Site Layout

The Project would include clearing, grubbing and tree removal prior to grading. A short access road would extend from an existing gravel maintenance road that is owned and maintained by PG&E. The overall Project area is shown on **Figure 2**.

The Project site is vegetated with oaks, pines, brush and grasses. Approximately 14 trees would be removed as part of the Project as noted in **Figure 3** (Tree Removal Plan). A new access road, approximately 200 feet long and 14 feet wide, would be constructed from the existing PG&E access road. The access road would provide construction and operational access. **Figure 4** (Turnout/Roadway Grading) includes the extent of the project grading.

The equipment area includes a fenced site approximately 55-foot by 50-foot. The fence would be a 6-foot-tall chain-link fence topped with three strands of barbed wire. A 20-foot-wide double-leaf swing gate would be used for entering the site and a man gate would be provided to enable operations to access the debris screen at the turnout located in the canal and avoid walk around the site perimeter. **Figure 5** (Preliminary Turnout/Site Plan) shows the facilities and site layout.

Bear River Canal Inlet and Turnout Structure

The turnout structure would be located on the bank of the canal. The turnout consists of a precast concrete wing wall and apron structure with a steel debris rack, approximately 50 feet of 16-inch-diameter ductile iron pipe (DIP), and a 16-inch plug valve. Grouted riprap or a new shotcrete liner would provide erosion protection around the precast wing wall that would be set in the uphill side of the canal. The turnout structure is shown in **Figure 6**.

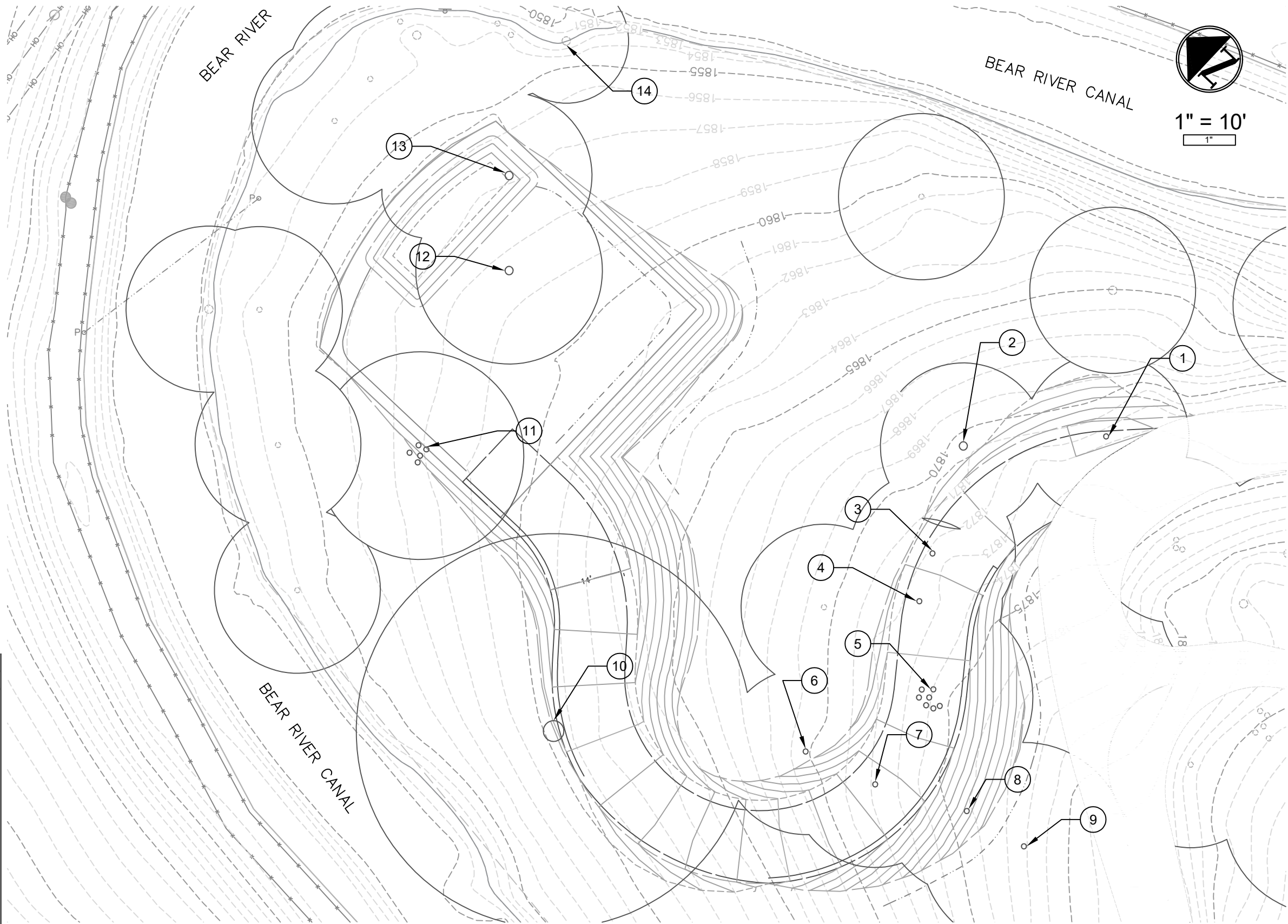
A 4-foot-tall chain-link safety fence would be installed along the front and both sides of a concrete pad. The back side of the platform would remain open to provide operator access to the inlet and debris screen.

The portion of the work on the turnout and piping must occur during PG&E's planned canal outage for maintenance which usually occurs during a period between September and November each year. The other site improvements that do not directly impact the canal and are out of the FERC jurisdiction would be built around the same time but can occur while the Bear River Canal is operational so long as the construction activity does not pose a risk to ongoing canal operations.

TREE REMOVAL, CHIPPING, AND ONSITE DISPOSAL NOTES:

- 1. CONTRACTOR SHALL REMOVE ALL TREES DESIGNATED FOR REMOVAL ON THE PLANS OR AS DIRECTED BY THE ENGINEER, INCLUDING TRUNKS, LIMBS, BRANCHES, AND ASSOCIATED DEBRIS.
- 2. TREE REMOVAL SHALL BE PERFORMED IN A CONTROLLED MANNER TO PREVENT DAMAGE TO EXISTING TREES, UTILITIES, STRUCTURES, ROADWAYS, AND OTHER IMPROVEMENTS TO REMAIN.
- 3. CONTRACTOR IS PERMITTED TO DISPOSE OF TREE REMOVAL MATERIAL ONSITE, SUBJECT TO THE REQUIREMENTS OF THESE NOTES, THE CONTRACT DOCUMENTS, AND APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS.
- 4. SMALL BRANCHES AND LIMBS MAY BE CHIPPED ONSITE. CHIPPED MATERIAL MAY BE SPREAD OR STOCKPILED WITHIN THE PROJECT LIMITS ONLY IN LOCATIONS APPROVED BY THE ENGINEER.
- 5. WOOD CHIPS SHALL NOT BE PLACED WITHIN DRAINAGE COURSES, SWALES, CULVERTS, FLOODPLAINS, UTILITY CORRIDORS, OR OTHER AREAS WHERE THEY MAY OBSTRUCT DRAINAGE, INTERFERE WITH MAINTENANCE, OR CREATE FIRE OR ENVIRONMENTAL HAZARDS.
- 6. LARGE TRUNKS, STUMPS, AND NON-CHIPPABLE MATERIAL SHALL BE CUT INTO MANAGEABLE LENGTHS AND DISPOSED OF ONSITE ONLY. MATERIAL SHALL BE NEATLY PLACED AT LOCATION DIRECTED BY ENGINEER.
- 7. BURNING OF TREE DEBRIS ONSITE IS PROHIBITED.
- 8. UNLESS OTHERWISE SHOWN ON THE PLANS, STUMPS SHALL BE REMOVED OR GROUND TO A MINIMUM DEPTH OF 18 INCHES BELOW FINISHED GRADE AND BACKFILLED WITH SUITABLE MATERIAL COMPACTED TO MATCH SURROUNDING CONDITIONS.
- 9. AREAS DISTURBED BY TREE REMOVAL, STUMP GRINDING, CHIPPING, OR DISPOSAL OPERATIONS SHALL BE GRADED SMOOTH AND RESTORED TO A STABLE CONDITION CONSISTENT WITH ADJACENT AREAS.
- 10. CONTRACTOR SHALL IMPLEMENT ALL REQUIRED EROSION CONTROL, FIRE PREVENTION, AND ENVIRONMENTAL PROTECTION MEASURES DURING TREE REMOVAL AND DISPOSAL OPERATIONS.

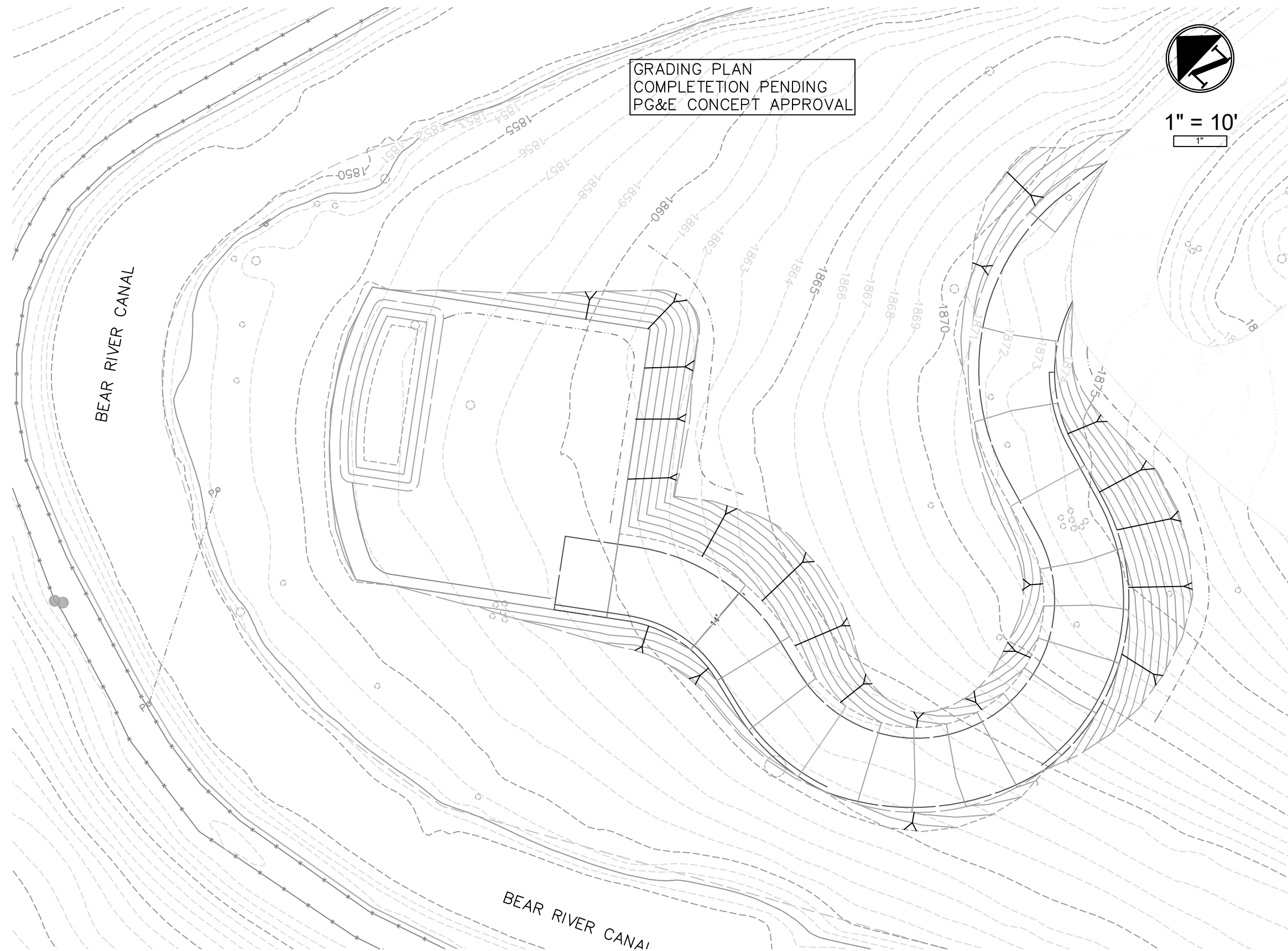
TREE REMOVAL SCHEDULE		
ID	DIA. IN	TYPE
1	18"	OAK
2	20"	PINE
3	6"	OAK
4	6"	OAK
5	MULTI OAK	OAK
6	14"	PINE
7	14"	PINE
8	12"	PINE
9	18"	OAK
10	38"	OAK
11	MULTI OAK	OAK
12	18"	OAK
13	18"	OAK
14	14"	PINE

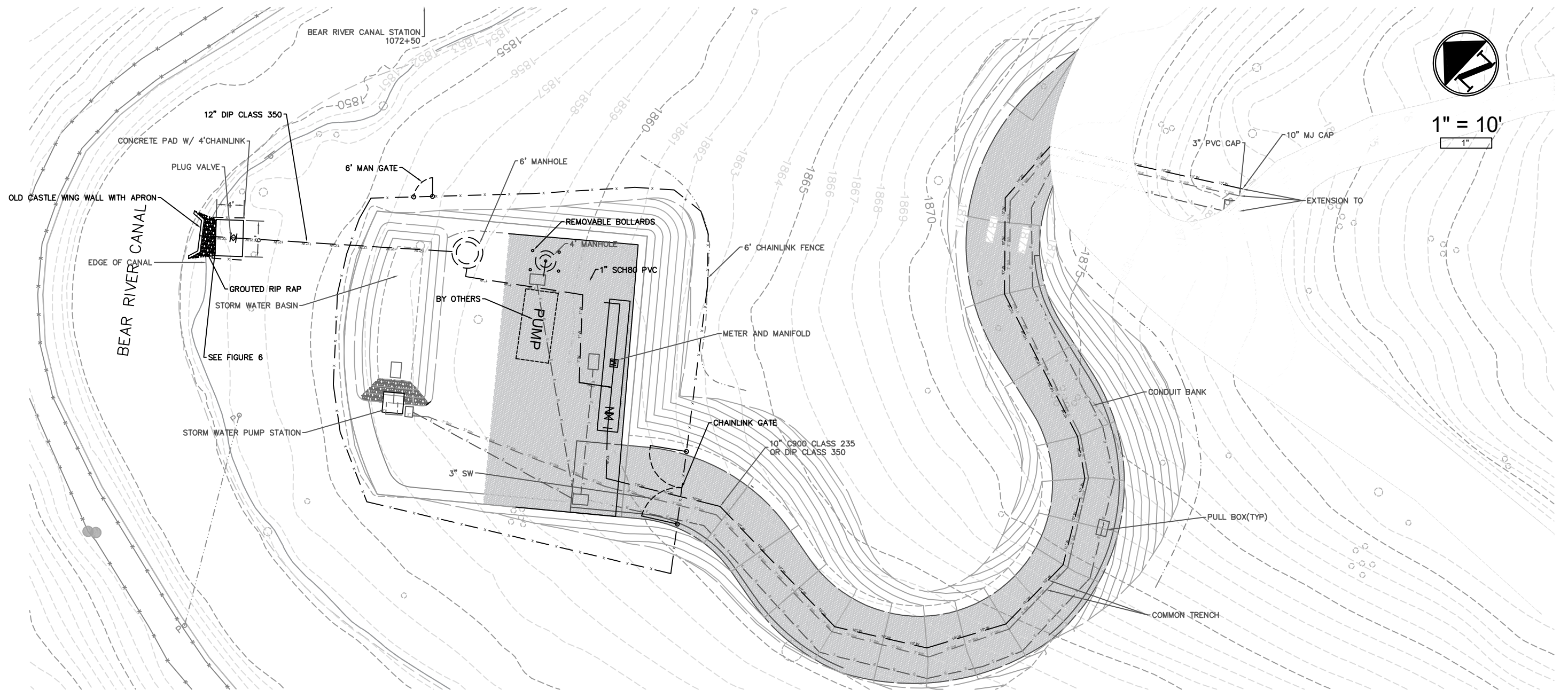


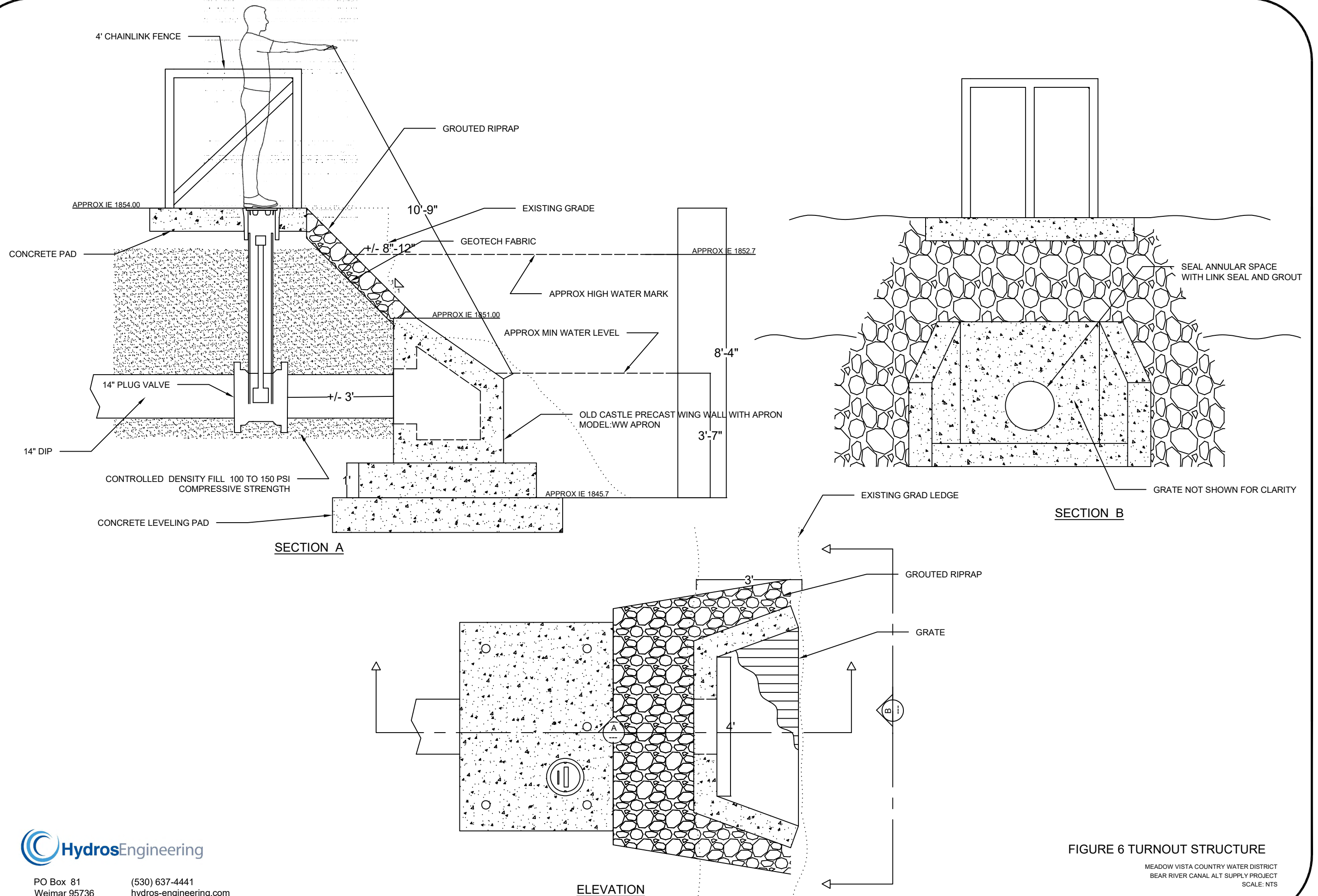
PO Box 81
Weimar 95736

(530) 637-4441
hydros-engineering.com

FIGURE 3 - TREE REMOVAL PLAN
MEADOW VISTA COUNTRY WATER DISTRICT
BEAR RIVER CANAL ALT SUPPLY PROJECT
SCALE: NTS







Raw Water Intake Manholes, Screen/Strainer, and Wet Well

The two precast concrete manholes located on the site as shown in **Figure 5**. The approximate depth of both manholes is approximately 15-feet. The first manhole would be a 6-foot-diameter and used to settle and strain any solids and prevent them from damaging the pump. The second structure would be a 4-foot-diameter wet well and would house the suction for the pump. Raw water would enter the intake system through the 16-inch-diameter DIP inlet pipe and be conveyed through the first manhole to the pump in the second.

The 6-foot-diameter strainer manhole would prevent solids from entering the pump wet well just downstream. The manhole is sized to install a self-cleaning screen, if needed, due to algae or other debris that could clog the fine screen on a turbine pump. The self-cleaning screen is approximately 24 inches tall by 24 inches in diameter and would include a 10-mesh screen.

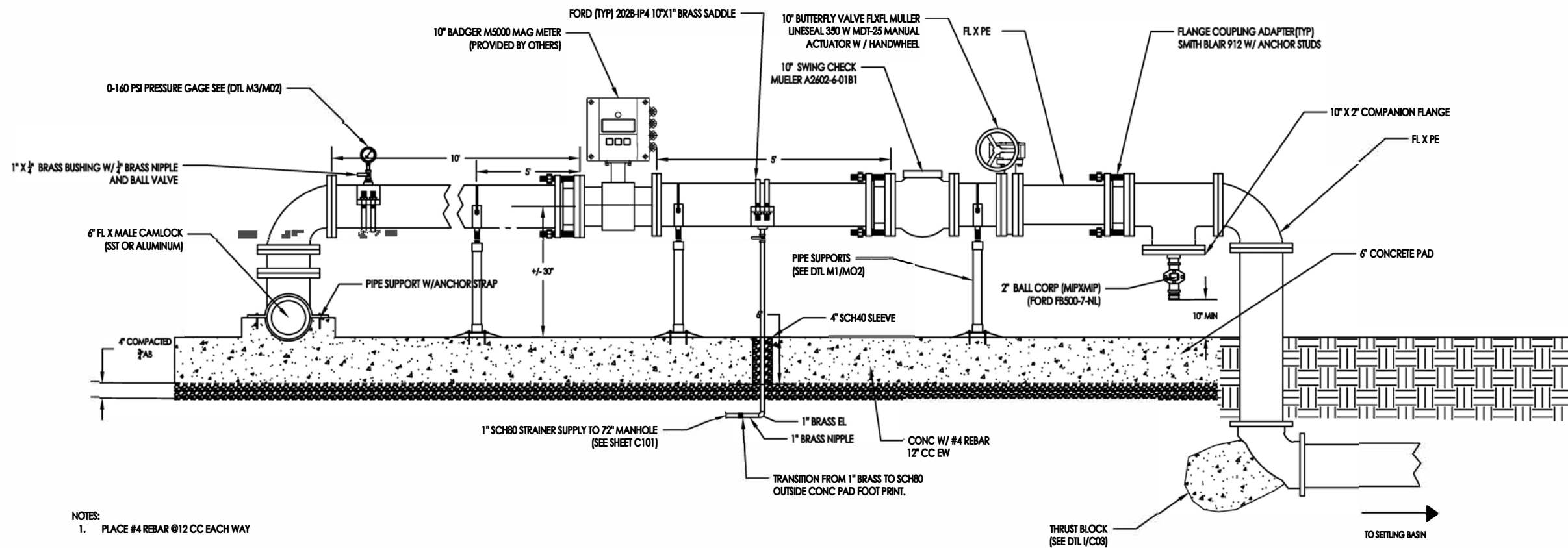
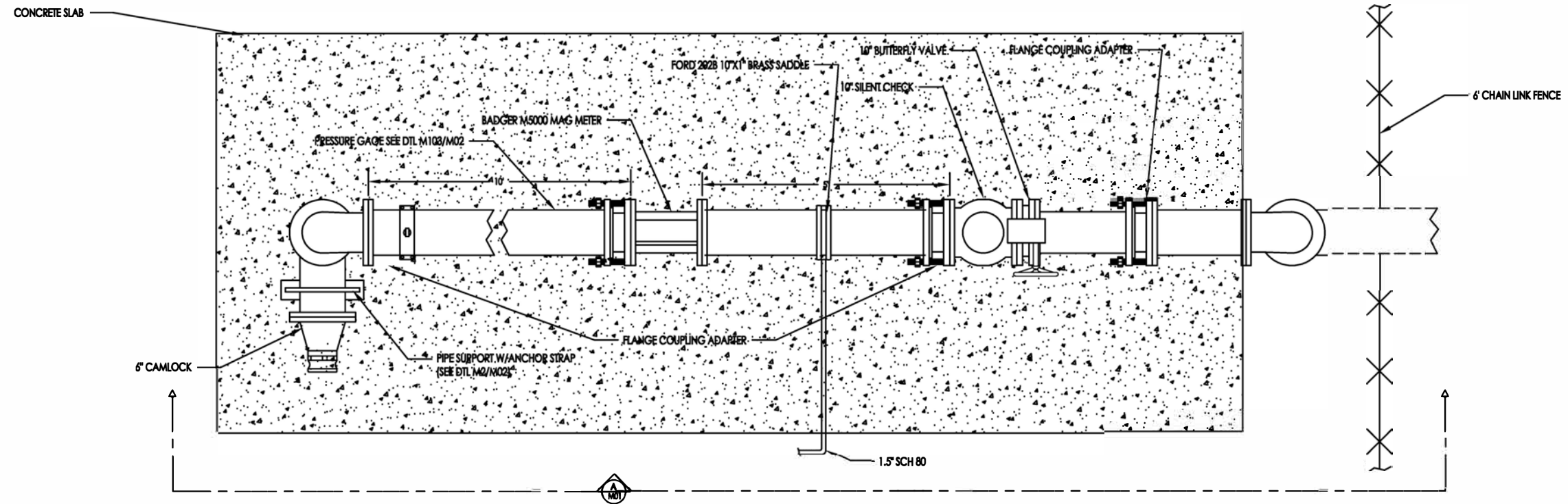
A second 4-foot-diameter wet well would receive water downstream of the screen/strainer and would provide a wet well for the suction line for a portable diesel pump. The system is designed to add a permanent electric turbine pump with the column and bowls extending into the wet well. Removable bollards with safety chains would be installed around the grated area for safety.

Raw Water Conveyance Pipeline, Discharge Manifold, and Chemical Feed Facilities

Raw water would be pumped and conveyed through a discharge manifold that would be used for flow control and flow metering. The manifold would be installed above grade on an equipment pad with pipe supports. **Figure 7** includes details for the manifold. Key components include concrete equipment pad, flexible hose connection points, a flow meter with remote flow-totalization and communications endpoint, a 10-inch silent check valve and isolation valve.

Approximately 950 feet of 10-inch-diameter ductile iron pipe (DIP) of C-900 would extend from the turnout area to the existing WTP settled water basin would be used to convey the raw water to the WTP. The new pipeline would be installed along the existing WTP access road as shown on **Figure 2**. Temporary pipe may be used initially. Temporary pipe would be rented and installed when the turnout is activated, then removed when the turnout is deactivated.

Application of coagulant would be necessary for treatment. The District uses liquid alum as a primary coagulant. A 15 foot by 15 foot shed would be installed at the WTP discharge location to house temporary chemical-feed dosing pumps and chemical storage associated with treatment. Chemical would be stored in day tanks with secondary containment when the system is operating. The alum would be removed when the facility is not operating. The location of the chemical feed facility is shown in **Figure 2**.



NOTES:
1. PLACE #4 REBAR @12 CC EACH WAY

Stormwater Basin, Stormwater Pump Sump, and Discharge Facilities

The Project would include construction of a stormwater basin adjacent to the raw water facility pad to collect and manage runoff from the graded and paved Project area. The stormwater basin would be approximately 35 feet long by 16 feet wide and would have a maximum depth of approximately 3 feet. PG&E requires that runoff from new development is not discharged into the Bear River Canal.

The Project would be designed to avoid direct discharge of stormwater from the new Project improvements to the Bear River Canal. Stormwater runoff from the raw water facility pad, paved maneuvering area, access road, and associated graded areas would be directed to the stormwater basin. Water would be pumped to a percolation basin located at the WTP as shown on **Figure 2** through a 4-inch diameter pipeline installed in the plant access road. The stormwater system is shown in **Figure 8**.

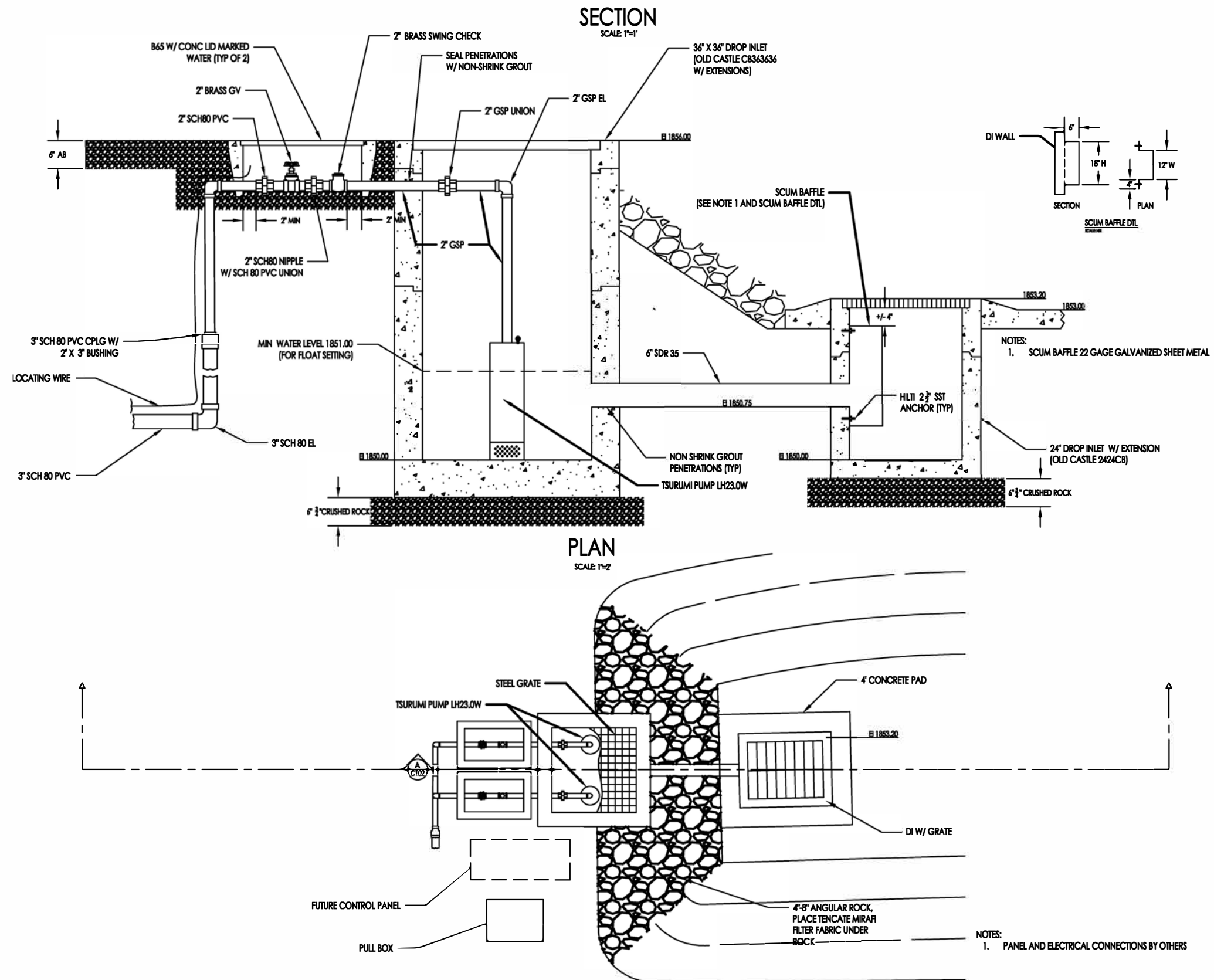
Electrical conduit of varying sizes would be installed in the same trench as the conveyance pipeline where feasible. The conduit would provide electrical service to the stormwater pump.

Construction Activities and Schedule

Construction would occur entirely on District-owned property and is anticipated to require approximately 12 weeks to complete. Trees proposed for removal, including species, diameter, and location, are identified on **Figure 3**. Grading limits, finished elevations, drainage patterns, stormwater improvements, pavement limits, and erosion-control features are shown on **Figure 4**.

Construction activities would include vegetation clearing, tree removal, grading, trenching, utility installation, concrete work, equipment installation, paving, restoration, and erosion-control improvements. Construction equipment would include excavators, backhoes, bulldozers, loaders, compactors, rollers, dump trucks, water trucks, cranes, concrete trucks, generators, and other standard utility-construction equipment.

Approximately 700 cubic yards of surplus soil would be generated during construction and stockpiled at the WTP property for future District projects. Groundwater is not anticipated to be encountered during excavation or trenching based on current site information. Cut and fill embankments would be restored with appropriate stabilization, erosion-control measures, and revegetation as necessary.



STORM WATER PUMP

FIGURE 8 - STORM WATER BASIN
MEADOW VISTA COUNTRY WATER DISTRICT
BEAR RIVER CANAL ALT SUPPLY PROJECT
SCALE: NTS

Project Operation

The new facility would be operated during emergency conditions when the supply from Bowman Feeder Canal supply is unavailable and the community's water supply is jeopardized due to inadequate supply of raw water to meet water demands. The District would coordinate with PCWA during Boardman/Boman Feeder canal outages to confirm outage duration and operational conditions and make a determination whether the District's water supply is at risk. If so, the District would request activation of the turnout and PCWA would request the diversion from PG&E.

The District would mobilize the equipment which may include a diesel pump or generator and begin operations to convey raw water to the WTP. Anticipated operation and maintenance activities would include inspection and cleaning of the debris grate; inspection of the strainer manhole, fueling diesel equipment and monitoring pump performance.

The following operational response stages are proposed operating guidelines for operation. Pump or generator runtime would depend on the severity and duration of the raw water supply interruption, available treated-water storage, seasonal water demand, fire-weather conditions, PG&E diversion capacity available and other system operating conditions. Three operating stages are outlined below:

Operational Response Stage 1 – Planned or Minor Emergency Outage

Stage 1 would apply to an activation during low demands periods, such as late fall or winter, when the District has full or near-full treated-water storage. Under Stage 1 conditions, the diesel pump or future generator-supported pumping system would generally operate during normal District operating hours, anticipated to occur between approximately 7:00 a.m. and 5:00 p.m.

Operational Response Stage 2 – Higher-Demand Season, Elevated Fire Risk, or Extended Outage

Stage 2 would apply to an outage occurring during moderate to high water demand periods, elevated wildfire-risk conditions, a longer-duration outage, or another emergency requiring additional pump time to maintain adequate treated-water storage and emergency reserve. Under Stage 2 conditions, the diesel pump or future generator-supported pumping system would operate extending beyond normal business hours until the evening period, then be shut down overnight.

Operational Response Stage 3 – Major Emergency Conditions

Stage 3 would apply during a primary canal failure or other severe supply emergency involving compounding conditions, such as low treated-water storage, high customer demand, elevated fire danger, prolonged supply interruption, or other system constraints. Under Stage 3 conditions, the diesel pump or future generator-supported pumping system may operate continuously, up to 24 hours per day, until the emergency condition is resolved, normal raw water supply is restored, or adequate treated-water storage is reestablished.

Pumping and Power Equipment

Initially a trailer-mounted diesel pump would be used to convey raw water from the wet well to the existing WTP. The portable diesel pump would be towed to the site by truck, positioned on the paved 25-foot by 50-foot maneuvering area, and connected to the wet well and discharge manifold using flexible suction and discharge hoses with camlock or equivalent fittings.

The diesel pump would be operated at a maximum flow rate compatible with a maximum diversion rate of up to 2.4 MGD, or approximately 3.7 cfs. The pump output is variable by reducing the engine speed and would be operated at a capacity based on available capacity from the Bear River Canal as determined by PG&E.

The portable diesel pump would be removed from the site when not in use. The District anticipates renting the diesel pump when needed.

The proposed Project includes provisions for a future permanent electrically driven vertical turbine pump. The pump would initially be powered by a portable diesel generator.

The use of the turnout would be for emergencies and is not anticipated to occur frequently. If the District determines that generator availability is limited or delayed, or the use of the turnout increases in frequency, permanent power may be installed to operate off the PG&E power grid. Once permanent electrical service is available, the electric pump would be powered primarily by utility service, and the portable generator may be used for backup or emergency power at the District's discretion.

On-site refueling of diesel equipment would occur as necessary during extended diesel-pump or generator operation. Diesel fuel would be transferred to the site by pick-up truck to fuel equipment and diesel would not be stored permanently at the facility.

9. Required Agency Approvals:

The Project requires the District's discretionary approval of the implementation and funding of the Project. The Project also requires permit amendment approval for the new water supply from the State Water Resources Control Board – Division of Drinking Water.

10. Tribal Consultation:

The District has not had any Native American tribes request Assembly Bill (AB) 52 notification for projects subject to CEQA. The Colfax-Todds Valley Consolidated Tribe, the Nevada City Rancheria Nisenan Tribe, the TSI-AKIM Maidu of the Taylorsville Rancheria, the United Auburn Indian Community of the Auburn Rancheria, the Washoe Tribe of Nevada and California, and the Wilton Rancheria were contacted as a result of the Sacred Lands File Records Search on July 8, 2026. No responses were received.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

- | | | |
|--|---|--|
| ☐ Aesthetics | ☐ Agriculture and Forestry Resources | ☐ Air Quality |
| ☒ Biological Resources | ☒ Cultural Resources | ☐ Energy |
| ☐ Geology/Soils | ☐ Greenhouse Gas Emissions | ☐ Hazards and 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 |

DETERMINATION: (To be completed by Lead Agency)

On the basis of this initial study:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.



Signature

October 21, 2026

Date

Cassandra Barnhill, General Manager
Printed Name

AESTHETICS

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
1. AESTHETICS — Except as provided in Public Resources Code Section 21099, would the proposed project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage 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 daytime or nighttime views in the area?	☐	☐	☒	☐

Discussion

- a) **Less-than-Significant Impact.** Visual resources can be valued both objectively and subjectively based on their uniqueness, prominence, quality, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on the characteristics listed above, they are identified as containing significant scenic value. Within this understanding, a scenic vista can be defined as the public view of an area that is visually or aesthetically unique, such as a valley or a mountain range.

The Project site is located on the District's existing WTP property adjacent to PG&E's Bear River Canal in unincorporated Placer County. The site consists of existing utility facilities, maintenance roads, and undeveloped areas vegetated with oak trees, pines, shrubs, and grasses. Surrounding views are primarily of the existing WTP, Bear River Canal, forested hillsides, and nearby rural residential properties. Public views of the site are limited due to existing vegetation and restricted access. The Project site does not constitute an identifiable scenic vista or scenic viewshed.

Construction of the Project would require removal of approximately 14 trees, grading, construction of a short access road, installation of a canal turnout structure, underground piping, manholes, a wet well, fencing, and associated mechanical equipment. These improvements would be located adjacent to the existing WTP, within an existing utility corridor and would be compatible with the existing visual character of the site. Although construction activities and tree removal would result in localized visual changes, these changes would not be substantial, and the Project would not obstruct scenic vistas or

- substantially alter the surrounding landscape. Therefore, the Project would result in a less-than-significant impact.
- b) **No Impact.** The Project site is not within or near a designated state scenic highway. There are no identifiable scenic resources within the Project site, such as historic buildings or rock outcroppings. The Project would not substantially damage scenic resources within a state scenic highway. The nearest eligible scenic highway is California State Route 49, which is approximately 5.3 miles east of the Project site. Therefore, the Project would result in no impact.
- c) **Less-Than-Significant Impact.** The Project would introduce new utility infrastructure, including a fenced equipment area, turnout structure, and associated piping, within an existing water treatment facility and utility corridor. These facilities would be consistent with the existing utility character of the site and would not substantially degrade the visual character or quality of the surrounding area. Therefore, the Project would result in a less-than-significant impact.
- d) **Less-Than-Significant Impact.** The Project would not require permanent lighting for normal operations. Temporary lighting may be used during construction or occasional maintenance activities but would be limited in duration and directed toward active work areas. The Project would not create a substantial new source of light or glare affecting surrounding properties or nighttime views. Therefore, the Project would result in a less-than-significant impact.

AGRICULTURAL AND FOREST RESOURCES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
2. AGRICULTURAL AND FOREST RESOURCES —				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the proposed 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?	☐	☐	☐	☒

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
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?	☐	☐	☐	☒

Introduction

The Project site is zoned O, RS-AG-B-100 (APN# 073-050-015-000) and O (APN# 073-050-017-000) and is designated Rural Residential 1 - 2.3 Acre Minimum in the County's General Plan. The Project site includes no forest land, timberland, or agricultural use, and is not under a Williamson Act contract.

Discussion

- a) **No Impact.** The Project site does not contain any areas of Farmland of Statewide Importance. The Project site would not convert any farmland or agricultural uses to non-agricultural uses. Therefore, the Project would result in no impact.
- b) **No Impact.** The Project site has not been used for agriculture and is not under a Williamson Act contract. Therefore, the Project would result in no impact.
- c, d) **No Impact.** There are no areas classified as forest land, timberland, or farmland within the vicinity of the Project that may be affected by the development of the Project. Therefore, the Project would result in no impact.
- e) **No Impact.** The Project would not result in loss of farmland or forest land. Therefore, the Project would result in no impact.

AIR QUALITY

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
3. AIR QUALITY —				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.				
Would the proposed 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?	☐	☐	☒	☐

Introduction

This section describes construction air quality impacts associated with the Project and is consistent with the methods described in the Placer County Air Pollution Control District (PCAPCD)'s *CEQA Air Quality Handbook* (PCAPCD, 2017). Detailed modeling assumptions and results are provided in **Appendix C**.

Setting

The Project site lies within the Mountain Counties Air Basin (Air Basin), which encompasses the foothill and mountain portions of Placer County. The Air Basin also includes Plumas, Sierra, Nevada, Amador, Calaveras, Tuolumne, and Mariposa Counties, and most of El Dorado County. The Air Basin includes the central and northern Sierra Nevada mountain range with elevations ranging from several hundred feet in the foothills to over 6,000 feet above mean sea level along the Sierra Crest. The MCAB generally experiences warm, dry summers and wet winters.

Criteria Air Pollutants

Concentrations of “criteria” air pollutants (“criteria” air pollutants are state and/or federally regulated) are used to indicate the quality of the air. These include ozone, carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter less than 10 micrometers (coarse or PM₁₀), particulate matter less than 2.5 micrometers (fine or PM_{2.5}), and lead. Regulation of air pollutants is achieved through both national and state ambient air quality standards (AAQS), and emissions limits for individual sources. Regulations implementing the federal Clean Air Act established national ambient air quality standards (NAAQS) for the six criteria pollutants. California has adopted more stringent California ambient air quality standards (CAAQS) for most of the criteria air pollutants. In addition, California has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. There are considerable differences between state and federal standards in California.

The AAQS are intended to protect the public health and welfare, with an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

Under amendments to the federal Clean Air Act, United States Environmental Protection Agency (U.S. EPA) has classified air basins or portions thereof, as either in “attainment” or “non-attainment” for each criteria air pollutant, based on whether or not the NAAQS have been achieved. The California Clean Air Act, which is patterned after the federal Clean Air Act, also requires areas to be designated as in “attainment” or “non-attainment” for the CAAQS. Thus, areas in California have one set of attainment / non-attainment designation with respect to the NAAQS and another set with respect to the CAAQS.

The portion of Placer County that lies within the Mountain Counties Air Basin is currently designated “non-attainment” for 1-hour and 8-hour ozone CAAQS, the 8-hour ozone NAAQS, the PM10 CAAQS (annual and 24-hour), and the PM2.5 NAAQS (24-hour). Placer County is “attainment” or “unclassified” with respect to the other ambient air quality standards. Based upon Placer County’s attainment status, pollutants of greatest concern include criteria pollutant emissions such as nitrogen oxides (NO_x)¹, volatile organic compounds (VOC) as reactive organic gases (ROG)², PM10, and PM2.5.³

Significance Criteria

As stated in Appendix G of the CEQA *Guidelines*, the significance criteria established by the applicable air quality district may be relied upon to make the determinations. Thus, according to PCAPCD’s *CEQA Air Quality Handbook*, the Project would result in a significant impact to air quality if it would result in the following:

- Maximum daily construction emissions of 82 pounds per day of ROG, NO_x, or PM10;
- Maximum daily operational emissions of 55 pounds per day of ROG or NO_x, or 82 pounds per day of PM10;

Discussion

- a) **Less-than-Significant Impact.** The portion of Placer County that lies within the Mountain Counties Air Basin is currently designated “non-attainment” for 1-hour and 8-

¹ When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen (NO_x). Nitric oxide (NO) and NO₂ are the most significant air pollutants generally referred to as NO_x. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO₂ and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema.

² VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation. ROG are any reactive compounds of carbon, excluding methane, CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, ammonium carbonate, and other exempt compounds. The terms VOC and ROG are often used interchangeably.

³ PM10 and PM2.5 consists of airborne particles that measure 10 micrometers or less in diameter and 2.5 micrometers or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

hour ozone CAAQS, the 8-hour ozone NAAQS, the PM10 CAAQS (annual and 24-hour), and the PM2.5 NAAQS (24-hour). A conflict with, or obstruction of, implementation of PCAPCD's air quality plans could occur if a project generates emissions greater than the PCAPCD's thresholds of significance. As discussed in Impact AQ-2, the Project would not exceed PCAPCD's thresholds of significance. Therefore, the Project would result in a less-than-significant impact.

- b) **Less-than-Significant Impact.** The Project would generate air pollutant emissions during temporary construction activities and infrequent emergency operations. Construction-related activities would generate air pollutant emissions from off-road equipment, on-road trucks, and worker automobiles. Fugitive dust emissions would also be generated by ground disturbance and would vary as a function of soil silt content, soil moisture, wind speed, and acreage of disturbance. Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) Version 2022.1 (CAPCOA, 2022) and are summarized in **Table 1**. Detailed modeling assumptions and results are provided in **Appendix A**.

TABLE 1 ESTIMATED MAXIMUM DAILY CONSTRUCTION EMISSIONS

Condition	ROG lbs/day	NOx lbs/day	PM10 ¹ lbs/day	PM2.5 ¹ lbs/day
Construction	1.4	12.2	8.78	4.1
PCAPCD Thresholds of Significance	82	82	82	N/A
Potentially Significant?	No	No	No	No

SOURCE: CAPCOA, 2022.

As shown in **Table 1**, Project construction would not exceed the PCAPCD's significance thresholds. The PCAPCD requires construction projects to comply with District Rules & Regulations for Construction. Compliance with the PCAPCD Rules & Regulations for construction, specifically Rule 228 – Fugitive Dust, which requires implementation of minimum dust control requirements, would prevent and control fugitive dust emissions. Therefore, Project construction would result in a less-than-significant impact.

Project operations that would generate air quality emissions would consist of infrequent and intermittent operation of either a portable diesel pump or generator. The portable diesel pump would be 100 kilowatt (kw) with a Tier 4 Final diesel engine and the portable generator would be 176 kw with a Tier 4 Final diesel engine. Both conditions were modeled using worst case 24-hour operations for comparison to the PCAPCD significance thresholds.

TABLE 2 ESTIMATED MAXIMUM DAILY OPERATIONAL EMISSIONS

Condition	ROG lbs/day	NOx lbs/day	PM10 ¹ lbs/day	PM2.5 ¹ lbs/day
Portable Diesel Generator	9.29	25.98	1.37	1.37
Portable Diesel Pump	5.28	14.75	0.78	0.78
PCAPCD Thresholds of Significance	55	55	82	N/A
Potentially Significant?	No	No	No	No

SOURCE: CAPCOA, 2022.

As shown in **Table 2**, Project operation of either condition (portable pump or generator) would not exceed the PCAPCD's significance thresholds. The Project would also be required to comply with all applicable PCAPCD District Rules & Regulations. Compliance with the PCAPCD Rules & Regulations. Therefore, Project operations would result in a less-than-significant impact.

The PCAPCD recommends that cumulative air quality effects from criteria air pollutants also be addressed by comparison to the mass daily. These thresholds were developed to identify a cumulatively considerable contribution to a significant regional air quality impact. As described, the Project-related construction and operational emissions would be below the significance thresholds. Therefore, the Project would not be cumulatively considerable, and cumulative impacts would be less-than-significant.

- c) **Less-than-Significant Impact.** Health effects are generally evaluated based on a long-term (30 years) of exposure. According to the PCAPCD, the Project type is not one that would require a health risk assessment for CEQA purposes because it is short-term (approximately 12 weeks) and would not generate substantial TAC pollutant concentrations. Project operation would be infrequent and would use a Tier 4 Final engine for either condition (portable pump or generator) or could ultimately use an electric pump in the future. Therefore, the Project would have a less-than-significant impact.
- d) **Less-than-Significant Impact.** With respect to the Project, diesel-fueled construction equipment and haul truck exhaust would generate some odors. However, these emissions typically dissipate quickly and would be unlikely to affect a substantial number of people. Therefore, the Project would result in a less-than-significant impact.

References

California Air Pollution Officers Association, California Emissions Estimator Model User Guide Version 2022.1, April 2022, <http://www.caleemod.com/>

Placer County Air Pollution Control District, CEQA Air Quality Handbook, November 21, 2017. <https://www.placerair.org/1801/CEQA-Handbook>

BIOLOGICAL RESOURCES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
4. BIOLOGICAL RESOURCES — Would the proposed 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?	☐	☐	☐	☒

Introduction

This section is based on a biological reconnaissance survey and desktop review conducted by Stringer Biological Consulting, Inc. in July 2026. The biological reconnaissance survey and desktop review findings are provided in **Appendix B**. The assessment included a review of the U.S. Fish and Wildlife Service Information for Planning and Consultation (IPaC) system and the California Department of Fish and Wildlife California Natural Diversity Database (CNDDB), including records from the Auburn, Lake Combie, Colfax, and Greenwood USGS 7.5-minute quadrangles, as well as a pedestrian survey of the Project site and immediately adjacent areas conducted on July 20, 2026. The survey documented existing vegetation and wildlife, evaluated the potential for special-status plant and animal species, sensitive natural communities, wetlands and other jurisdictional waters, nesting birds, and other sensitive biological resources that may occur within the Project area.

Discussion

- a) **Less-than-Significant Impact with Mitigation Incorporated.** Based on background review, a list of special-status plants and animals with the potential to occur within the Project site was generated. Only the special-status species that are present onsite or have the potential to occur onsite are discussed in this analysis.

The Project site is located within a rural residential area adjacent to the existing WTP and consists of disturbed montane hardwood-conifer woodland. Dominant tree species include ponderosa pine, California black oak, canyon live oak, and Pacific madrone. Native shrubs include whiteleaf manzanita, poison oak, toyon, and honeysuckle. The understory is relatively disturbed and contains previously treated invasive French broom.

No special-status plant or wildlife species were observed during the July 2026 biological reconnaissance survey. One special-status plant, Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*), has been documented adjacent to the Project site. Additional records within approximately 2 miles include valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and foothill yellow-legged frog (*Rana boylei*). Additional special-status species have been documented within approximately 5 miles of the Project site.

The biological reconnaissance survey concluded that the Project site lacks suitable habitat for special-status species. No elderberry shrubs occur within the Project site, which means valley elderberry longhorn beetle has no potential to occur. Furthermore, the concrete-lined Bear River Canal lacks suitable aquatic habitat for foothill yellow-legged frog, northwestern pond turtle, or other special-status aquatic species. In addition, the disturbed nature of the site and surrounding development limit the potential for regionally occurring special-status plants and wildlife that require relatively undisturbed forest or specialized habitats.

Several common bird species were observed during the reconnaissance survey. However, no active nests for these species were identified. Construction activities occurring during the nesting bird season (generally February through August) have the potential to impact nesting native birds protected under the Migratory Bird Treaty Act and Sections 3503 and 3503.5 of the California Fish and Game Code. To avoid impacts to nesting birds, preconstruction nesting bird surveys shall be conducted if construction occurs during the nesting season. If active nests are identified, appropriate avoidance buffers shall be established and maintained until a qualified biologist determines the nest is no longer active.

If construction activities take place during the nesting season (generally February through August), the Project could directly impact special-status nesting birds. **Mitigation Measures BIO-1** would reduce this potentially significant impact to a less-than-significant level.

Mitigation Measure BIO-1: To avoid potential impacts on nesting birds, the following protection measures shall be implemented:

- Preconstruction nesting bird surveys shall be completed from February 1-August 31. A survey shall be completed within 7 days before the beginning of Project-related activities. The survey area shall include the Project site and an appropriate buffer around the site to identify any nesting that could be impacted directly or indirectly by the Project-related activities. The survey shall follow established nesting search protocols described in Martin and Geupel (1993) and CDFW and USFWS protocols, where appropriate. If the qualified biologist finds no active nests or breeding activity indicating nests are present, then work can proceed without restrictions. If there is a lapse in Project-related activities for 7 days or more, then a follow-up survey may be required per the recommendations of the qualified biologist.
 - If active nests are identified during the survey and the nests are within the Project site or the buffer area and nesting would be adversely affected, a “No Work Zone” buffer area shall be demarcated around each nest site by the qualified biologist. Buffer distances for each bird nest shall be site-specific and established to protect the bird’s normal behavior to prevent nesting failure or abandonment. The buffer distance shall vary by species, nest location, existing visual and topographical buffers, and intensity and extent of the construction-related disturbance. The buffer area may be as small as 25-50 feet for common, disturbance-adapted species or much larger (e.g., 100-250 feet) for sensitive species like raptors and owls. The “No Work Zone” shall be established in the field with flagging, fencing, or other appropriate material and shall remain in place until all young in the nest have fledged or the nest otherwise becomes inactive due to predation or other natural causes as determined by the qualified biologist. The qualified biologist shall continue to monitor the behavior of the birds at the nest site during construction activities to ensure that they are not disturbed by the Project work. Nest monitoring shall continue until the nesting attempt is complete. If state and/or federally listed birds are found breeding within the area, consultation with the CDFW and USFWS may be required.
 - If initial ground-disturbing activities occur outside of the nesting season (September 1 through January 31), then a preconstruction survey would not be required, and construction could begin unimpeded.
- b) **No Impact.** The biological reconnaissance survey determined that the Project site does not contain riparian habitat or other sensitive natural communities recognized by the California Department of Fish and Wildlife. Although the Project is located adjacent to the Bear River Canal, the canal is concrete lined and does not support riparian vegetation or associated sensitive biological communities (**Appendix B**). Therefore, the Project would have no impact on riparian habitat or other sensitive natural communities.
- c) **Less-than-Significant Impact.** The biological reconnaissance survey did not identify wetlands, jurisdictional waters, or other natural aquatic habitat features within the Project site. The Bear River Canal is a concrete canal with fast moving water and does not provide wetland functions or suitable habitat for special-status aquatic

species (**Appendix B**). Therefore, the Project would not directly or indirectly impact federally protected wetlands or other jurisdictional waters and would result in a less-than-significant impact.

- d) **Less-than-Significant Impact.** The Project site is located adjacent to existing water treatment facilities within a rural residential area and does not contain a known wildlife movement corridor. The Project footprint is small and would not interfere with the movement of local or migratory wildlife species across the surrounding landscape. The biological reconnaissance survey determined the Project site lacks suitable habitat for special-status plant or animal species. Therefore, impacts remain less-than-significant.
- e) **No Impact.** The Project site contains one large canyon live oak (*Quercus chrysolepis*) with a diameter at breast height (DBH) of approximately 61 inches, as well as several smaller canyon live oak, sugar pine, madrone, black oak, and ponderosa pine. A visual assessment conducted by an ISA Certified Arborist determined that the large canyon live oak is in fair overall health but is overmature to senescent and exhibits substantial deadwood, decay, and evidence of previous limb failures. The tree is considered a potential failure hazard due to the likelihood of future branch or limb failure and, potential whole-tree failure. The arborist recommends removal of the tree if the Project would place people or structures within the tree's potential fall zone. Furthermore, under California Code, Government Code - GOV § 5309, construction of facilities for the production, generation, storage, treatment, or transmission of water is exempt from the City or County zoning ordinance and, therefore, is also exempt from the Placer County tree ordinance. Therefore, the Project would result in no impact.
- f) **No Impact.** There are no habitat conservation plans or natural community conservation plans in effect that apply to the Project area, therefore, the Project would not conflict with any habitat conservation plans, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project would result in no impact.

References

Stringer Biological Consulting, Inc., 2026. *Biological Reconnaissance Survey for the Meadow Vista County Water District (MVCWD) Bear River Canal Turnout Emergency Pump Project, County of Placer*. July 2026.

CULTURAL RESOURCES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
5. CULTURAL RESOURCES — Would the proposed project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to in §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?	☐	☐	☒	☐

Introduction

This section is based on a Cultural Resources Investigation conducted by Natural Investigations Company (NIC) in August 2026. NIC completed a cultural and paleontological resources investigation of the Project site. The investigation included a records search of the California Historical Resources Information System (CHRIS), Sacred Lands File (SLF) search with the Native American Heritage Commission (NAHC), additional archival research focused on historical mapping and land transfer records, and field survey on August 6, 2026. The Cultural Resources Investigation is on file with the District and is confidential due to the potential for releasing potentially sensitive cultural information.

The CHRIS record search results (Record Search Number: PLA-26-44) were received from the North Central Information Center (NCIC) on July 8, 2026, and identified two previously recorded resources and two previous studies conducted within the Project area and two previously recorded resources and no previous studies within a .25-mile radius of the Project area. Natural Investigations received a positive result from the NAHC of their SLF search on July 8, 2026, for the presence of Native American sacred lands or traditional cultural properties within the Project area. Due to the positive result, letters seeking additional input and concerns regarding the Project were sent the Colfax-Todds Valley Consolidated Tribe, the Nevada City Rancheria Nisenan Tribe, the TSI-AKIM Maidu of the Taylorsville Rancheria, the United Auburn Indian Community of the Auburn Rancheria, the Washoe Tribe of Nevada and California, and the Wilton Rancheria. No responses were received from any of the letters and follow up calls were placed on July 24, 2026.

Based upon the field survey and background research, it is not anticipated that the proposed project would impact any undisturbed historic properties, historical resources, or unique archaeological resources eligible for listing on the NRHP or CRHR and there is a low sensitivity for buried cultural deposits.

Discussion

- a) **No Impact.** The cultural resources investigation identified two previously recorded historic resources within the Project area, including P-31-001745 and the eligible Drum-Spaulding Historic District (P-31-005728), as well as one newly recorded historic

resource, NIC-2026-Meadow_Vista_Water-01. P-31-001745 has previously been recommended as not being eligible for listing, but as an eligible component of the Drum-Spaulding Historic District, while P-31-005728 was previously recommended as an eligible historic district. The newly recorded resource, NIC-2026-Meadow_Vista_Water-01, does not meet the criteria for listing on the National Register of Historic Places or the California Register of Historical Resources and is recommended as not eligible. Although P-31-001745 and P-31-005728 are considered eligible resources, both are components of a continually maintained water management and hydroelectric system that has substantially altered their original condition. Based on the field survey and background research, the proposed Project would not substantially adversely change the significance of any historical resource. Therefore, the Project would result in no impact.

- b) **Less-than-Significant Impact with Mitigation Incorporated.** The cultural resources investigation included a CHRIS records search, background literature and historic map review, geoarchaeological sensitivity analysis, NAHC Sacred Lands File search, and pedestrian survey of the Project area. The investigation identified no archaeological resources that are eligible for listing on the National Register of Historic Places or California Register of Historical Resources. The newly recorded resource, NIC-2026-Meadow_Vista_Water-01, was determined not eligible for listing, and the existing historic resources within the Project area would not be adversely affected by Project activities. The investigation also determined that the potential for buried cultural deposits is low. Based on the results of the records search, field survey, and background research, the proposed Project would not cause a substantial adverse change in the significance of an archaeological resource. Despite the findings of the background research and survey, there remains the possibility of discovering cultural resources during project construction activities. **Mitigation Measure CUL-1** would address inadvertent discoveries of cultural resources. With implementation of **Mitigation Measure CUL-1**, the impact would be reduced to a less than significant level.

Mitigation Measure CUL-1: In the event that cultural resources are discovered, regardless of significance, all work shall be halted within a 50-foot radius of the discovery and a qualified archaeologist shall be immediately notified. Any soil or cultural or tribal cultural resources that have been removed shall be retained in as close to the original context as possible until reviewed by a qualified archaeologist and tribal representative, if applicable. Work shall continue outside of the 50-foot buffer around the discovery. If the find is deemed not significant by the qualified archaeologist and applicable tribal representative, work shall resume within the 50-foot buffer. If the find is deemed significant by the qualified archaeologist, additional work, such as shovel testing or data recovery, shall be required and shall be determined through consultation with the County, State Historic Preservation Office, regulatory agencies, affiliated Tribal governments, or other stakeholders, as appropriate.

- c) **Less-Than-Significant Impact.** The cultural resources investigation did not identify any human remains or known burial locations within the Project area, and the investigation determined that the potential for buried cultural deposits is low. However, the absence of identified human remains does not completely eliminate the possibility that previously

unidentified human remains could be encountered during construction activities. In the unlikely event that human remains are discovered, compliance with applicable provisions of California Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 would require stopping of work in the vicinity of the discovery and appropriate treatment and consultation procedures. Therefore, the Project would result in less-than-significant impact.

References

Natural Investigations Company (NIC), 2026. *Cultural Resources Investigation for the Bear River Canal Alternative Water Supply Improvements Project Placer County, California*. August 2026.

ENERGY

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
6. ENERGY — Would the proposed project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	☒

Discussion

- a) **Less-than-Significant Impact.** The Project would consume energy resources during construction activities. Construction activities are a temporary and one-time direct source of energy consumption. Construction activities would consume petroleum fuels (primarily diesel and gasoline) through the operation of heavy off-road equipment and worker automobiles.

Construction of the Project would occur intermittently over approximately 12 weeks. Project construction would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations. Furthermore, construction contractors are economically incentivized to employ energy efficient techniques and practices to reduce fuel use to lower overall construction costs.

In light of these statutory and regulatory requirements, the consumption of energy resources during Project construction would not result in a wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, Project construction would result in a less-than-significant impact.

Operation of the Project would occur only when the District's primary raw water supply from the Bowman Feeder Canal is unavailable and when diversion capacity is available from the Bear River Canal. Operation of the Project during of these times would require a portable diesel pump or generator, or potentially an electric turbine pump in the future. Given the Project would allow the existing WTP to continue operating during emergency raw water supply interruptions and increase the region's water supply reliability, Project operation would not result in wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, Project operation would result in a less-than-significant impact.

- b) **No Impact.** The Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The Project consists of short-term construction activities and infrequent operational activities to allow the existing WTP to continue operating during emergency raw water supply interruptions and increase the region's

water supply reliability. There are no renewable energy or energy efficiency plans applicable to the Project. Therefore, the Project would result in no impact.

GEOLOGY AND SOILS

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
7. GEOLOGY AND SOILS — Would the proposed 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 wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Introduction

Geologic Setting

The Project site is located in the western foothills of the Sierra Nevada and is immediately underlain by Jurassic marine sedimentary and metasedimentary rocks. These geologic units consist primarily of shale and sandstone, with lesser amounts of conglomerate, chert, slate, limestone, and minor pyroclastic rocks (California Department of Conservation 2015). The

underlying bedrock reflects the complex geologic history of the Sierra Nevada foothills, which includes marine sedimentary deposition and subsequent metamorphic alteration.

Seismicity

The Project site is not within an area zoned under California's Seismic Hazards Mapping Act (SHMA), which identifies areas susceptible to strong ground shaking, liquefaction, landslides, and other ground failures caused by seismic events. As the closest active fault is over one mile away, the Project site is not within an earthquake faults zone delineated under the Alquist-Priolo Earthquake Fault Zoning Act (CGS, 2026).

Soils

The Project site is underlain by Sites loam soils (USDA, 2016). These soils formed from metasedimentary rock and range from moderately steep to steep slopes (15 to 50 percent). The soils are generally well drained, have high available water capacity, and are not considered hydric or prime farmland. Bedrock occurs at depths of approximately 39 to 79 inches, and the soils have low to moderately low infiltration rates, with higher runoff potential on steeper slopes. The primary limitations associated with these soils are steep terrain and associated erosion potential.

Liquefaction

Liquefaction is a phenomenon where loose, saturated, non-cohesive soils, such as silts, sands, and gravels, undergo a sudden loss of strength during earthquake shaking. Under certain circumstances, seismic ground shaking can temporarily transform an otherwise solid, granular material to a fluid state. Liquefaction is a serious hazard because buildings in areas that experience liquefaction may suddenly subside and suffer major structural damage. Liquefaction is most often triggered by seismic shaking, but it can also be caused by improper grading, landslides, or other factors. In dry soils, seismic shaking may cause soil to consolidate rather than flow, a process known as densification. According to the California Geological Survey's Seismic Hazards Program mapping, the Project site is not within an area subject to liquefaction (California Geological Survey 2026).

Discussion

- ai) **No Impact.** The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and is approximately one mile from the nearest fault (the Foothill Fault System) capable of causing surface rupture (CGS, 2026). There are no mapped traces of older faults extending through the Project site (CGS, 2026). Therefore, there is no potential for the Project site to experience surface fault rupture from a known mapped earthquake fault. Therefore, the Project would result in no impact.
- a ii) **Less-Than-Significant Impact.** Major factors that affect the severity (intensity) of ground shaking include the size (magnitude) of the earthquake, the distance to the fault that generated the earthquake, and the underlying geologic materials. Seismic ground shaking from regional fault zones, including those within the Foothill Fault System, could affect the Project site. However, construction of the Project would involve installation of

- a raw water intake, buried transmission pipeline, access road, and associated facilities, none of which would substantially increase exposure to seismic hazards. Project components would be designed and constructed in accordance with applicable California Building Code requirements, reducing the potential for damage from seismic shaking. Furthermore, the Project site is not within an area zoned under California's SHMA, which identifies areas susceptible to strong ground shaking, liquefaction, landslides, and other ground failures caused by seismic events. Therefore, the Project would result in a less-than-significant impact.
- aiii) **Less-Than-Significant Impact.** Liquefaction occurs when saturated sandy or gravelly materials become liquified due to earthquake ground shaking. Liquefaction causes material to lose bearing strength and can result in differential settlement and consolidation, which, in turn, can damage structures and utilities. Lateral spreading occurs when liquified soil materials move downslope during an earthquake. According to the California Geological Survey, the Project site is not located within a mapped liquefaction hazard zone. Construction of the Project would not increase the potential for liquefaction or other seismic related ground failure, and any site preparation would be completed in accordance with applicable California Building Code requirements. Therefore, the Project would result in a less-than-significant impact.
- aiv) **Less-Than-Significant Impact.** Portions of the Project are located within gently sloping foothill terrain. Construction would involve limited grading for the intake structure, buried pipeline, and access road but would not substantially alter existing topography or create unstable slopes. Disturbed areas would be stabilized following construction, and standard building practices would be implemented to maintain slope stability. As a result, the Project would not increase the potential for landslides compared to existing conditions. Therefore, the Project would result in a less-than-significant impact.
- b) **Less-than-Significant Impact.** The Project would require clearing, grading, trenching, excavation, road construction, and installation of new water facilities over approximately 1.6 acres. Furthermore, approximately 700 cubic yards of soil would be excavated and stockpiled on site for future District projects. The Project site is underlain by Sites loam soils, which occur on moderately steep to steep slopes (15 to 50 percent) and have a relatively high runoff potential due to low to moderately low infiltration rates. Due to this, construction activities could temporarily increase the potential for soil erosion and sediment transport. However, these impacts would be temporary and would be minimized through implementation of a Stormwater Pollution Prevention Plan (SWPPP). The Project also includes permanent drainage improvements, including a stormwater basin and percolation system designed to prevent runoff from discharging into the adjacent Bear River Canal, consistent with PG&E requirements. Following construction, disturbed areas not occupied by permanent improvements would be stabilized and revegetated as appropriate. Therefore, impacts would be less-than-significant.
- c) **Less-than-Significant Impact.** The Project site is located on Sites loam soils developed over metasedimentary bedrock. Bedrock is encountered at relatively shallow depths

- (approximately 39 to 79 inches). Although the site includes moderately steep to steep slopes, the proposed improvements consist primarily of pipelines, manholes, a turnout structure, a small equipment pad, access road improvements, and associated utility infrastructure. The Project would not involve construction of large buildings or significant changes to natural topography that would substantially increase slope instability. Excavation for the approximately 15-foot-deep intake and wet well structures would be temporary and would be conducted using appropriate construction BMPs. Permanent facilities would be designed in accordance with current California Building Code requirements. The Project area is not within a zone that is prone to liquefaction or significant subsidence because the underlying soils are well drained with underlying bedrock. Furthermore, the Project would not create conditions that would induce lateral spreading or collapse. While steep slopes present some erosion potential during construction, implementation of grading controls and erosion-control BMPs would maintain slope stability. Therefore, impacts related to unstable geologic units or soils would be less-than-significant.
- d) **Less-than-Significant Impact.** The Project site is underlain by well-drained Sites loam soils derived from metasedimentary rock. These soils are not generally recognized as highly expansive soils. Furthermore, the Project consists primarily of water utility infrastructure, including pipelines, manholes, turnout structures, equipment pads, and access roads, rather than habitable structures. Project facilities would be designed and constructed in accordance with applicable engineering standards and the California Building Code. Accordingly, expansive soils would not create substantial risks to life or property, and impacts would be less-than-significant.
- e) **No Impact.** The proposed Project does not include construction of habitable buildings or facilities requiring wastewater disposal through septic systems or alternative onsite wastewater treatment systems. Project facilities consist of raw water conveyance facilities, pumping equipment, stormwater management facilities, and associated utility improvements. No sanitary wastewater would be generated during operation that would require disposal through onsite wastewater treatment systems. Therefore, no impact would occur.
- f) **Less-than-Significant Impact.** Construction would require excavation for pipelines, manholes, and other underground facilities, with a maximum excavation depth of approximately 15 feet. The site is underlain by Jurassic marine sedimentary and metasedimentary rocks, which may have some potential to contain paleontological resources (CGS, 2015). However, no unique geologic features or known paleontological resources have been identified within the Project area. Construction would involve relatively limited and localized excavation associated primarily with underground utility installation, with excavation generally confined to depths of approximately 15 feet. Given the limited extent and depth of excavation and the absence of known paleontological resources within the Project area, the potential for construction to encounter paleontological resources is low. Therefore, impacts to paleontological resources would be less-than-significant.

References

- California Geological Survey (CGS), 2023a. *EQZapp – California Earthquake Hazard Zone Application* <https://maps.conservation.ca.gov/cgs/EQZApp/app/> Accessed July 2026.
- California Geological Survey (CGS) 2023b. *Fault Activity Map of California*. ArcGIS Web Application. <https://maps.conservation.ca.gov/cgs/fam/app/> Accessed July 2026.
- California Geological Survey (CGS) 2015. *Geologic Map of California*. ArcGIS Web Application. <https://maps.conservation.ca.gov/cgs/gmc/> Accessed July 2026
- United States Department of Agriculture (USDA), 2016. *Web Soil Survey*. <https://websoilsurvey.nrcs.usda.gov/app/> Accessed July 2026
-

GREENHOUSE GAS EMISSIONS

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
8. GREENHOUSE GAS EMISSIONS — Would the proposed 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?	☐	☐	☒	☐

Setting

Global Climate Change and GHG Emissions

Over the last 10,000 years, the rate of temperature change has typically been incremental, with warming and cooling occurring over the course of thousands of years. However, scientists have observed an unprecedented increase in the rate of warming over the past 150 years, roughly coinciding with the global industrial revolution, which has resulted in substantial increases in GHG emissions into the atmosphere. The anticipated impacts of climate change in California range from water shortages to inundation from sea level rise. Transportation systems contribute to climate change primarily through the emissions of certain GHGs (CO₂, methane (CH₄), and nitrous oxide (N₂O)) from nonrenewable energy (primarily gasoline and diesel fuels) used to operate passenger, commercial and transit vehicles. Land use changes contribute to climate change through construction and operational use of electricity and natural gas, and waste production.

The Intergovernmental Panel on Climate Change (IPCC) has reached consensus that human-caused emissions of GHGs in excess of natural ambient concentrations are responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increases in global average surface temperature from 1951 to 2010 were caused by the anthropogenic increase in GHG concentrations and other anthropogenic forces together. The IPCC predicts that the global mean surface temperature increase by the end of the 21st century (2081–2100) relative to 1986–2005, could range from 0.5 to 8.7 degrees Fahrenheit. Additionally, the IPCC projects that global mean sea level rise will continue during the 21st century, very likely at a faster rate than observed from 1971 to 2010. For the period 2081–2100 relative to 1986–2005, the rise will likely range from 10 to 32 inches (IPCC, 2013).

Greenhouse Gases

Gases that trap heat in the atmosphere are referred to as GHGs because they capture heat radiated from the sun as it is reflected back into the atmosphere, much like a greenhouse does. The accumulation of GHGs has been implicated as the driving force for global climate change. The six primary GHGs are:

- carbon dioxide (CO₂), emitted when solid waste, fossil fuels (oil, natural gas, and coal), and wood and wood products are burned;
- methane (CH₄), produced through the anaerobic decomposition of waste in landfills, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, incomplete fossil fuel combustion, and water and wastewater treatment;
- nitrous oxide (N₂O), typically generated as a result of soil cultivation practices, particularly the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning;
- hydrofluorocarbons (HFCs), primarily used as refrigerants;
- perfluorocarbons (PFCs), originally introduced as alternatives to ozone depleting substances and typically emitted as by-products of industrial and manufacturing processes; and
- sulfur hexafluoride (SF₆), primarily used in electrical transmission and distribution.

Although there are other contributors to global climate change, these six GHGs are identified by the U.S. EPA as threatening the public health and welfare of current and future generations. GHGs have varying potential to trap heat in the atmosphere, known as global warming potential (GWP), and atmospheric lifetimes. GWP reflects how long GHGs remain in the atmosphere, on average, and how intensely they absorb energy. Gases with a higher GWP absorb more energy per pound than gases with a lower GWP and thus contribute more to warming Earth. For example, one ton of CH₄ has the same contribution to the greenhouse effect as approximately 28 tons of CO₂; hence, CH₄ has a 100-year GWP of 28 while CO₂ has a GWP of 1. GWP ranges from 1 (for CO₂) to 23,500 (for SF₆).

In emissions inventories, GHG emissions are typically reported in terms metric tons of CO₂ equivalents (CO₂e). CO₂e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWP than CO₂, CO₂ is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO₂e.

Executive Order S-3-05

Governor Schwarzenegger established Executive Order S-3-05 in 2005, in recognition of California's vulnerability to the effects of climate change. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHG would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The executive order directed the Secretary of CalEPA to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The Secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of CalEPA created the California Climate Action Team, made up of members from various state agencies and commissions. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through state incentive and regulatory programs.

Assembly Bill 32 (California Global Warming Solutions Act of 2006)

California passed the California Global Warming Solutions Act of 2006 (AB 32; California Health and Safety Code Division 25.5, Sections 38500 - 38599). AB 32 established regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 required that statewide GHG emissions be reduced to 1990 levels by 2020. This reduction was to be accomplished by enforcing a statewide cap on GHG emissions that were to be phased in starting in 2012. To effectively implement the cap, AB 32 directed CARB to develop and implement regulations to reduce statewide GHG emissions from stationary sources. AB 32 specified that regulations adopted in response to AB 1493 were used to address GHG emissions from vehicles. However, AB 32 also included language stating that if the AB 1493 regulations cannot be implemented, then CARB was to develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

AB 32 required CARB to adopt a quantified cap on GHG emissions representing 1990 emissions levels and disclose how it arrived at the cap; institute a schedule to meet the emissions cap; and develop tracking, reporting, and enforcement mechanisms to ensure that the state reduces GHG emissions enough to meet the cap. AB 32 also includes guidance on instituting emissions reductions in an economically efficient manner, along with conditions to ensure that businesses and consumers are not unfairly affected by the reductions. Pursuant to AB 32, CARB identified 427 million MT CO₂e as the total Statewide aggregated 1990 GHG emissions level, which serves as the 2020 emissions limit. Using these criteria to reduce statewide GHG emissions to 1990 levels by 2020 represented an approximate 25 to 30 percent reduction in current emissions levels. However, CARB also had discretionary authority to seek greater reductions in more significant and growing GHG sectors, such as transportation, as compared to other sectors that are not anticipated to significantly increase emissions. The goals of AB 32 were achieved within the 2002 timeline.

Climate Change Scoping Plan

AB 32 also required CARB to develop a Scoping Plan that describes the approach California will take to reduce GHG to achieve the goal of reducing emissions to 1990 levels by 2020. The Scoping Plan was first approved by CARB in 2008 and must be updated every five years. The initial AB 32 Scoping Plan contains the main strategies California will use to reduce the GHG that cause climate change. The initial Scoping Plan has a range of GHG reduction actions which include direct regulations, alternative compliance mechanisms, monetary and non-monetary

incentives, voluntary actions, market-based mechanisms such as a cap-and-trade system, and an AB 32 program implementation fee regulation to fund the program. In August 2011, the initial Scoping Plan was approved by CARB.

In 2022, CARB approved the Third Update to the Climate Change Scoping Plan (2022 Scoping Plan), which lays out a path to achieve targets for carbon neutrality and reduce anthropogenic GHG emissions by 85 percent below 1990 levels no later than 2045, as directed by Assembly Bill 1279 (CARB, 2022).

Executive Order No. B-30-15

On April 29, 2015, Executive Order No. B-30-15 was issued to establish a California GHG reduction target of 40 percent below 1990 levels by 2030. Executive Order No. B-30-15 sets a new, interim, 2030 reduction goal intended to provide a smooth transition to the existing ultimate 2050 reduction goal set by Executive Order No. S-3-05 (signed by Governor Schwarzenegger in June 2005). It is designed so State agencies do not fall behind the pace of reductions necessary to reach the existing 2050 reduction goal. Executive Order No. B-30-15 orders “All State agencies with jurisdiction over sources of GHG emissions shall implement measures, pursuant to statutory authority, to achieve reductions of GHG emissions to meet the 2030 and 2050 targets.” The Executive Order also states that “CARB shall update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of carbon dioxide equivalent.” The CARB is currently moving forward with a second update to the Climate Change Scoping Plan to reflect the 2030 reduction target. The updated Scoping Plan will provide a framework for achieving the 2030 target. In September of 2016, the AB 32 was extended to achieve reductions in GHG of 40 percent below 1990 levels by 2030. The new plan, outlined in SB 32, involves increasing renewable energy use, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

Executive Order No. B-55-18/Assembly Bill 1279

Executive Order B-55-18 was signed by Governor Brown on September 10, 2018. The order establishes an additional statewide policy to achieve carbon neutrality by 2045 and maintain net negative emissions thereafter. As per Executive Order B-55-18, CARB is directed to work with relevant state agencies to develop a framework for implementation and accounting that tracks progress toward this goal and to ensure future Climate Change Scoping Plans identify and recommend measures to achieve the carbon neutrality goal.

Executive Order B-55-18 establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State’s GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal. On September 16, 2022, AB 1279, also known as the California Climate Crisis Act, codified the carbon neutrality goal established by EO B-55-18.

Significance Criteria

CEQA Guidelines Section 15064 and Appendix G recommend that a lead agency consider a project's consistency with relevant, adopted plans, and discuss any inconsistencies with applicable regional plans, including plans to reduce GHG emissions. Consistent with Appendix G of the *CEQA Guidelines*, GHG emissions generated by the Project could have a cumulatively considerable contribution to global climate change if the Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG.

CEQA Guidelines Section 15064.4 provides guidance to lead agencies for determining the significance of environmental impacts pertaining to GHG emissions. Section 15064.4(a) states that a lead agency should make a good-faith effort that is based, to the extent possible, on scientific and factual data to describe, calculate, or estimate the amount of GHG emissions that would result from implementation of a project. CEQA Guidelines Section 15064.4(b) also states that, when assessing the significance of impacts from GHG emissions, a lead agency should consider (1) the extent to which the project may increase or reduce GHG emissions compared with existing conditions, (2) whether the project's GHG emissions would exceed a threshold of significance that the lead agency has determined to be applicable to the project, and (3) the extent to which the project would comply with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The following PCAPCD thresholds of significance are applicable to the Project:

- Construction phases of all projects and operational phases of stationary source projects with GHG emissions less than 10,000 metric tons of CO₂e per year are considered less than significant.
- Operational phases of land use projects with GHG emissions below the De Minimis Level of 1,100 metric tons of CO₂e per year are considered less than significant.

Discussion

- a) **Less-than-Significant Impact.** The Project would generate GHG emissions during construction activities. Construction activities are a temporary and one-time direct source of GHG emissions. Construction activities would generate GHG emissions through the operation of heavy off-road equipment, haul trucks, and worker automobiles. Construction of the Project would utilize fuel efficient equipment and trucks consistent with state regulations and would be consistent with state regulations intended to reduce the inefficient, wasteful, or unnecessary consumption of energy, such as anti-idling and emissions regulations.

Project construction and operational GHG emissions were estimated using CalEEMod (CAPCOA, 2022). Detailed modeling assumptions and results are provided in **Appendix A**. Project construction would result in a one-time release of approximately 52 metric tons of CO₂e in 2027, well below the PCAPCD's construction threshold of 10,000 metric tons of CO₂e per year. Project operations would result in approximately 9 metric tons of CO₂e annually for the portable generator condition and 5 metric tons of CO₂e annually for the portable pump condition, well below the PCAPCD's De Minimis Level of 1,100 metric tons of CO₂e per year and the stationary source threshold of 10,000 metric tons of CO₂e per year. Therefore, the Project would result in a less-than-significant impact.

- b) **Less-than-Significant Impact.** As noted in impact a), the Project would be below PCAPCD's adopted GHG significance thresholds. The Project would not conflict with applicable plans, policies or regulations adopted for the purpose of reducing GHG emissions. Therefore, the Project would result in a less-than-significant impact.

References

California Air Pollution Officers Association, California Emissions Estimator Model User Guide Version 2022.1, April 2022, <http://www.caleemod.com/>

Placer County Air Pollution Control District, CEQA Air Quality Handbook, November 21, 2017. <https://www.placerair.org/1801/CEQA-Handbook>

HAZARDS AND HAZARDOUS MATERIALS

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
9. HAZARDS AND HAZARDOUS MATERIALS — Would the proposed 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 two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Discussion

- a) **Less-Than-Significant Impact.** Construction of the Project would involve the routine use of common hazardous materials such as fuels, lubricants, hydraulic fluids, paints, and solvents. During operation, temporary diesel pumps or generators may be used during emergency raw water supply interruptions, and liquid alum would be temporarily stored in secondary containment for water treatment. Diesel fuel would be delivered to the site as needed, and no permanent fuel storage is proposed as part of the Project. All hazardous materials would be transported, stored, used, and disposed of in accordance with applicable federal, State, and local regulations. Because the Project involves only the routine use of hazardous materials typical of water utility construction and operation, impacts would be less-than- significant.
- b) **Less-Than-Significant Impact.** Construction and operation of the Project could potentially result in the accidental release of small quantities of fuels, lubricants, hydraulic fluids, or treatment chemicals during equipment operation or refueling.

- Standard construction best management practices, proper storage and handling procedures, secondary containment for alum, and prompt spill cleanup would minimize the potential for releases. The Project does not involve large quantities of hazardous materials or occur on a hazardous materials site. Therefore, impacts associated with accidental releases would be less-than-significant.
- c) **No Impact.** The closest school to the Project site is the Sierra Hills School, located approximately 0.9 miles to the west of the Project site. Therefore, the Project would not 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 would occur.
 - d) **Less-than-Significant Impact.** The “Cortese List” refers to a collection of databases maintained by select California agencies and Boards that include properties involved in hazardous materials use, hazardous waste, or sites with confirmed soil and groundwater contamination. These databases include the Water Board’s Geotracker data management system, the DTSC’s Envirostor database. A review of the Cortese List databases determined that the Project site is not included on any list of hazardous materials sites. In addition, no hazardous materials release sites, hazardous waste facilities, or sites with documented soil or groundwater contamination were identified on or adjacent to the Project site in the Water Board’s GeoTracker database or the DTSC EnviroStor database. Accordingly, the Project would not create a significant hazard to the public or the environment as a result of existing site contamination. Therefore, the Project would result in a less-than-significant impact.
 - e) **No Impact.** The Project site is not located within an Airport Land Use Compatibility Plan and is not within two miles of a public airport. The nearest airport to the Project site is the Auburn Municipal Airport located approximately 4 miles to the southwest. Therefore, the Project would result in no impact.
 - f) **Less-than-Significant Impact.** The Project would be constructed entirely within the existing WTP property and would not permanently affect public roadways, emergency access, or evacuation routes. Construction-related traffic would be temporary and managed to maintain proper access to emergency vehicles, if required. Operation of the facility would not interfere with emergency response or evacuation activities and would improve the reliability of the community’s water supply during emergency events. Therefore, the Project would not impair implementation of, or physically interfere with, an adopted emergency response or emergency evacuation plan, and impacts would be less-than-significant.
 - g) **Less-than-Significant Impact.** The Project site is mapped in a Very High Fire Hazard Severity Zone in a State Responsibility Area (SRA) (CalFire, 2026). However, the Project would not result in new development, increase the number of people or structures exposed to wildfire hazards, or substantially alter existing fire risk. Construction and operation would comply with applicable fire safety requirements, and the Project would

improve the reliability of the existing water supply during emergency situations, including potential wildland fires. Therefore, the Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires, and impacts would be less-than-significant.

References

California State Water Resources Control Board (SWRCB), 2026. *GeoTracker*. Accessed online July 21, 2026, at: <https://geotracker.waterboards.ca.gov/>

California Department of Forestry and Fire Protection (CalFire), 2026. *Fire Hazard Severity Zone Maps, Fire Hazard Severity Zone Viewer Placer County*. Accessed online July 21, 2026, at: <https://experience.arcgis.com/experience/6a9cb66bb1824cd98756812af41292a0>.

California Department of Toxic Substance Control (DTSC), 2026. *EnviroStor*. Accessed online July 21, 2026, at: <https://www.envirostor.dtsc.ca.gov/public/>

HYDROLOGY AND WATER QUALITY

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
10. HYDROLOGY AND WATER QUALITY – Would the proposed project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i) result in substantial erosion of 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?	☐	☐	☐	☒

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Introduction

The Project is located near Applegate in unincorporated Placer County and consists of a new raw water intake on the Bear River Canal, a buried transmission pipeline, and associated pathways that would convey untreated surface water to the existing Applegate Water Treatment Plant. The Project area is characterized by gently sloping terrain with no natural streams or wetlands within the construction footprint. Stormwater runoff from the Project would be collected in a proposed stormwater basin and conveyed to an existing percolation basin at the water treatment plant. The Project site is located outside the Federal Emergency Management Agency (FEMA) mapped 100-year flood hazard area. Construction would disturb approximately 1.6 acres and would therefore require preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the State Water Resources Control Board Construction General Permit.

Discussion

- a) **Less-than-Significant Impact.** Construction activities could temporarily affect water quality through erosion, sedimentation, or accidental spills of fuels, lubricants, or other construction materials. Because the Project would disturb approximately 1.6 acres, construction would be subject to the State Water Resources Control Board Construction General Permit and preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP would identify potential pollutant sources and require implementation of erosion and sediment control best management practices (BMPs), good housekeeping measures, spill prevention and response procedures, and site inspections to minimize construction-related water quality impacts. During operation, the Project includes a stormwater collection basin that would convey runoff to an existing percolation basin at the water treatment plant, preventing runoff from entering the Bear River Canal. The Project would not generate wastewater or introduce pollutants that would substantially degrade surface water or groundwater quality. Therefore, impacts would be less-than-significant.
- b) **No Impact.** The Project would not extract groundwater or rely on groundwater for construction or operation. The Project provides an alternative surface water supply to the existing water treatment plant and would not increase water demand or treatment capacity. Although the Project would add a limited amount of impervious surface, the change is minor and would not substantially affect groundwater recharge. Therefore, no impact would occur.
- ci) **Less-than-Significant Impact.** Construction-related grading could temporarily increase erosion and sediment transport. Because the Project would disturb approximately 1.6 acres, it would require preparation and implementation of a SWPPP in accordance with

- the Construction General Permit. The SWPPP would require erosion and sediment control BMPs, such as stabilized construction entrances, fiber rolls, silt fencing, sediment traps, soil stabilization measures, and routine inspections to minimize erosion and prevent sediment from leaving the site. The Project would not alter the course of a stream or river, and long-term operation would not result in substantial erosion or siltation. Therefore, impacts would be less-than-significant.
- cii) **Less-than-Significant Impact.** The Project would add a limited amount of impervious surface associated with the access road and equipment pad. Stormwater runoff would be collected in a proposed stormwater basin and pumped to an existing percolation basin at the water treatment plant, where runoff would be managed and allowed to infiltrate. During construction, runoff would also be managed through implementation of the Project SWPPP and associated BMPs. The Project would not substantially increase runoff volumes or cause flooding on- or off-site. Therefore, impacts would be less-than-significant.
- ciii) **Less-than-Significant Impact.** Construction-related stormwater would be managed in accordance with the Project SWPPP, which would require implementation of BMPs to control sediment, erosion, and potential pollutants during construction. During operation, stormwater runoff would be collected in the proposed stormwater basin and conveyed to the existing percolation basin at the water treatment plant. The Project would not substantially increase runoff volumes, exceed the capacity of existing stormwater drainage facilities, or generate substantial additional sources of runoff. Therefore, impacts would be less-than-significant.
- civ) **No Impact.** The Project would not alter the course of a stream or river or place structures that would obstruct flood flows. Therefore, the Project would not impede or redirect flood flows, and no impact would occur.
- d) **No Impact.** A seiche is caused by oscillation of the surface of a large enclosed or semi-enclosed body of water due to an earthquake or large wind event. The Project site is not located near a large enclosed or semi-enclosed body of water. The Project site is not in a tsunami hazard inundation zone (CGS, 2026). According to the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (NFHL) Mapper, the Project site is located outside the mapped 100-year floodplain, as shown on Flood Insurance Rate Map (FIRM) Panel 06061C0760H, effective November 2, 2018. Therefore, the Project would result in a no impact.
- e) **Less-than-Significant Impact.** As discussed above, the Project would prepare and implement a SWPPP and comply with applicable stormwater regulations to protect water quality during construction. The Project would not rely on groundwater or affect groundwater management, and the Project site is not located within a groundwater basin subject to a Groundwater Sustainability Plan under the Sustainable Groundwater Management Act. Therefore, the Project would not conflict with or obstruct

implementation of an applicable water quality control plan or sustainable groundwater management plan. Impacts would be less-than-significant.

References

California Department of Conservation, California Geological Survey (CGS), 2026. *Tsunami Hazard Area Map, County of Placer*; produced by the California Geological Survey. Accessed online on July 23, 2026 at:

https://maps.conservation.ca.gov/cgs/informationwarehouse/ts_evacuation/

Federal Emergency Management Agency (FEMA), 2025. *National Flood Hazard Layer FIRMette*. Accessed online August 7, 2026 at: <https://msc.fema.gov/portal/home>

LAND USE AND LAND USE PLANNING

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
11. LAND USE AND LAND USE PLANNING — Would the proposed 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?	☐	☐	☒	☐

Discussion

- a, b) **Less-Than-Significant Impact.** The Project consists of the construction and operation of a small raw water intake facility and associated utility infrastructure adjacent to the existing Bear River Canal and connected to an existing PG&E maintenance road. Improvements include a short access road, fenced equipment area, intake structures, and associated piping within a limited disturbance area. The Project would not divide an established community, induce growth, or substantially alter existing land uses. Because the Project is a small utility facility located adjacent to existing utility infrastructure and is consistent with applicable land use plans, policies, and zoning regulations, impacts related to land use and planning would be less-than-significant.

MINERAL RESOURCES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
12. MINERAL RESOURCES — Would the proposed 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?	☐	☐	☐	☒

Discussion

- a, b) **No Impact.** The California Department of Conservation Mines Online tool does not identify any documented mines on or nearby the Project site (California Department of Conservation, 2026). Thus, the Project would not affect any known mineral deposits or active mining operations in the District. In addition, the Project site does not contain a locally important mineral resource. Therefore, the Project would result in no impact.

References

Department of Conservation, *Division of Mine Reclamation, Mines Online*.
<https://maps.conservation.ca.gov/mol/index.html>. Accessed July 13, 2026.

NOISE

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
13. NOISE — Would the proposed project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Introduction

RCH conducted two short-term noise measurements at the Project site on July 27th, 2026 and one long-term (72-hour) noise measurement from July 28th-July 30th, 2026. The results and locations of the short-term noise measurements are provided in the discussion below.

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise is defined as unwanted sound. Sound pressure level has become the most common descriptor used to characterize the “loudness” of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain. Decibels are measured using different scales, and it has been found that A-weighting of sound levels best reflects the human ear’s reduced sensitivity to low frequencies, and correlates well with human perceptions of the annoying aspects of noise. The A-weighted decibel scale (dBA) is cited in most noise criteria. All references to decibels (dB) in this report will be A-weighted unless noted otherwise.

Several time-averaged scales represent noise environments and consequences of human activities. The most commonly used noise descriptors are the equivalent A-weighted sound level over a given time period (Leq)⁴; average day-night 24-hour average sound level (Ldn)⁵ with a nighttime

⁴ The Equivalent Sound Level (Leq) is a single value of a constant sound level for the same measurement period duration, which has sound energy equal to the time-varying sound energy in the measurement period.

⁵ Ldn is the day-night average sound level that is equal to the 24-hour A-weighted equivalent sound level with a 10-decibel penalty applied to night between 10:00 p.m. and 7:00 a.m.

increase of 10 dB to account for sensitivity to noise during the nighttime; and community noise equivalent level (CNEL)⁶, also a 24-hour average that includes both an evening and a nighttime sensitivity weighting. **Table 3** identifies decibel levels for common sounds heard in the environment. With regard to increases in A-weighted noise level, the following relationships occur (Caltrans, 1998a):

- Under controlled conditions in an acoustics laboratory, the trained healthy human ear is able to discern changes in sound levels of 1 dB;
- Outside of such controlled conditions, the trained ear can detect changes of 2 dB in normal environmental noise;
- It is widely accepted that the average healthy ear, however, can barely perceive noise levels changes of 3 dB;
- A change in level of 5 dB is a readily perceptible increase in noise level; and
- A 10-dB change is recognized as twice as loud as the original source.

TABLE 3 TYPICAL NOISE LEVELS

Noise Level (dB)	Outdoor Activity	Indoor Activity
90+	Gas lawn mower at 3 feet, jet flyover at 1,000 feet	Rock Band
80-90	Diesel truck at 50 feet	Loud television at 3 feet
70-80	Gas lawn mower at 100 feet, noisy urban area	Garbage disposal at 3 feet, vacuum cleaner at 10 feet
60-70	Commercial area	
40-60	Quiet urban daytime, traffic at 300 feet	Large business office, dishwasher next room
20-40	Quiet rural, suburban nighttime	Concert hall (background), library, bedroom at night
10-20		Broadcast / recording studio
0	Lowest threshold of human hearing	Lowest threshold of human hearing

SOURCE: (modified from Caltrans Technical Noise Supplement, 1998a)

Noise Attenuation

Stationary point sources of noise, including construction equipment, attenuate (lessen) at a rate of 6 to 7.5 dB per doubling of distance from the source, depending on ground absorption. Soft sites attenuate at 7.5 dB per doubling because they have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. Hard sites have reflective surfaces (e.g., parking lots or smooth bodies of water) and therefore have less attenuation (6.0 dB per doubling). A street or roadway with moving vehicles (known as a “line” source), would typically attenuate at a lower rate, approximately 3 to 4.5 dB each time the distance doubles from the source, that also depends on ground absorption (Caltrans, 1998b). Physical barriers located between a noise source and the

⁶ CNEL is the average A-weighted noise level during a 24-hour day, obtained by addition of 5 decibels in the evening from 7:00 to 10:00 p.m., and an addition of a 10-decibel penalty in the night between 10:00 p.m. and 7:00 a.m.

noise receptor, such as berms or sound walls, would increase the attenuation that occurs by distance alone.

Sensitive Receptors

Some land uses are considered more sensitive to ambient noise levels than others due to the amount of noise exposure, in terms of both duration and insulation from noise, and the types of activities typically involved. Residences, hospitals, schools, and nursing homes are generally more sensitive to noise than commercial and industrial land uses. The Placer County General Plan identifies noise-sensitive land uses as residences, transient lodging, hospitals, nursing homes, churches, schools, libraries, and museums (Placer County, 2013). The Project site boundary is approximately 100 feet and 300 east of the nearest residential structures, respectively.

Existing Noise Sources

To quantify existing ambient noise levels, RCH Group conducted two short-term (10-minute) noise measurements and one long-term (72-hour) noise measurement at the Project site. Short-term measurements were made using a Larson Davis SoundTrack LxT Sound Level Meter calibrated before and after measurements. The long-term measurement was made using a Metrosonics dB-308 Sound Level Meter calibrated before and after measurements. **Table 4** summarizes the locations and results of the noise measurements. **Figure 9** shows the locations of the noise measurements. **Appendix D** includes 24-hour noise plots for each day of measurements. The main source of noise in and around the Project vicinity is overhead aircraft and distant noise from residential uses (i.e., yard work during daytime hours). Other minor noise sources included the noise generated by the flow of water in the canal.

TABLE 4 EXISTING NOISE LEVELS

Location	Time Period	Noise Levels (dB)	Noise Sources
Site 1: North area of the Project site, nearby the canal, approximately 120 feet south of nearest residence.	July 28, 12:00 a.m. through July 30, 11:59 p.m., 2026 72-hour measurement	Hourly Leq's ranged from: 43-47 CNEL: 50, 51, 51	Unattended noise measurements do not specifically identify noise sources.
Site 1: North area of the Project site, nearby the canal, approximately 120 feet south of nearest residence.	Monday July 27, 2026 9:56 a.m. to 10:06 a.m.	5-minute Leq's: 40, 38	Overhead aircraft was 56 dB. Distant noise from yard work was 40-45 dB. Noise from the canal was 40 dB.
Site 2: Northeast area of the Project site, nearby the canal, approximately 150 feet south of nearest residence.	Monday July 27, 2026 9:44 a.m. to 9:54 a.m.	5-minute Leq's: 40, 39	Distant noise from yard work was 40-45 dB.

SOURCE: RCH GROUP, 2026

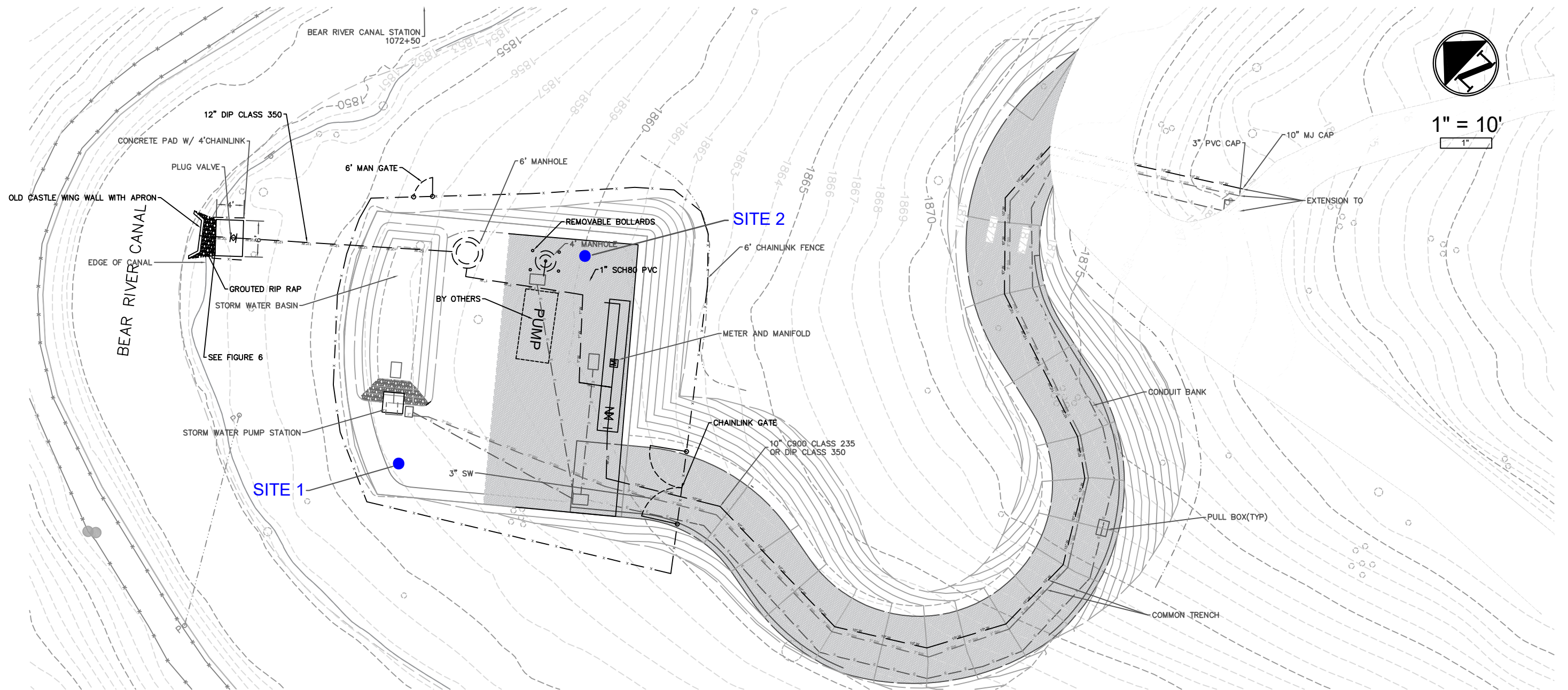


FIGURE 9 - NOISE MEASUREMENT LOCATIONS

MEADOW VISTA COUNTRY WATER DISTRICT
BEAR RIVER CANAL ALT SUPPLY PROJECT
SCALE: NTS

Regulatory Context

Federal and State

There are no federal or state noise standards that regulate noise issues related to the Project.

Local

Placer County General Plan

The Placer County General Plan Noise Element provides a framework to minimize risks posed by excessive noise. The Placer County General Plan Noise Element establishes goals and policies to protect County residents from excessive noise and to ensure compatibility between noise-generating land uses and noise-sensitive receptors. The following goals and policies are relevant to the Project:

Goal 9.A: To protect County residents from the harmful and annoying effects of exposure to excessive noise.

Placer County Municipal Code

Chapter 9.36 of the Placer County Municipal Code (Noise Ordinance) aims to ensure that the environment is free from unnecessary, offensive and excessive sound and vibration that may jeopardize the health or welfare or safety of County residents. The following regulations are relevant to the Project.

Per Chapter 9.36.030(7), construction noise is exempt from the Noise Ordinance between the hours of 6:00 a.m. and 8:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday provided that all construction equipment is fitted with factory installed muffling devices and that all construction is maintained in good working order.

Chapter 9.36.060 establishes noise performance standards and exemptions for activities within the unincorporated County. For noise-sensitive receptors, noise is limited to 55 dB, Leq during daytime hours (7:00 a.m. to 10:00 p.m.) and 45 dB, Leq during nighttime hours (10:00 p.m. to 7:00 a.m.), or no more than 5 dBA above ambient noise levels, whichever is greater. Per Chapter 9.36.030(6), emergency activities involving governmental personnel, utility personnel, emergency responders, and the operation of emergency response equipment and vehicles are exempt from these noise performance standards.

Discussion

- a) **Less-than-Significant Impact.** Construction would result in a temporary increase in ambient noise levels in the vicinity of the Project. Construction activities would require the use of numerous pieces of noise-generating equipment, such as grading and excavating equipment. The noise levels generated by construction equipment would vary greatly depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment, and the prevailing wind direction. Construction equipment would not all operate at the same time or location.

Furthermore, construction equipment would not be in constant use during the 8-hour operating day. **Table 5** provides the noise levels at 100 feet and 300 feet from expected construction equipment (this is the distance between the construction equipment to the nearest residential structures).

TABLE 5 TYPICAL CONSTRUCTION EQUIPMENT NOISE LEVELS (LMAX)

Construction Equipment	Noise Level (dB, Lmax at 100 feet)	Noise Level (dB, Lmax at 300 feet)
Backhoe	79	69
Bulldozer	76	66
Compactor	77	67
Concrete Truck	75	65
Crane	75	65
Dump Truck	70	60
Generator	75	65
Loader	73	63
Paver	71	61
Roller	74	64
Water Truck	70	60

SOURCE: FHWA Roadway Construction Noise Model User's Guide, 2006

An attenuation rate of 6.0 dB per doubling of distance was assumed.

100 feet and 300 feet are the distances to the nearest residential structures.

Due to the proximity of nearby noise sensitive receptors, construction noise would temporarily elevate the existing ambient noise levels (See **Table 4**, for existing noise levels at Sites 1-2 [i.e., the ambient noise levels nearby the private residences are quiet]). These noise levels would not exceed the noise ordinance as it does not contain sound level limitations and only restricts construction hours of operation and requires muffler systems to be maintained and that construction equipment is maintained in good condition. Construction activities would be short-term, intermittent, and limited to the allowable hours (daytime) outlined in Placer County Municipal Code Section 9.36.030(7), described above. Aside from the allowable hours in the Placer County Municipal Code, no other standards have been established in the General Plan, Municipal Code, or by other agencies that are applicable to the Project construction activities. Therefore, Project construction would result in a less-than-significant impact.

During emergency situations, the loudest components of the Project would be the portable diesel generator and the portable diesel pump. This equipment could operate 24 hours a day during major emergency conditions. **Table 6** provides the noise levels at 150 feet and 350 feet from expected operational equipment (this is the distance between the operational equipment to the nearest residential structures).

TABLE 6 OPERATIONAL EQUIPMENT PREDICTED NOISE LEVELS

Operational Equipment	Noise Source Level	Noise Level (dB, Leq at 150 feet)	Noise Level (dB, Leq at 350 feet)
Portable Diesel Generator	74 dBA at 23 feet ¹	58	50
Portable Diesel Pump	69 dBA at 23 feet ²	53	45

SOURCES:

1. Reference noise level for the diesel generator was obtained from a data sheet from MQ POWER WhisperWatt 220 Model (DCA220SSJU4f)
https://service.multiquip.com/pdfs/DCA220SSJU4F_Data_Sheet.pdf
2. Reference noise levels for the diesel pump was obtained from a data sheet from Pioneer Pump Sound Attenuated Diesel-Driver Trailer Package (SAPP88S12L71-TCD3.6),
https://pioneerpump.blob.core.windows.net/media/293036/m9038_sapp88s12l71-tcd36_spec_sheet.pdf

An attenuation rate of 6.0 dB per doubling of distance was assumed.

150 feet and 350 feet are the distances to the nearest residential structures.

As shown in **Table 6** above, the portable diesel generator and the portable diesel pump that would be used during emergency situations, would exceed the 50 dB, Leq daytime (7:00 a.m. to 10:00 p.m.) and 45 dB, Leq nighttime (10:00 p.m. to 7:00 a.m.) noise performance standards outlined in Chapter 9.36.060 at the nearest residential structure and would result in a significant increase to the existing nighttime ambient noise levels at nearby noise-sensitive receptors during emergency situations.

Per Chapter 9.36.030(6), emergency activities involving governmental personnel, utility personnel, emergency responders, and the operation of emergency response equipment and vehicles are exempt from these noise performance standards. The Project is intended solely to provide an emergency and backup raw water supply to the Meadow Vista County Water District during planned or unplanned outages of the Bowman Feeder Canal. Because operation of the diesel pump and associated equipment would occur only during emergency or outage conditions to maintain potable water service, Project operation would be exempt from the noise performance standards outlined in Chapter 9.36.060. Therefore, Project operations would result in a less-than-significant impact.

- b) **Less-than-Significant Impact.** Construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the specific construction equipment used and operations involved. In most cases, vibration induced by typical construction equipment does not result in adverse effects on people or structures (Caltrans, 2013). At the highest levels of vibration, damage to structures is primarily architectural (e.g., loosening and cracking of plaster or stucco coatings) and rarely results in structural damage. Vibratory motion is commonly described by identifying the peak particle velocity (PPV).

For vibration, a PPV threshold of 0.5 inches per second or greater can cause architectural damage and minor structural damage. The FTA recommends a threshold of 0.5 PPV for residential and commercial structures (FTA, 2006). Vibrational effects from typical construction activities are only a concern within 25 feet of existing structures (Caltrans,

- 2002). There are no off-site structures within 25 feet of the Project site. The nearest noise-sensitive land uses to the Project site are two residences approximately 100 feet and 300 feet north of the Project site. Therefore, the Project would result in a less-than-significant impact.
- c) **No Impact.** The Project site is not within the vicinity of a private airstrip or an airport land use plan, or within two miles of a public use airport. The nearest airport is the Auburn Municipal Airport (the nearest runway of which is approximately 4 miles southwest of the Project site). Therefore, the Project would result in no impact.

References

- California Department of Transportation (Caltrans). 1998a. *Technical Noise Supplement*. <https://rosap.ntl.bts.gov/view/dot/27590>
- California Department of Transportation (Caltrans). 2013. *Technical Noise Supplement*. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf>
- California Department of Transportation (Caltrans). 1998b. *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects*. <https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/f0008617-traffic-noise-protocol-oct1998-a11y.pdf>
- California Department of Transportation (Caltrans). 2002. *Transportation Related Earthborne Vibrations*. https://www.vibrationdata.com/tutorials_alt/caltrans_earth.pdf
- Federal Highway Administration (FHWA). 2006. *Roadway Construction Noise Model User's Guide*. https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/
- Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06)*. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf
- Placer County. 2013. *Placer County General Plan*. <https://www.placer.ca.gov/DocumentCenter/View/8568/Noise-PDF>
- Placer County. *Article 9.36, Noise*. <https://www.placer.ca.gov/DocumentCenter/View/8274/Placer-County-Noise-Code-2014-Archive-PDF>
-

POPULATION AND HOUSING

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
14. POPULATION AND HOUSING — Would the proposed 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 units, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion

- a) **No Impact.** The Project consists of construction of a raw water intake, access road, and associated infrastructure within an existing utility corridor and would not include residential, commercial, or other growth-inducing development. The Project would not create new employment centers, housing, or infrastructure that would induce substantial population growth. Therefore, the Project would result in no impact.
- b) **No Impact.** The Project consists of construction of a raw water intake, access road, and associated infrastructure within an existing utility corridor and would not include residential, commercial, or other growth-inducing development. Furthermore, the Project would not displace existing people or housing units. Therefore, the Project would result in no impact.

PUBLIC SERVICES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
15. PUBLIC SERVICES — Would the proposed project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:				
i) Fire protection?	☐	☐	☒	☐
ii) Police protection?	☐	☐	☒	☐
iii) Schools?	☐	☐	☐	☒
iv) Parks?	☐	☐	☐	☒
v) Other public facilities?	☐	☐	☐	☒

Introduction

Fire Protection

CALFIRE provides fire protection services to the unincorporated portions of Placer County. CALFIRE and Placer County Fire Department operate a total of 16 fire stations within the County (Placer County, 2026). The nearest fire station to the site is Placer Hills Fire Station 84, located approximately 1.1 miles northwest of the Project site.

Police Protection

The Placer County Sheriff's Office provides service to the unincorporated portions of Placer County. The Placer County Sheriff's Office has a total staff of 571, consisting of 270 sworn law enforcement officers and 301 civilian and professional personnel.⁷ The Placer County Sheriff's Office is located approximately 6.4 miles southwest of the Project site.

Discussion

- a.i) **Less-than-Significant Impact.** The Project consists of constructing an alternative raw water supply connection to the District's existing Water Treatment Plant and would not increase the plant's treatment capacity, expand the service area, or facilitate new development. Construction would be temporary and operation of the completed facilities would not increase demand for fire protection services or require new or expanded fire protection facilities. Therefore, impacts to fire protection services would be less-than-significant.
- a.ii) **Less-than-Significant Impact.** The Project would be constructed on the District's existing WTP property and would not increase population, employment, or public access

⁷ <https://nleomf.org/dz-resource/placer-county-so-plan-summary/>

to the site. Construction activities would be temporary, and would not result in an increase in calls for police protection or result in any changes in crime that would warrant changes to police protection service ratios and/or response times. Therefore, the Project would result in a less-than-significant impact.

- a.iii-v) **No Impact.** The Project would improve the reliability of the existing water supply system and would not increase treatment capacity, expand the District's service area, induce population growth, or create new employment opportunities that would increase demand for schools, parks, or other public facilities. Therefore, the Project would result in no impact.

RECREATION

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
16. RECREATION — Would the proposed project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	☐	☐	☐	☒
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☐	☒

Discussion

- a, b) **No Impact.** The Project consists of construction of a raw water intake, access road, and associated infrastructure within an existing utility corridor and would not include and would not result in development or a change from existing operations at the vacant property. Because the Project does not propose development or a change in activities on the Project site, the Project would not increase the use of existing recreational facilities such that physical deterioration of existing facilities would occur or be accelerated, and would not warrant new or expanded recreational facilities. Therefore, the Project would result in no impact.

TRANSPORTATION

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
17. TRANSPORTATION — Would the proposed project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Introduction

Senate Bill 743

Senate Bill 743 (SB 743; Steinberg, 2013) governs the application of new State CEQA *Guidelines* for addressing transportation impacts based on Vehicle Miles Traveled (VMT). It was codified in Public Resources Code §21099, required changes to the guidelines implementing CEQA (State CEQA *Guidelines*) (Cal. Code Regs., Title 14, Div. 6, Ch. 3, § 15000 et seq.) regarding the analysis of transportation impacts. The Governor's Office of Planning and Research (OPR) has proposed, and the California Natural Resources Agency (Agency) has certified and adopted, changes to the State CEQA *Guidelines* that identify VMT as the most appropriate metric to evaluate a project's transportation impacts. With the Agency's certification and adoption of the changes to the State CEQA *Guidelines*, automobile delay, as measured by "level of service" and other similar metrics, generally no longer constitutes a significant environmental effect under CEQA. (Pub. Resources Code, § 21099, subd. (b)(3).)"

The OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR, 2018) provides general direction regarding the methods to be employed and significance criteria to evaluate VMT impacts, absent policies adopted by local agencies.

Discussion

- a) **Less-than-Significant Impact.** The Project consists of constructing an emergency raw water diversion and associated facilities within the District's existing water treatment plant property. Construction would result in temporary trips by workers, equipment, and material deliveries over an approximately 12-week period. Access would be provided from existing District and PG&E access roads, and the Project would not modify public roadways or change existing traffic patterns. The Project would not generate new operational vehicle trips except for occasional maintenance visits and equipment usage during emergencies. The Project would not conflict with any adopted program, plan,

- ordinance, or policy addressing the circulation system, including roadway, transit, bicycle, or pedestrian facilities. Therefore, impacts would be less-than-significant.
- b) **Less-than-Significant Impact.** CEQA Guidelines Section 15064.3 requires evaluation of transportation impacts using Vehicle Miles Traveled (VMT). The Project would not increase treatment capacity, expand the District's service area, induce growth, or generate new long term vehicle trips. Construction traffic would be temporary and would require very few daily trips. Operation of the Project would only occur during emergency situations and would involve occasional maintenance. Because the Project would not result in a substantial increase in VMT, it would not conflict with CEQA Guidelines Section 15064.3(b). Impacts would be less-than-significant.
 - c) **Less-than-Significant Impact.** The Project would use existing access roads and construct an additional internal access road within District property for maintenance and emergency operations. No modifications to public roadway geometry, intersections, or traffic circulation are proposed. The Project would not introduce hazardous roadway design features or incompatible roadway uses. Therefore, the Project would not substantially increase transportation hazards, and impacts would be less-than-significant.
 - d) **Less-than-Significant Impact.** The Project would not obstruct or adversely affect emergency access. Construction activities would occur within the existing water treatment plant property and would utilize existing access routes. The new access road would improve access to the emergency diversion facilities for District personnel while maintaining access for emergency responders. Temporary construction traffic would be limited and would not substantially affect emergency response on the surrounding roadway network. Therefore, the Project would not result in inadequate emergency access, and impacts would be less-than-significant.

References

California Governor's Office of Planning and Research (OPR). 2018. *Technical Advisory on Evaluating Transportation Impacts in CEQA*, April 2018.

TRIBAL CULTURAL RESOURCES

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
18. TRIBAL CULTURAL RESOURCES —				
Would the proposed project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	☐	☒	☐	☐

Introduction

Tribal Cultural Resources (TCR's) include sites, features, places, cultural landscapes, and sacred places or objects that have cultural value or significance to a Tribe. To qualify as a TCR, the resource must either: 1) be listed on, or be eligible for, listing on the California Register of Historical Resources (CRHR) or other local historic register; or 2) constitute a resource that the lead agency, at its discretion and supported by substantial evidence, determines should be treated as a TCR (PRC §21074). Under Assembly Bill 52 (AB 52) tribal representatives are considered experts appropriate for providing substantial evidence regarding the locations, types, and significance of TCRs within their traditional and cultural affiliated geographic area, and therefore, the identification and analysis of TCRs should involve government-to-government tribal consultation between the CEQA lead agency and interested tribal groups and/or tribal persons. (PRC §21080.3.1(a)).

The District has not had any Native American tribes request Assembly Bill (AB) 52 notification for projects subject to CEQA. The Colfax-Todds Valley Consolidated Tribe, the Nevada City Rancheria Nisenan Tribe, the TSI-AKIM Maidu of the Taylorsville Rancheria, the United Auburn Indian Community of the Auburn Rancheria, the Washoe Tribe of Nevada and California, and the Wilton Rancheria were contacted as a result of the Sacred Lands File Records Search on July 8, 2026. No responses were received.

Discussion

- a) **Less-than-Significant Impact.** Previously recorded resources P-31-001745 and P-31-005728 were identified within the Project area. However, the cultural resources investigation concluded that the Project would not adversely impact these eligible resources. The newly identified resource, NIC-2026-Meadow_Vista_Water-01, was

determined not eligible for listing. Therefore, the Project would result in a less-than-significant impact.

- b) **Less-than-Significant Impact with Mitigation Incorporated.** The NAHC Sacred Lands File search returned a positive result, and consultation letters were sent to potentially interested Native American tribes mentioned above. However, no responses were received. The cultural resources investigation did not identify any resources that would be adversely affected by the Project. Furthermore, **Mitigation Measure CUL-1** requires procedures for the inadvertent discovery of cultural resources and tribal cultural resources. Therefore, the Project would result in a less-than-significant impact with mitigation.

References

Natural Investigations Company (NIC), 2026. Cultural Resources Investigation for the Bear River Canal Alternative Water Supply Improvements Project Placer County, California. August 2026.

UTILITIES AND SERVICE SYSTEMS

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
19. UTILITIES AND SERVICE SYSTEMS — Would the proposed project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c) Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
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?	☐	☐	☒	☐

Discussion

- a) **No Impact.** The Project would construct an alternative raw water supply connection to the District's existing WTP and would not increase the permitted treatment capacity, expand the service area, or induce new development. The Project would utilize existing utility services during construction and would not require new or expanded water, wastewater, stormwater, electric power, natural gas, or telecommunications facilities beyond those necessary to operate the existing WTP. Therefore, the Project would result in no impact.
- b) **No Impact.** The Project is intended to improve the reliability of the District's existing raw water supply during interruptions to the primary Bowman Feeder Canal. The Project would not increase treated water demand, customer connections, or the WTP's permitted treatment capacity. Because the Project provides an alternative source of existing water supplies rather than increasing water demand, sufficient water supplies would remain available during normal, dry, and multiple dry years. Therefore, the Project would result in no impact.
- c) **No Impact.** The Project would not increase wastewater flows or require additional wastewater treatment capacity. Therefore, the Project would result in no impact.

- d) **Less-than-Significant Impact.** Construction of the Project would generate typical construction debris, including vegetation, excavated soil, concrete, and other construction materials. Vegetation and other waste materials that cannot be reused would be disposed of at appropriately permitted facilities, and excess excavated material would be reused onsite where feasible or disposed of at an approved disposal facility. Operation of the Project would not generate a significant amount of solid waste. The Project would not generate solid waste in excess of State or local standards, exceed the capacity of local solid waste infrastructure, or impair the attainment of solid waste reduction goals. Therefore, impacts would be less-than-significant.
- e) **Less-than-Significant Impact.** The Project would comply with all applicable federal, state, and local statutes and regulations related to solid waste management, recycling, and disposal during construction and operation. Construction waste would be managed and disposed of at appropriately permitted facilities in accordance with applicable requirements. Therefore, the Project would result in a less-than-significant impact.

WILDFIRE

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
20. WILDFIRE — If located in or near state responsibility areas or lands classified as very high hazard severity zones, would the proposed 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?	☐	☐	☐	☒

Introduction

Areas where the state has financial responsibility for wildland fire protection are known as state responsibility areas (SRA). The Department of Forestry and Fire Protection (CALFIRE) is responsible for fire prevention and suppression in SRA. Areas where local governments have financial responsibility for wildland fire protection are known as local responsibility areas (LRA). The Project site is located within an SRA with a Very High Fire Hazard Severity Zone (FHSZ).

The nearest fire station to the site is Placer Hills Fire Station 84, located approximately 1.1 miles northwest of the Project site.

Discussion

- a) **Less-than-Significant Impact.** The Project would utilize an existing PG&E maintenance road with a short new access road to provide construction and operational access. The Project would not close or substantially alter existing evacuation routes or interfere with emergency access during construction or operation. Therefore, impacts related to emergency response and evacuation would be less-than-significant.
- b) **Less-than-Significant Impact.** The Project includes limited vegetation clearing and construction of a small utility facility within a previously disturbed utility corridor. Although construction activities would occur in a Very High FHSZ, the Project would not substantially increase wildfire risk due to slope, prevailing winds, or other site conditions. Standard construction best management practices and fire prevention measures would minimize the potential for ignition. Therefore, impacts would be less-than-significant.
- c) **Less-than-Significant Impact.** The Project would not substantially increase the risk of wildfire or require the installation or maintenance of infrastructure that could exacerbate fire risk. Following construction, the facility would require only periodic maintenance, and the limited vegetation removal around the facility may reduce combustible fuels immediately surrounding the improvements. Therefore, impacts would be less-than-significant.
- d) **No Impact.** The Project involves limited grading and construction of localized utility facilities and would not substantially alter drainage patterns or expose people or structures to flooding, post-fire slope instability, or landslides. Therefore, the Project would result in no impact.

References

CALFIRE. 2025. *Fire Hazard Severity Zones in State Responsibility Area*, <https://osfm.fire.ca.gov/what-we-do/community-wildfire-preparedness-and-mitigation/fire-hazard-severity-zones>, accessed July 30, 2026

MANDATORY FINDINGS OF SIGNIFICANCE

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
21. MANDATORY FINDINGS OF SIGNIFICANCE — Would the proposed project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐
c) Have environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion

- a) **Less-than-Significant Impact with Mitigation Incorporated.** The Project would not 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. As discussed in the Biological Resources section, the Project site consists of disturbed woodland habitat adjacent to an existing water treatment facility and lacks suitable habitat for special-status plants and most special-status wildlife species. No special-status plants or wildlife species were observed during the biological reconnaissance survey. Potential impacts are limited to nesting native birds that could occur onsite during the nesting season. Implementation of **Mitigation Measure BIO-1**, requiring preconstruction nesting bird surveys and establishment of avoidance buffers around active nests, would reduce potentially significant impacts to nesting birds to a less-than-significant level. As discussed in the Cultural Resources and Tribal Cultural Resources sections, cultural investigations identified no archaeological resources eligible for listing on the California Register of Historical Resources within the Project area, and the Project would not adversely affect any historical resources or important examples of California history or prehistory. Implementation of **Mitigation Measure CUL-1** requires procedures for the inadvertent discovery of cultural resources and tribal cultural resources. Therefore, the Project would result in a less-than-significant impact with mitigation incorporated.

- b) **Less-than-Significant Impact with Mitigation Incorporated.** According to the County of Placer, there are no development projects within one mile of the Project site.

As described in this Initial Study, the Project would result in no impacts to agricultural and forest resources, mineral resources, population and housing, recreation, or utilities requiring expansion of service systems. Because no impacts would occur in these resource areas, the Project would not contribute to cumulative impacts associated with those topics.

As described in the preceding sections of this Initial Study, the Project would result in less-than-significant impacts to aesthetics, energy, geology and soils, GHG emissions, hazards and hazardous materials, hydrology and water quality, noise, public services, and transportation. The Project is consistent with the land use and zoning designations for the parcel and would not conflict with applicable land use policies or regulations.

As discussed in the Air Quality section, Project construction emissions would be well below applicable PCAPCD significance thresholds, and compliance with District fugitive dust control requirements would ensure construction-related air quality impacts remain less than significant. Therefore, the Project would not make a cumulatively considerable contribution to regional air quality impacts.

As discussed in the Biological Resources section, the Project site lacks suitable habitat for special-status plants, wetlands, riparian habitat, or other sensitive natural communities. Potential impacts to nesting birds would be reduced to a less-than-significant level through implementation of **Mitigation Measure BIO-1**. Therefore, the Project would not result in cumulatively considerable biological resource impacts.

As discussed in the Cultural Resources and Tribal Cultural Resources sections, investigations determined that the Project area exhibits low sensitivity for archaeological, historical, and tribal cultural resources. No significant cultural resources were identified that would be adversely affected by Project implementation, and compliance with applicable state laws governing inadvertent discoveries would further protect unknown resources. Implementation of **Mitigation Measure CUL-1** requires procedures for the inadvertent discovery of cultural resources and tribal cultural resources. Therefore, the Project would not result in cumulatively considerable cultural or tribal cultural resource impacts.

Considering the factors addressed above, the Project would not have a cumulatively considerable impact on any of the environmental factors evaluated in this Initial Study with mitigation incorporated. Therefore, cumulative impacts would be less than significant with mitigation incorporated and the Project would not result in cumulatively considerable impacts when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.

- c) **Less-than-Significant Impact.** As described in the preceding sections of this Initial Study, the Project would not result in impacts that would result in substantial adverse

effects on human beings, either directly or indirectly. Therefore, the Project would result in a less-than-significant impact.

APPENDIX A

AIR QUALITY SUPPORTING INFORMATION

Bear River Canal Emergency Pump Construction Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.1. Construction Emissions Compared Against Thresholds
 - 2.2. Construction Emissions by Year
 - 2.2.1. Total Construction Emissions by Year, Unmitigated
 - 2.2.2. Onsite Construction Emissions by Year, Unmitigated
 - 2.2.3. Offsite Construction Emissions by Year, Unmitigated
- 3. Construction Emissions Details
 - 3.1. Site Preparation (2027)
 - 3.1.1. Onsite - Unmitigated
 - 3.1.2. Offsite - Unmitigated
 - 3.2. Grading (2027)
 - 3.2.1. Onsite - Unmitigated
 - 3.2.2. Offsite - Unmitigated
 - 3.3. Equipment Installation (2027)

3.3.1. Onsite - Unmitigated

3.3.2. Offsite - Unmitigated

3.4. Paving (2027)

3.4.1. Onsite - Unmitigated

3.4.2. Offsite - Unmitigated

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.1. Construction Schedule

5.2. Off-Road Equipment

5.2.1. Unmitigated

5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.3. Land Use

8.4. Construction

8.4.1. Construction Phases

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bear River Canal Emergency Pump Construction
Construction Start Date	9/1/2027
Lead Agency	MVCWD
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30000
Precipitation (days)	49.6000
Location	38.98845080624008, -121.01013567232766
County	Placer-Mountain Counties
City	Unincorporated
Air District	Placer County APCD
Air Basin	Mountain Counties
TAZ	471
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.45

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
Other Asphalt Surfaces	2.03500	1000sqft	1.65000	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.67854	1.41338	12.2100	14.3756	0.02267	0.53897	8.24412	8.78309	0.49585	3.56293	4.05878	—	2,560.31	2,560.31	0.10137	0.02373	0.44406	2,570.27
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.16707	0.97105	8.25338	9.90715	0.01942	0.26132	0.00000	0.26132	0.24041	0.00000	0.24041	—	1,800.91	1,800.91	0.07305	0.01461	0.00000	1,807.09
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21369	0.18052	1.44207	1.73785	0.00314	0.05219	0.32788	0.38007	0.04801	0.14084	0.18885	—	311.909	311.909	0.01255	0.00271	0.00840	313.039

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03900	0.03295	0.26318	0.31716	0.00057	0.00952	0.05984	0.06936	0.00876	0.02570	0.03447	—	51.6402	51.6402	0.00208	0.00045	0.00139	51.8271

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.67854	1.41338	12.2100	14.3756	0.02267	0.53897	8.24412	8.78309	0.49585	3.56293	4.05878	—	2,560.31	2,560.31	0.10137	0.02373	0.44406	2,570.27
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.16707	0.97105	8.25338	9.90715	0.01942	0.26132	0.00000	0.26132	0.24041	0.00000	0.24041	—	1,800.91	1,800.91	0.07305	0.01461	0.00000	1,807.09
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.21369	0.18052	1.44207	1.73785	0.00314	0.05219	0.32788	0.38007	0.04801	0.14084	0.18885	—	311.909	311.909	0.01255	0.00271	0.00840	313.039
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.03900	0.03295	0.26318	0.31716	0.00057	0.00952	0.05984	0.06936	0.00876	0.02570	0.03447	—	51.6402	51.6402	0.00208	0.00045	0.00139	51.8271

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.63491	1.37378	12.1813	13.8677	0.02267	0.53897	8.14309	8.68206	0.49585	3.53925	4.03510	—	2,455.46	2,455.46	0.09960	0.01992	0.00000	2,463.88
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.16707	0.97105	8.25338	9.90715	0.01942	0.26132	0.00000	0.26132	0.24041	0.00000	0.24041	—	1,800.91	1,800.91	0.07305	0.01461	0.00000	1,807.09
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.21139	0.17845	1.44008	1.71310	0.00314	0.05219	0.32252	0.37471	0.04801	0.13958	0.18760	—	306.508	306.508	0.01243	0.00249	0.00000	307.560
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.03858	0.03257	0.26282	0.31264	0.00057	0.00952	0.05886	0.06838	0.00876	0.02547	0.03424	—	50.7460	50.7460	0.00206	0.00041	0.00000	50.9201

2.2.3. Offsite Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.05454	0.04949	0.03585	0.63496	0.00000	0.00000	0.12629	0.12629	0.00000	0.02960	0.02960	—	131.065	131.065	0.00220	0.00477	0.44406	132.985
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00231	0.00207	0.00199	0.02474	0.00000	0.00000	0.00536	0.00536	0.00000	0.00125	0.00125	—	5.40113	5.40113	0.00012	0.00022	0.00840	5.47843
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.00042	0.00038	0.00036	0.00452	0.00000	0.00000	0.00098	0.00098	0.00000	0.00023	0.00023	—	0.89422	0.89422	0.00002	0.00004	0.00139	0.90702

3. Construction Emissions Details

3.1. Site Preparation (2027)

3.1.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.41617	1.18998	10.4379	11.5743	0.01907	0.47275	—	0.47275	0.43493	—	0.43493	—	2,065.36	2,065.36	0.08378	0.01676	—	2,072.45
Dust From Material Movement	—	—	—	—	—	—	7.25776	7.25776	—	3.11115	3.11115	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01940	0.01630	0.14298	0.15855	0.00026	0.00648	—	0.00648	0.00596	—	0.00596	—	28.2927	28.2927	0.00115	0.00023	—	28.3898
Dust From Material Movement	—	—	—	—	—	—	0.09942	0.09942	—	0.04262	0.04262	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00354	0.00297	0.02609	0.02894	0.00005	0.00118	—	0.00118	0.00109	—	0.00109	—	4.68417	4.68417	0.00019	0.00004	—	4.70025
Dust From Material Movement	—	—	—	—	—	—	0.01814	0.01814	—	0.00778	0.00778	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

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

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03272	0.02970	0.02151	0.38098	0.00000	0.00000	0.07578	0.07578	0.00000	0.01776	0.01776	—	78.6389	78.6389	0.00132	0.00286	0.26644	79.7908
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00043	0.00039	0.00037	0.00464	0.00000	0.00000	0.00100	0.00100	0.00000	0.00024	0.00024	—	1.01271	1.01271	0.00002	0.00004	0.00157	1.02721
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00008	0.00007	0.00007	0.00085	0.00000	0.00000	0.00018	0.00018	0.00000	0.00004	0.00004	—	0.16767	0.16767	< 0.000005	0.00001	0.00026	0.17007
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2. Grading (2027)

3.2.1. Onsite - Unmitigated

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

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.63491	1.37378	12.1813	13.8677	0.02267	0.53897	—	0.53897	0.49585	—	0.49585	—	2,455.46	2,455.46	0.09960	0.01992	—	2,463.88
Dust From Material Movement	—	—	—	—	—	—	8.14309	8.14309	—	3.53925	3.53925	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04479	0.03764	0.33373	0.37994	0.00062	0.01477	—	0.01477	0.01358	—	0.01358	—	67.2728	67.2728	0.00273	0.00055	—	67.5037
Dust From Material Movement	—	—	—	—	—	—	0.22310	0.22310	—	0.09697	0.09697	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00817	0.00687	0.06091	0.06934	0.00011	0.00269	—	0.00269	0.00248	—	0.00248	—	11.1378	11.1378	0.00045	0.00009	—	11.1760

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Dust From Material Movement	—	—	—	—	—	—	0.04072	0.04072	—	0.01770	0.01770	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04363	0.03960	0.02868	0.50797	0.00000	0.00000	0.10103	0.10103	0.00000	0.02368	0.02368	—	104.852	104.852	0.00176	0.00381	0.35525	106.388
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00115	0.00104	0.00099	0.01237	0.00000	0.00000	0.00268	0.00268	0.00000	0.00063	0.00063	—	2.70057	2.70057	0.00006	0.00011	0.00420	2.73921
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00021	0.00019	0.00018	0.00226	0.00000	0.00000	0.00049	0.00049	0.00000	0.00011	0.00011	—	0.44711	0.44711	0.00001	0.00002	0.00070	0.45351

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3. Equipment Installation (2027)

3.3.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16707	0.97105	8.25338	9.90715	0.01942	0.26132	—	0.26132	0.24041	—	0.24041	—	1,800.91	1,800.91	0.07305	0.01461	—	1,807.09
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.16707	0.97105	8.25338	9.90715	0.01942	0.26132	—	0.26132	0.24041	—	0.24041	—	1,800.91	1,800.91	0.07305	0.01461	—	1,807.09
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Off-Road Equipment	0.12790	0.10642	0.90448	1.08572	0.00213	0.02864	—	0.02864	0.02635	—	0.02635	—	197.360	197.360	0.00801	0.00160	—	198.038
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02334	0.01942	0.16507	0.19814	0.00039	0.00523	—	0.00523	0.00481	—	0.00481	—	32.6752	32.6752	0.00133	0.00027	—	32.7874
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4. Paving (2027)

3.4.1. Onsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54404	0.45646	4.29849	6.48965	0.00940	0.16865	—	0.16865	0.15516	—	0.15516	—	991.534	991.534	0.04022	0.00804	—	994.937
Paving	0.86460	0.86460	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00745	0.00625	0.05888	0.08890	0.00013	0.00231	—	0.00231	0.00213	—	0.00213	—	13.5827	13.5827	0.00055	0.00011	—	13.6293
Paving	0.01184	0.01184	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00136	0.00114	0.01075	0.01622	0.00002	0.00042	—	0.00042	0.00039	—	0.00039	—	2.24876	2.24876	0.00009	0.00002	—	2.25648
Paving	0.00216	0.00216	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05454	0.04949	0.03585	0.63496	0.00000	0.00000	0.12629	0.12629	0.00000	0.02960	0.02960	—	131.065	131.065	0.00220	0.00477	0.44406	132.985
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00072	0.00065	0.00062	0.00773	0.00000	0.00000	0.00167	0.00167	0.00000	0.00039	0.00039	—	1.68785	1.68785	0.00004	0.00007	0.00262	1.71201
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00013	0.00012	0.00011	0.00141	0.00000	0.00000	0.00031	0.00031	0.00000	0.00007	0.00007	—	0.27944	0.27944	0.00001	0.00001	0.00043	0.28344
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

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)

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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
Site Preparation	Site Preparation	9/1/2027	9/7/2027	5.00000	5.00000	—
Grading	Grading	9/8/2027	9/21/2027	5.00000	10.00000	—
Equipment Installation	Building Construction	9/29/2027	11/23/2027	5.00000	40.0000	—
Paving	Paving	9/22/2027	9/28/2027	5.00000	5.00000	—

5.2. Off-Road Equipment

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Site Preparation	Rubber Tired Dozers	Diesel	Average	1.000000	7.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/ Backhoes	Diesel	Average	2.00000	7.00000	84.0000	0.37000
Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Equipment Installation	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	6.00000	84.0000	0.37000
Equipment Installation	Cranes	Diesel	Average	1.000000	6.00000	367.000	0.29000
Equipment Installation	Forklifts	Diesel	Average	1.000000	6.00000	82.0000	0.20000
Equipment Installation	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Equipment Installation	Welders	Diesel	Average	3.00000	8.00000	46.0000	0.45000
Paving	Tractors/Loaders/ Backhoes	Diesel	Average	1.000000	8.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	1.000000	6.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	1.000000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	1.000000	7.00000	36.0000	0.38000
Paving	Cement and Mortar Mixers	Diesel	Average	1.000000	6.00000	10.00000	0.56000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	Worker	7.50000	14.3000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	10.00000	14.3000	LDA,LDT1,LDT2
Grading	Vendor	—	8.80000	HHDT,MHDT
Grading	Hauling	0.00000	20.0000	HHDT
Grading	Onsite truck	—	—	HHDT
Equipment Installation	Worker	0.00000	14.3000	LDA,LDT1,LDT2
Equipment Installation	Vendor	0.00000	8.80000	HHDT,MHDT
Equipment Installation	Hauling	0.00000	20.0000	HHDT
Equipment Installation	Onsite truck	—	—	HHDT
Paving	Worker	12.5000	14.3000	LDA,LDT1,LDT2
Paving	Vendor	—	8.80000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation	—	—	4.68750	0.00000	0.00000
Grading	—	—	10.00000	0.00000	0.00000
Equipment Installation	0.00000	0.00000	0.00000	0.00000	1.65000

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Equipment Installation	Other Asphalt Surfaces	1.65000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2027	0.00000	203.983	0.03300	0.00400

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.1800	annual days of extreme heat
Extreme Precipitation	15.6000	annual days with precipitation above 20 mm

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Climate Hazard	Result for Project Location	Unit
Sea Level Rise	—	meters of inundation depth
Wildfire	11.2300	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	3	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	0	0	0	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	76.9384
AQ-PM	6.26011
AQ-DPM	8.06472
Drinking Water	10.7031
Lead Risk Housing	15.8412
Pesticides	0.00000
Toxic Releases	3.81345
Traffic	15.2500
Effect Indicators	—
CleanUp Sites	25.9239
Groundwater	22.1152
Haz Waste Facilities/Generators	0.00000
Impaired Water Bodies	23.8765
Solid Waste	83.2761
Sensitive Population	—
Asthma	7.34048
Cardio-vascular	20.1770
Low Birth Weights	26.6359
Socioeconomic Factor Indicators	—

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Indicator	Result for Project Census Tract
Education	23.6649
Housing	55.1331
Linguistic	0.92029
Poverty	35.7538
Unemployment	39.2113

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.95098165
Employed	39.30450404
Median HI	69.20313102
Education	—
Bachelor's or higher	66.11061209
High school enrollment	100
Preschool enrollment	17.59271141
Transportation	—
Auto Access	83.51084306
Active commuting	39.39432824
Social	—

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Indicator	Result for Project Census Tract
2-parent households	71.55139228
Voting	95.99640703
Neighborhood	—
Alcohol availability	84.9993584
Park access	19.29937123
Retail density	8.674451431
Supermarket access	24.67599127
Tree canopy	99.66636725
Housing	—
Homeownership	98.19068395
Housing habitability	89.93968946
Low-inc homeowner severe housing cost burden	41.53727704
Low-inc renter severe housing cost burden	68.35621712
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	88.86179905
Arthritis	0.0
Asthma ER Admissions	58.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Indicator	Result for Project Census Tract
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	76.1
Cognitively Disabled	41.3
Physically Disabled	43.7
Heart Attack ER Admissions	78.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	52.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	26.6
SLR Inundation Area	0.0
Children	71.1

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Indicator	Result for Project Census Tract
Elderly	6.8
English Speaking	95.5
Foreign-born	1.7
Outdoor Workers	31.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.5
Traffic Density	15.0
Traffic Access	23.0
Other Indices	—
Hardship	18.2
Other Decision Support	—
2016 Voting	95.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00000
Healthy Places Index Score for Project Location (b)	76.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Equipment area, pipeline, access road, and other ancillary equipment
Construction: Construction Phases	Approximately 12 weeks of construction
Operations: Architectural Coatings	none
Operations: Landscape Equipment	none

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	0.04672	1.65000

Bear River Canal Emergency Pump Construction Detailed Report, 9/11/2026

Model Parameter	Units	Default Value	New Value
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Site Preparation	Site Preparation	Start Date	9/30/2027	9/1/2027
Site Preparation	Site Preparation	End Date	10/2/2027	9/7/2027
Site Preparation	Site Preparation	Work Days per Phase	2.00000	5.00000
Grading	Grading	Start Date	10/3/2027	9/8/2027
Grading	Grading	End Date	10/8/2027	9/21/2027
Grading	Grading	Work Days per Phase	4.00000	10.00000
Paving	Paving	Start Date	7/16/2028	9/22/2027
Paving	Paving	End Date	7/30/2028	9/28/2027
Paving	Paving	Work Days per Phase	10.00000	5.00000

Bear River Canal Emergency Pump Detailed Report

Table of Contents

- 1. Basic Project Information
 - 1.1. Basic Project Information
 - 1.2. Land Use Types
 - 1.3. User-Selected Emission Reduction Measures by Emissions Sector
- 2. Emissions Summary
 - 2.3. Operations Emissions Compared Against Thresholds
 - 2.4. Operations Emissions by Sector, Unmitigated
- 4. Operations Emissions Details
 - 4.1. Mobile Emissions by Land Use
 - 4.1.1. Unmitigated
 - 4.2. Energy
 - 4.2.1. Electricity Emissions By Land Use - Unmitigated
 - 4.2.3. Natural Gas Emissions By Land Use - Unmitigated
 - 4.3. Area Emissions by Source
 - 4.3.1. Unmitigated
 - 4.4. Water Emissions by Land Use
 - 4.4.1. Unmitigated
 - 4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

8.1. Justifications

8.5. Operations

8.5.2. Area Sources

8.5.2.4. Landscape Equipment

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Bear River Canal Emergency Pump
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.30000
Precipitation (days)	49.6000
Location	38.98845080624008, -121.01013567232766
County	Placer-Mountain Counties
City	Unincorporated
Air District	Placer County APCD
Air Basin	Mountain Counties
TAZ	471
EDFZ	4
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.45

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
User Defined Linear	0.18000	Mile	1.60000	0.00000	0.00000	—	—	—
Other Asphalt Surfaces	2.03500	1000sqft	0.04672	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.3. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.0120	14.5709	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	16.0120	14.5709	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Unmit.	0.18294	0.16649	0.46495	0.48916	0.00080	0.02447	0.00000	0.02447	0.02447	0.00000	0.02447	0.00000	85.1014	85.1014	0.00342	0.00067	0.00000	85.3855
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.03339	0.03038	0.08485	0.08927	0.00015	0.00447	0.00000	0.00447	0.00447	0.00000	0.00447	0.00000	14.0895	14.0895	0.00057	0.00011	0.00000	14.1365

2.4. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	16.0118	14.5707	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Total	16.0120	14.5709	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	16.0118	14.5707	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Total	16.0120	14.5709	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	0.18278	0.16633	0.46495	0.48916	0.00080	0.02447	0.00000	0.02447	0.02447	0.00000	0.02447	0.00000	85.1014	85.1014	0.00342	0.00067	0.00000	85.3855
Total	0.18294	0.16649	0.46495	0.48916	0.00080	0.02447	0.00000	0.02447	0.02447	0.00000	0.02447	0.00000	85.1014	85.1014	0.00342	0.00067	0.00000	85.3855
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Area	0.00003	0.00003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Water	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Waste	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Stationary	0.03336	0.03036	0.08485	0.08927	0.00015	0.00447	0.00000	0.00447	0.00447	0.00000	0.00447	0.00000	14.0895	14.0895	0.00057	0.00011	0.00000	14.1365

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Total	0.03339	0.03038	0.08485	0.08927	0.00015	0.00447	0.00000	0.00447	0.00447	0.00000	0.00447	0.00000	14.0895	14.0895	0.00057	0.00011	0.00000	14.1365

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.3. Area Emissions by Source

4.3.1. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00016	0.00016	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.00003	0.00003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.00000	0.00000	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00003	0.00003	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

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

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	10.2129	9.29377	25.9792	23.7003	0.04467	1.36732	0.00000	1.36732	1.36732	0.00000	1.36732	0.00000	4,755.01	4,755.01	0.19092	0.03725	0.00000	4,770.88
Fire Pump	5.79887	5.27697	14.7509	19.1503	0.02536	0.77636	0.00000	0.77636	0.77636	0.00000	0.77636	0.00000	2,699.88	2,699.88	0.10840	0.02115	0.00000	2,708.89
Total	16.0118	14.5707	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	10.2129	9.29377	25.9792	23.7003	0.04467	1.36732	0.00000	1.36732	1.36732	0.00000	1.36732	0.00000	4,755.01	4,755.01	0.19092	0.03725	0.00000	4,770.88
Fire Pump	5.79887	5.27697	14.7509	19.1503	0.02536	0.77636	0.00000	0.77636	0.77636	0.00000	0.77636	0.00000	2,699.88	2,699.88	0.10840	0.02115	0.00000	2,708.89
Total	16.0118	14.5707	40.7301	42.8506	0.07003	2.14369	0.00000	2.14369	2.14369	0.00000	2.14369	0.00000	7,454.89	7,454.89	0.29932	0.05840	0.00000	7,479.77
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.02128	0.01936	0.05412	0.04938	0.00009	0.00285	0.00000	0.00285	0.00285	0.00000	0.00285	0.00000	8.98682	8.98682	0.00036	0.00007	0.00000	9.01683
Fire Pump	0.01208	0.01099	0.03073	0.03990	0.00005	0.00162	0.00000	0.00162	0.00162	0.00000	0.00162	0.00000	5.10269	5.10269	0.00020	0.00004	0.00000	5.11972
Total	0.03336	0.03036	0.08485	0.08927	0.00015	0.00447	0.00000	0.00447	0.00447	0.00000	0.00447	0.00000	14.0895	14.0895	0.00057	0.00011	0.00000	14.1365

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

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

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Total all Land Uses	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Other Asphalt Surfaces	Wood Fireplaces	0	0
Other Asphalt Surfaces	Gas Fireplaces	0	0

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Other Asphalt Surfaces	Propane Fireplaces	0	0
Other Asphalt Surfaces	Electric Fireplaces	0	0
Other Asphalt Surfaces	No Fireplaces	0	0
Other Asphalt Surfaces	Conventional Wood Stoves	0	0
Other Asphalt Surfaces	Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Non-Catalytic Wood Stoves	0	0
Other Asphalt Surfaces	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0.00000	0.00000	0.00000	0.00000	122.100

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	0.00000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Other Asphalt Surfaces	0.00000	203.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Other Asphalt Surfaces	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Other Asphalt Surfaces	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.000000	24.0000	100.0000	236.000	0.73000
Fire Pump	Diesel	1.000000	24.0000	100.0000	134.000	0.73000

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
--------------------------	----------------------	---------------	-------------

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
--------------------	---------------	-------------

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	30.1800	annual days of extreme heat
Extreme Precipitation	15.6000	annual days with precipitation above 20 mm
Sea Level Rise	—	meters of inundation depth
Wildfire	11.2300	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about $\frac{3}{4}$ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	1	1	1	2
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Snowpack Reduction	1	1	1	2
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	76.9384
AQ-PM	6.26011
AQ-DPM	8.06472
Drinking Water	10.7031
Lead Risk Housing	15.8412
Pesticides	0.00000

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Indicator	Result for Project Census Tract
Toxic Releases	3.81345
Traffic	15.2500
Effect Indicators	—
CleanUp Sites	25.9239
Groundwater	22.1152
Haz Waste Facilities/Generators	0.00000
Impaired Water Bodies	23.8765
Solid Waste	83.2761
Sensitive Population	—
Asthma	7.34048
Cardio-vascular	20.1770
Low Birth Weights	26.6359
Socioeconomic Factor Indicators	—
Education	23.6649
Housing	55.1331
Linguistic	0.92029
Poverty	35.7538
Unemployment	39.2113

7.2. Healthy Places Index Scores

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

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	73.95098165
Employed	39.30450404
Median HI	69.20313102
Education	—
Bachelor's or higher	66.11061209
High school enrollment	100
Preschool enrollment	17.59271141
Transportation	—
Auto Access	83.51084306
Active commuting	39.39432824
Social	—
2-parent households	71.55139228
Voting	95.99640703
Neighborhood	—
Alcohol availability	84.9993584
Park access	19.29937123
Retail density	8.674451431
Supermarket access	24.67599127
Tree canopy	99.66636725
Housing	—

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Indicator	Result for Project Census Tract
Homeownership	98.19068395
Housing habitability	89.93968946
Low-inc homeowner severe housing cost burden	41.53727704
Low-inc renter severe housing cost burden	68.35621712
Uncrowded housing	96.93314513
Health Outcomes	—
Insured adults	88.86179905
Arthritis	0.0
Asthma ER Admissions	58.2
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	76.1
Cognitively Disabled	41.3
Physically Disabled	43.7
Heart Attack ER Admissions	78.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0

Bear River Canal Emergency Pump Detailed Report, 8/20/2026

Indicator	Result for Project Census Tract
Obesity	0.0
Pedestrian Injuries	52.4
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	26.6
SLR Inundation Area	0.0
Children	71.1
Elderly	6.8
English Speaking	95.5
Foreign-born	1.7
Outdoor Workers	31.4
Climate Change Adaptive Capacity	—
Impervious Surface Cover	99.5
Traffic Density	15.0
Traffic Access	23.0
Other Indices	—

Indicator	Result for Project Census Tract
Hardship	18.2
Other Decision Support	—
2016 Voting	95.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	6.00000
Healthy Places Index Score for Project Location (b)	76.0000
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Operations: Architectural Coatings	none
Operations: Landscape Equipment	none

8.5. Operations

8.5.2. Area Sources

8.5.2.4. Landscape Equipment

Model Parameter	Units	Default Value	New Value
Summer Days	day/yr	180.000	0.00000

APPENDIX B

BIOLOGICAL RESOURCES ASSESSMENT

The following was provided by Stringer Biological Consulting:

Stringer Biological Consulting, Inc. conducted a desktop review and biological reconnaissance survey in support of the Meadow Vista County Water District Emergency Pump Project in order to evaluate the potential for special-status species or habitat for special-status species to occur in the project site. The proposed project involves building a small site about 50' x 50' adjacent to the Boardman Canal in Meadow Vista, California to support an emergency pump. There would be some above ground piping with a meter and isolation valves and about 200 feet of below grade piping from the site up to the Water Treatment Plant. There would be a manhole that would act as sump and would be connected to the canal via an underground pipe about 50' long.

Our study area included the 50x50 site and the proposed pipeline to the existing water treatment plant as well as immediately adjacent areas. SBC conducted a desktop review of the US Fish and Wildlife Service Information for Planning and Conservation and the California Department of Fish and Wildlife California Natural Diversity Database to determine whether any special-status species had been previously documented on or adjacent to the site as well as compile a list of regionally-occurring special-status species with the potential to occur in the project site or be impacted by the proposed project. The CNDDDB search consisted of a record search of the following four USGS 7.5-minute topographic quads: Auburn, Lake Combie, Colfax, and Greenwood. The biological reconnaissance survey consisted of a pedestrian survey of the study area. The entire study area was walked, and plant and animal species were recorded. Representative site photos were also taken.

The study area is located within a rural residential area and is generally surrounded by large residential parcels as well as the existing water treatment plant. The site of the proposed pump is undeveloped and comprised of Montane Hardwood-Conifer habitat. The project site contains the invasive French broom (*Genista monspessulana*), which appears to have been treated in the past, and the understory is relatively disturbed. The dominant tree species in the project site consist of Ponderosa pine (*Pinus ponderosa*), California black oak (*Quercus kelloggii*), canyon live oak (*Quercus chrysolepis*), and Pacific madrone (*Arbutus menziesii*). The understory contains native shrubs including white-leaf manzanita (*Arctostaphylos viscida*), poison oak (*Toxicodendron diversilobum*), toyon (*Heteromeles arbutifolia*), and vines including honeysuckle (*Lonicera hispidula*) as well as grasses and forbs. Several common species of birds were observed in the project site, although no active nests were observed.

No special-status species were observed in or adjacent to the project site and none would be expected to occur in the project site based on the site conditions and surroundings. One special-status plant species, Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeae*), has been documented adjacent to the site. No other special-status species have been documented in the project site or within a 0.5-mile radius. The following species have been documented within approximately a 2-mile radius of the site: Brandegee's clarkia, valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and foothill yellow-legged frog (*Rana boylei* pop. 3). No elderberry shrubs are present in the project site and therefore there is no habitat for the valley elderberry longhorn beetle and no potential for this species to occur. There are no water bodies that provide suitable habitat for foothill yellow-legged frog in or adjacent to the project site and also no potential for this species to occur. Additionally, within approximately 5 miles, there are records for oval-leaved viburnum (*Viburnum ellipticum*), Butte County fritillary (*Fritillaria eastwoodiae*), Jepson's onion (*Allium jepsonii*), porcupine (*Erethizon dorsatum*), Townsend's big-eared bat (*Corynorhinus townsendii*), dubious pea (*Lathyrus sulphureus* var. *argillaceus*), and northwestern pond turtle (*Actinemys marmorata*). No special-status plant species were observed in the project site and the site is generally disturbed and not suitable for rare plants. Rare plants in the region generally occur on specialized soils (serpentine, gabbro) or wetlands/vernal pools which are not present or in chaparral or woodland habitats. The project site contains forested habitat but is fairly disturbed and is a small patch of habitat surrounded by disturbance. Habitat is not present for any of the special-status animal species with occurrences within 5 miles. Regionally-occurring special-status animal species require large tracts of relatively undisturbed forested habitats or perennial water sources that are not present. The Boardman Canal is not suitable habitat for foothill yellow-legged frog, western pond turtle, or other rare aquatic species as it is a concrete lined canal with swiftly moving water and lacks suitable substrate for egg-laying.

In summary, the project site lacks suitable habitat for special-status plant or animal species, and none were observed in the project site or immediately adjacent areas during the biological reconnaissance survey. We recommend that a survey be conducted for nesting birds prior to construction if construction activities were to occur during the nesting bird season (February through August).

There is one very large canyon live oak (*Quercus chrysolepis*) tree in the project site with a dbh of 61 inches. The health/vigor of the tree is given an overall rating of "Fair", because although it has quite a few defects, it has average health and vigor, and it is not expected to die in the near term (within 5 years). However, it is considered a potential failure hazard, primarily due to the risk of branch/limb failure, and I recommend removal of the tree **if** the project would result in persons or property being introduced within close proximity to the

tree (within a distance where branches/limbs or the tree itself could fall onto persons or property). The tree is overmature to senescent and has significant deadwood, decay, and evidence of prior branch/limb failures. I expect that it will continue to lose branches/limbs, some of which are quite large, and could cause significant damage to persons or property if within striking distance. There is also a potential of whole tree failure, although this is less likely than branch/limb failure at present. The rest of the trees are relatively small canyon live oak, sugar pine, madrone, black oak, and ponderosa pine ranging from roughly 2 to 10 inches dbh.





Meadow Vista Water District Project - Plant Species Observed in the Study Area (July 20, 2026)

Family	Species Name	Common Name
Native		
Anacardiaceae	<i>Toxicodendron diversilobum</i>	Poison oak
Caprifoliaceae	<i>Lonicera hispidula</i>	honeysuckle
Ericaceae	<i>Arbutus menziesii</i>	Pacific madrone
	<i>Arctostaphylos viscida</i>	White-leaf manzanita
Fagaceae	<i>Quercus chrysolepis</i>	Canyon live oak
	<i>Quercus kelloggii</i>	California black oak
Pinaceae	<i>Pinus lambertiana</i>	Sugar pine
	<i>Pinus ponderosa</i>	Ponderosa pine
Rosaceae	<i>Heteromeles arbutifolia</i>	Toyon
Non-native		
Apiaceae	<i>Torilis arvensis</i>	Common hedge-parsley
Apocynaceae	<i>Vinca major</i>	Greater periwinkle
Asteraceae	<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian thistle
	<i>Centaurea solstitialis</i>	Yellow star-thistle
	<i>Sonchus asper</i>	Prickly sow thistle
Fabaceae	<i>Genista monspessulana</i>	French broom
Lamiaceae	<i>Marrubium vulgare</i>	Horehound
Plantaginaceae	<i>Kickxia elatine</i>	
Poaceae	<i>Aegilops triuncialis</i>	Barbed goat grass
	<i>Aira caryophyllea</i>	Silver European hairgrass
	<i>Avena fatua</i>	Wild oat
	<i>Cynosurus echinatus</i>	Dogtail grass
	<i>Gastridium phleoides</i>	Nit grass
Polygonaceae	<i>Rumex pulcher</i>	Fiddle dock
Rosaceae	<i>Rubus armeniacus</i>	Himalayan blackberry

Meadow Vista Water District Project – Wildlife Species Observed in the Study Area (July 20, 2026)

Family	Scientific Name	Common Name
Birds		
Aegithalidae	<i>Psaltriparus minimus</i>	American bushtit
Corvidae	<i>Corvus corax</i>	Common raven
Fringillidae	<i>Haemorhous mexicanus</i>	House finch
	<i>Spinus psaltria</i>	Lesser goldfinch
Passerellidae	<i>Junco hyemalis</i>	Dark eyed junco
	<i>Melospiza crissalis</i>	California towhee
	<i>Pipilo maculatus</i>	Spotted towhee
	<i>Turdus migratorius</i>	American robin
Picidae	<i>Dryobates nuttalli</i>	Nuttall's woodpecker
	<i>Melanerpes formicivorus</i>	Acorn woodpecker
Trochillidae	<i>Calypte anna</i>	Anna's hummingbird
Troglodytidae	<i>Thryomanes bewickii</i>	Bewick's wren
Tyrannidae	<i>Empidonax difficilis</i>	Western flycatcher
Mammals		
Sciuridae	<i>Sciurus griseus</i>	Western gray squirrel



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: BIOS selection

Map Index Number: A0445
Key Quad: Auburn (3812181)
Occurrence Number: 44
EO Index: 102007
Element Code: ABNKD06071
Occurrence Last Updated: 2016-06-10

Scientific Name: *Falco peregrinus anatum*
Common Name: American peregrine falcon
Listing Status: Federal: Delisted
* SENSITIVE * State: Delisted
Rare Plant Rank:
CNDDDB Element Ranks: Global: G4T4
State: S3S4
Other Lists: CDF_S-Sensitive

General Habitat: NEAR WETLANDS, LAKES, RIVERS, OR OTHER WATER; ON CLIFFS, BANKS, DUNES, MOUNDS; ALSO, HUMAN-MADE STRUCTURES.
Micro Habitat: NEST CONSISTS OF A SCRAPE OR A DEPRESSION OR LEDGE IN AN OPEN SITE.

Last Date Observed: 2015-03-19
Last Survey Date: 2015-03-19
Owner/Manager:
Presence: Presumed Extant
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Good
Trend: Unknown

Location:
SENSITIVE LOCATION INFORMATION SUPPRESSED.

Detailed Location:
PLEASE CONTACT THE CALIFORNIA NATURAL DIVERSITY DATABASE, CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE, FOR MORE INFORMATION: (916) 322-2493

Ecological:
CLIFFS IN OLD LIMESTONE QUARRY NOW USED FOR RECREATION; ROCK CLIMBERS UNAWARE OF BIRDS WERE CLIMBING CLOSE TO EYRIE ON DATE SURVEYED. ACTIVE QUARRY OPERATIONS IMMEDIATELY SOUTH.

Threats:

General:

PLSS: Accuracy: 80 meters Area (acres): 5
UTM: Latitude/Longitude: Elevation (feet): 1,161

County Summary: Quad Summary:
El Dorado Auburn (3812181)

Sources:

ALV15F0002 ALVARADO, C. - FIELD SURVEY FORM FOR FALCO PEREGRINUS ANATUM 2015-04-19



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number: 94742
Key Quad: Lake Combie (3912111)
Occurrence Number: 233
EO Index: 95859
Element Code: IICOL48011
Occurrence Last Updated: 2014-12-18

Scientific Name: *Desmocerus californicus dimorphus*
Common Name: valley elderberry longhorn beetle
Listing Status: **Federal:** Threatened
State: None
Rare Plant Rank:
Other Lists:
CNDDB Element Ranks: **Global:** G3T3
State: S3

General Habitat:
OCCURS ONLY IN THE CENTRAL VALLEY OF CALIFORNIA, IN ASSOCIATION WITH BLUE ELDERBERRY (SAMBUCUS MEXICANA).
Micro Habitat:
PREFERS TO LAY EGGS IN ELDERBERRIES 2-8 INCHES IN DIAMETER; SOME PREFERENCE SHOWN FOR "STRESSED" ELDERBERRIES.

Last Date Observed: 2010-03-10
Last Survey Date: 2010-03-10
Owner/Manager: PVT
Presence: Presumed Extant
Occurrence Type: Natural/Native occurrence
Occurrence Rank: Fair
Trend: Unknown

Location:
N SIDE OF SHIMP RD, ABOUT 0.3 MILE NE OF INTERSECTION WITH RED BUD LN, HALF WAY BETWEEN MEADOW VISTA & APPLGATE.

Detailed Location:
MAPPED TO PROVIDED COORDINATES. PROVIDED LOCATION DESCRIPTION WAS "ALONG PG&E'S BEAR RIVER CANAL."

Ecological:
LARGE ELDERBERRY LOCATED ALONG BEAR RIVER CANAL IN A RIPARIAN AREA. MIXED THICKET OF WILLOWS AND BLACKBERRY ALONG THE EDGE OF A CLEARED PATH ON THE CANAL. INDETERMINATE SOILS. SURROUNDING LAND USE INCLUDED HIKING TRAIL AND PRIVATE LANDS.

Threats:
TRIMMING (ELDERBERRY SHOWED SIGNS OF PRUNNING) AND RECREATIONAL USE OF THE AREA.

General:
14 EXIT HOLES (NO VELB) FOUND ON 10 MAR 2010.

PLSS: T13N, R09E, Sec. 06, SE (M) **Accuracy:** 80 meters **Area (acres):** 0
UTM: Zone-10 N4318741 E672514 **Latitude/Longitude:** 39.00069 / -121.00778 **Elevation (feet):** 1,875

County Summary: Placer
Quad Summary: Lake Combie (3912111)

Sources:
KEN10F0003 KENT, R. (HDR, INC.) - FIELD SURVEY FORM FOR DESMOCERUS CALIFORNICUS DIMORPHUS 2010-03-10



Occurrence Report

California Department of Fish and Wildlife

California Natural Diversity Database



Map Index Number:	78918	EO Index:	79892
Key Quad:	Auburn (3812181)	Element Code:	PDONA05053
Occurrence Number:	88	Occurrence Last Updated:	2010-06-09

Scientific Name:	<i>Clarkia biloba ssp. brandegeeeae</i>	Common Name:	Brandegee's clarkia
Listing Status:	Federal: None State: None	Rare Plant Rank:	4.2
CNDDB Element Ranks:	Global: G4G5T4 State: S4	Other Lists:	SB_UCSC-UC Santa Cruz

General Habitat:	Micro Habitat:
CHAPARRAL, CISMONTANE WOODLAND, LOWER MONTANE CONIFEROUS FOREST.	OFTEN IN ROADCUTS. 75-915 M.

Last Date Observed:	2009-06-01	Occurrence Type:	Natural/Native occurrence
Last Survey Date:	2009-06-01	Occurrence Rank:	Fair
Owner/Manager:	PVT	Trend:	Unknown
Presence:	Presumed Extant		

Location:
BETWEEN I-80 AND MEADOW VISTA, ABOUT 0.75 AIR MILE NORTH OF LAKE THEODORE.

Detailed Location:
ABOUT 3000 SQ FT AREA WITHIN ABOUT 40 FT OF BEAR RIVER CANAL. MAPPED ACCORDING TO 2009 KENT UTM COORDINATES IN THE SW 1/4 OF THE SE 1/4 OF SECTION 7.

Ecological:
SMALL BLUE OAK WOODLAND WITHIN MIXED CONIFEROUS FOREST. NW SLOPE WITH NON-NATIVE AND NATIVE GRASSES, BLUE OAK, GRAY PINE, CEANOTHUS SPP., CALIFORNIA BUCKEYE, AND MANZANITA; 35-60 DEG SLOPE.

Threats:
THREATENED BY WEEDY NON-NATIVE SPECIES AND POTENTIAL HERBICIDE SPRAYING. WITHIN FEET OF AEGILOPS TRIUNCIALIS.

General:
50-100 PLANTS OBSERVED IN 2009.

PLSS:	T13N, R09E, Sec. 07, SE (M)	Accuracy:	80 meters	Area (acres):	0
UTM:	Zone-10 N4317184 E672105	Latitude/Longitude:	38.98675 / -121.01290	Elevation (feet):	1,850

County Summary:	Quad Summary:
Placer	Auburn (3812181)

Sources:
KEN09F0023 KENT, R. (HDR, INC.) - FIELD SURVEY FORM FOR CLARKIA BILOBA SSP. BRANDEGEEAE 2009-06-01



Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database



Query Criteria: Quad IS (Auburn (3812181) OR Lake Combie (3912111) OR Colfax (3912018) OR Greenwood (3812088))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American bumble bee <i>Bombus pensylvanicus</i>	IIHYM24260	None	None	G3G4	S2	
American peregrine falcon <i>Falco peregrinus anatum</i>	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
An andrenid bee <i>Andrena subapasta</i>	IIHYM35210	None	None	G1G2	S1S2	
Brandegee's clarkia <i>Clarkia biloba ssp. brandegeeeae</i>	PDONA05053	None	None	G4G5T4	S4	4.2
Butte County fritillary <i>Fritillaria eastwoodiae</i>	PMLIL0V060	None	None	G3Q	S3	3.2
coast horned lizard <i>Phrynosoma blainvillii</i>	ARACF12100	None	None	G4	S4	SSC
Cosumnes stripetail <i>Cosumnoperla hypocrena</i>	IIPLE23020	None	None	G2	S2	
dubious pea <i>Lathyrus sulphureus var. argillaceus</i>	PDFAB25101	None	None	G5T1T2Q	S1S2	3
Fisher <i>Pekania pennanti</i>	AMAJF01020	None	None	G5	S2S3	SSC
foothill yellow-legged frog - north Sierra DPS <i>Rana boylei pop. 3</i>	AAABH01053	None	Threatened	G3T2	S2	
Galile's cave harvestman <i>Banksula galilei</i>	ILARA14040	None	None	G1	S1	
Jepson's onion <i>Allium jepsonii</i>	PMLIL022V0	None	None	G2	S2	1B.2
Morrison bumble bee <i>Bombus morrisoni</i>	IIHYM24460	None	None	G3	S1S2	
North American porcupine <i>Erethizon dorsatum</i>	AMAFJ01010	None	None	G5	S3	
northwestern pond turtle <i>Actinemys marmorata</i>	ARAAD02031	Proposed Threatened	None	G2	SNR	SSC
obscure bumble bee <i>Bombus caliginosus</i>	IIHYM24380	None	None	G2G3	S1S2	
oval-leaved viburnum <i>Viburnum ellipticum</i>	PDCPR07080	None	None	G4G5	S3	2B.3
Red Hills soaproot <i>Chlorogalum grandiflorum</i>	PMLIL0G020	None	None	G3	S3	4.2
Sierra blue grass <i>Poa sierrae</i>	PMPOA4Z310	None	None	G3	S3	1B.3



Selected Elements by Common Name
California Department of Fish and Wildlife
California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
tight coin (=Yates' snail) <i>Ammonitella yatesii</i>	IMGASB0010	None	None	G1	S1	
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	AMACC08010	None	None	G4	S2	SSC
valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	IICOL48011	Threatened	None	G3T3	S3	
western bumble bee <i>Bombus occidentalis</i>	IIHYM24252	None	Candidate Endangered	G3	S1	
western pearlshell <i>Margaritifera falcata</i>	IMBIV27020	None	None	G3G4	S1S2	

Record Count: 24

Contents

Active Layer: California Natural Diversity Database (CNDDDB) Commercial [ds85]

Graphics Layers

SELECTED California Natural Diversity Database (CNDDDB) Commercial [ds85]

External Layers

BIOS Layers

California Natural Diversity Database (CNDDDB) Commercial [ds85]

Plant (80m)

Plant (specific)

Plant (non-specific)

Plant (circular)

Animal (80m)

Animal (specific)

Animal (non-specific)

Animal (circular)

Terrestrial Comm. (80m)

Terrestrial Comm. (specific)

Terrestrial Comm. (non-specific)

Terrestrial Comm. (circular)

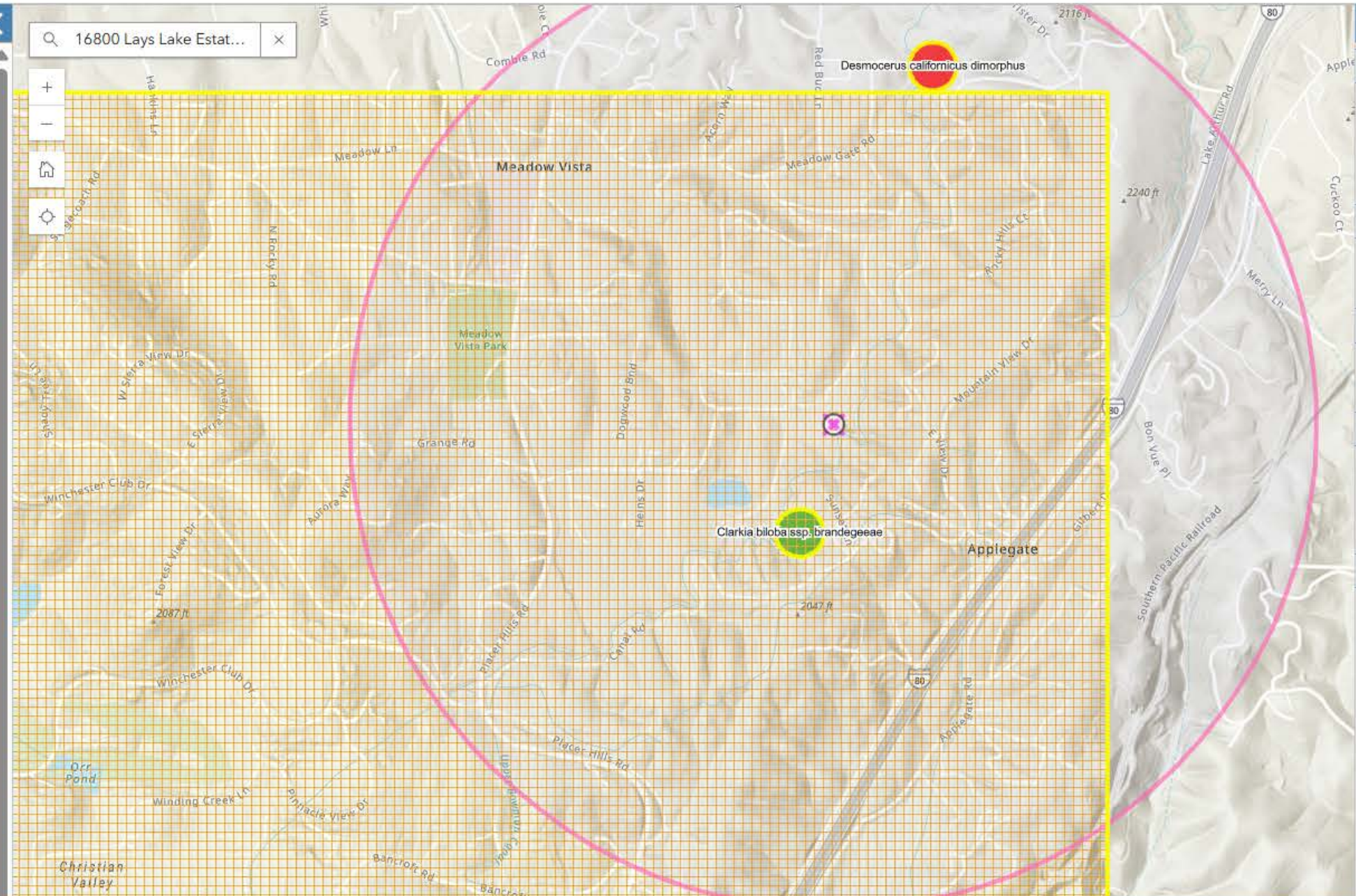
Aquatic Comm. (80m)

Aquatic Comm. (specific)

Aquatic Comm. (non-specific)

Aquatic Comm. (circular)

Multiple (80m)



Select By Location

Draw a shape to select by:

Select by Shape

Or Enter Coordinates

35.44,-119.65

Select By Coordinates

Select By Features

--SELECTED FEATURES--

Add Optional Buffer

1 miles

Apply Buffer

Clear

Clear Graphics

Clear Selection

California Natural Diversity Database (CNDDDB) Commercial [ds85] (3 features)																										
ZoomTo	Scientific_Name	Common_Name	Element_Code	Occ_Number	MAPNDX	EONDX	Key_Quad_Code	Key_Quad_Name	Key_County_Code	Accuracy	Presence	Occ_Type	Occ_Rank	Sensitive	Site_Date	Elm_Date	Owner_Management	Federal_Status	State_Status	Global_Rank	State_Rank	Rare_Plant_Rank	CDFW_Status	Other_Status	Symbology	Taxon_Group
1	45940	Clarkia biloba ssp. brandegeeeae	PDONA05053	88	78918	79892	3812181	Auburn	PLA	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20090601	20090601	PVT	None	None	G4G5T4	S4	4.2		SB_UCSC	101	Dicots
2	104015	Falco peregrinus anatum	ABNKD06071	44	A0445	102007	3812181	Auburn	ELD	80 meters	Presumed Extant	Natural/Native occurrence	Good	Y	20150319	20150319	-	Delisted	Delisted	G4T4	S3S4			CDF_S	999	Birds
3	65495	Desmocerus californicus dimorphus	IICOL48011	233	94742	95859	3912111	Lake Combie	PLA	80 meters	Presumed Extant	Natural/Native occurrence	Fair	N	20100310	20100310	PVT	Threatened	None	G3T3	S3				201	Insects

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Placer County, California



Local office

Sacramento Fish And Wildlife Office

☎ (916) 414-6600
📠 (916) 414-6713

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Gray wolf Canis lupus There is final critical habitat for this species. https://ecos.fws.gov/ecp/species/4488	Endangered

Reptiles

NAME	STATUS
Northwestern Pond Turtle Actinemys marmorata Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1111	Proposed Threatened

Amphibians

NAME	STATUS
California red-legged frog Rana draytonii Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2891	Threatened

Insects

NAME	STATUS
Monarch butterfly Danaus plexippus	Proposed Threatened
Wherever found	
There is proposed critical habitat for this species. Your location does not overlap the critical habitat.	
https://ecos.fws.gov/ecp/species/9743	

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act² and the Migratory Bird Treaty Act (MBTA)¹. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

There are Bald Eagles and/or Golden Eagles in your [project](#) area.

Measures for Proactively Minimizing Eagle Impacts

For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the [National Bald Eagle Management Guidelines](#). You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#).

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

If disturbance or take of eagles cannot be avoided, an [incidental take permit](#) may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the [Do I Need A Permit Tool](#). For assistance making this determination for golden eagles, please consult with the appropriate Regional [Migratory Bird Office](#) or [Ecological Services Field Office](#).

Ensure Your Eagle List is Accurate and Complete

If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

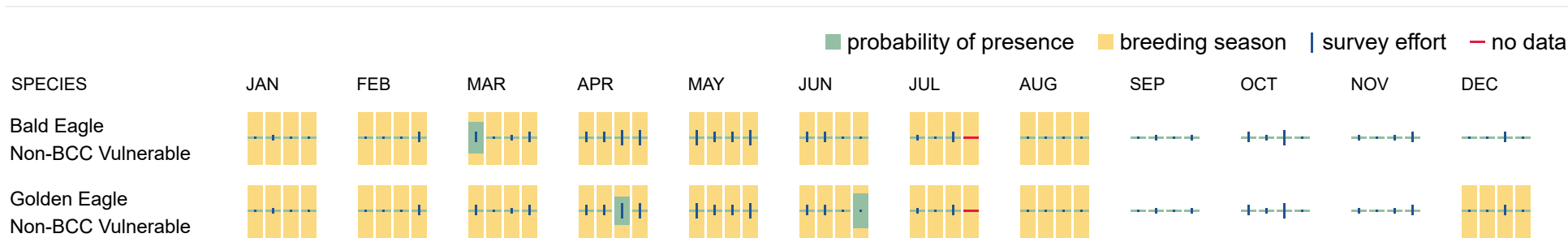
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply).

Proper interpretation and use of your eagle report

On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) ¹ prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases [birds of concern](#), including [Birds of Conservation Concern \(BCC\)](#), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the [Nationwide avoidance and minimization measures for birds](#)

document, and any other project-specific avoidance and minimization measures suggested at the link [Measures for avoiding and minimizing impacts to birds](#) for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the [Supplemental Information on Migratory Birds and Eagles document](#), to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON
American Dipper <i>Cinclus mexicanus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Aug 21
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Black Swift <i>Cypseloides niger</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8878	Breeds Jun 15 to Sep 10
Black-throated Gray Warbler <i>Setophaga nigrescens</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jul 20
California Gull <i>Larus californicus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 1 to Jul 31
California Thrasher <i>Toxostoma redivivum</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Calliope Hummingbird <i>Selasphorus calliope</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9526	Breeds May 1 to Aug 15
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31
Hermit Warbler <i>Setophaga occidentalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 5 to Jul 15
Lawrence's Goldfinch <i>Spinus lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9464	Breeds Mar 20 to Sep 20

Lewis's Woodpecker <i>Melanerpes lewis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9408	Breeds Apr 20 to Sep 30
Oak Titmouse <i>Baeolophus inornatus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9656	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher <i>Contopus cooperi</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3914	Breeds May 20 to Aug 31
Western Grebe <i>Aechmophorus occidentalis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6743	Breeds Jun 1 to Aug 31
Wrentit <i>Chamaea fasciata</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Avoidance & Minimization Measures for Birds](#) describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the [Bald and Golden Eagle Protection Act](#) and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle ([Bald and Golden Eagle Protection Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the [RAIL Tool](#) and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your "IPaC PROBABILITY OF PRESENCE SUMMARY" at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Bald and Golden Eagle Protection Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ "Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:

The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND

[PUBFx](#)

RIVERINE

[R5UBFx](#)

[R2UBHx](#)

[R5UBF](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local

government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

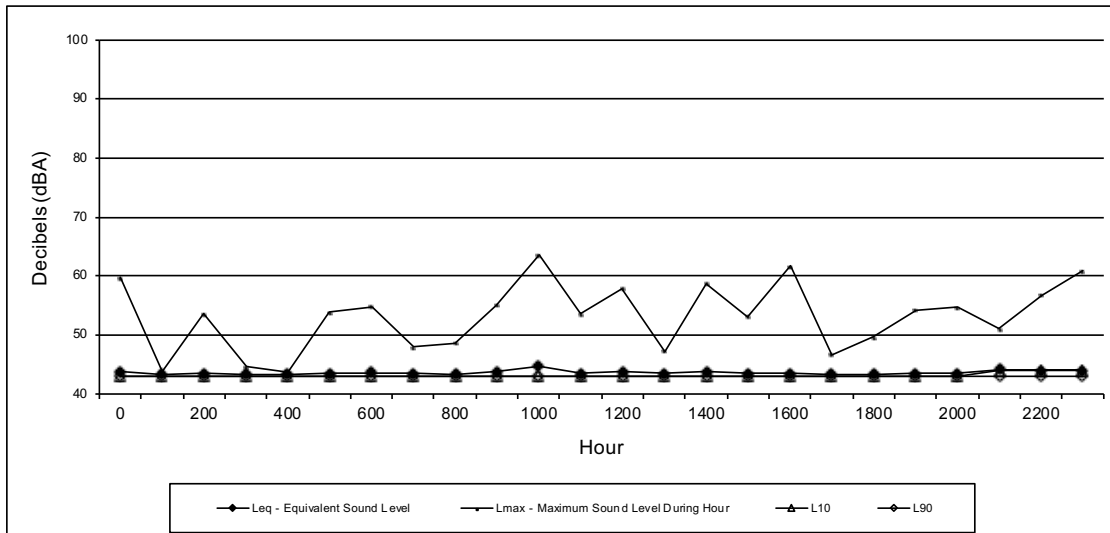
APPENDIX C

CULTURAL RESOURCES ASSESSMENT (CONFIDENTIAL)

Natural Investigations Company prepared the Cultural Resources Assessment for the Project. The findings of the report and additional cultural resource details are confidential so the report will not be released as part of this Initial Study. The Report is on file with the Monte Vista County Water District.

APPENDIX D

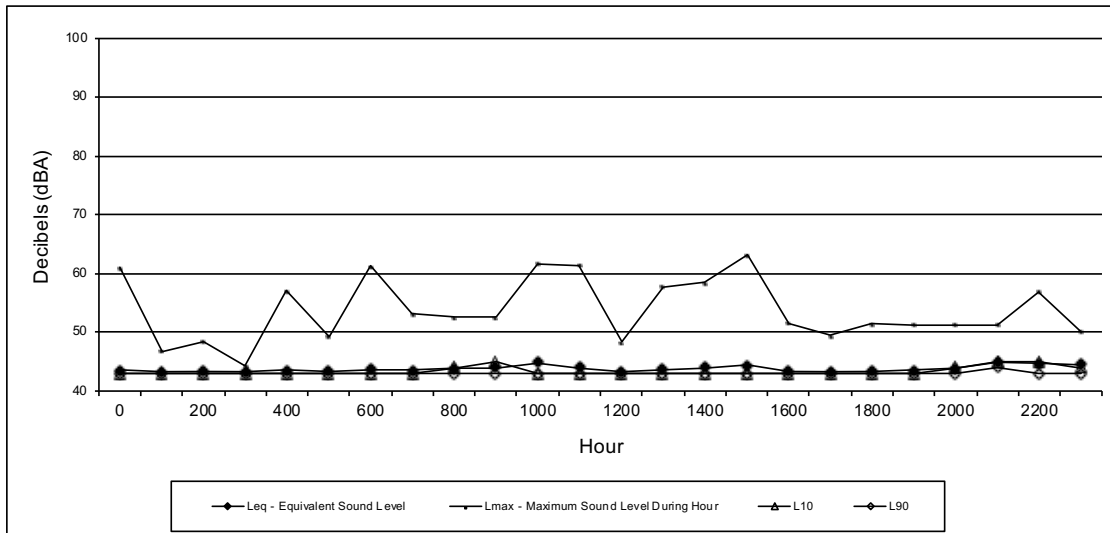
NOISE SUPPORTING INFORMATION



Site 1: North area of the Project site, nearby the canal, approximately 120 feet south of nearest residence.
Tuesday July 28, 2026

Leq - Equivalent Sound Level		Lmax - Maximum Sound Level During		L10	L90
Hour		Hour			
0	44	60		43	43
100	43	44		43	43
200	44	54		43	43
300	43	45		43	43
400	43	44		43	43
500	44	54		43	43
600	44	55		43	43
700	43	48		43	43
800	43	49		43	43
900	44	55		43	43
1000	45	64		43	43
1100	44	54		43	43
1200	44	58		43	43
1300	43	47		43	43
1400	44	59		43	43
1500	43	53		43	43
1600	44	62		43	43
1700	43	47		43	43
1800	43	50		43	43
1900	43	54		43	43
2000	44	55		43	43
2100	44	51		44	43
2200	44	57		44	43
2300	44	61		44	43

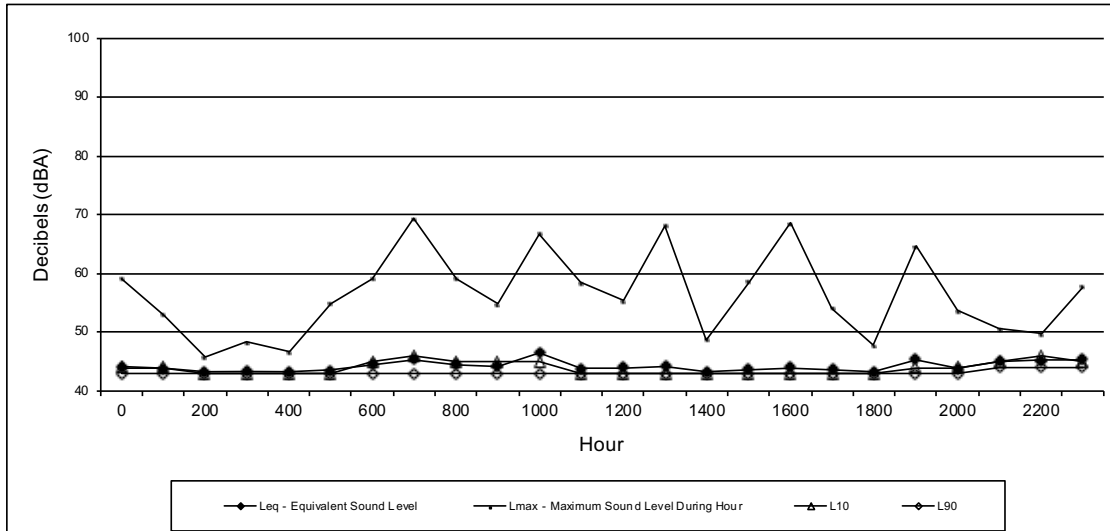
CNEL 50



Site 1: North area of the Project site, nearby the canal, approximately 120 feet south of nearest residence.
Wednesday July 29, 2026

Leq - Equivalent Sound Level		Lmax - Maximum Sound Level During		L10	L90
Hour		Hour			
0	44	61	43	43	43
100	43	47	43	43	43
200	43	49	43	43	43
300	43	44	43	43	43
400	44	57	43	43	43
500	43	49	43	43	43
600	44	61	43	43	43
700	44	53	43	43	43
800	44	53	44	43	43
900	44	53	45	43	43
1000	45	62	43	43	43
1100	44	61	43	43	43
1200	43	48	43	43	43
1300	44	58	43	43	43
1400	44	58	43	43	43
1500	44	63	43	43	43
1600	43	52	43	43	43
1700	43	49	43	43	43
1800	43	51	43	43	43
1900	44	51	43	43	43
2000	44	51	44	43	43
2100	45	51	45	44	44
2200	45	57	45	43	43
2300	45	50	44	43	43

CNEL: 50



Site 1: North area of the Project site, nearby the canal, approximately 120 feet south of nearest residence.
Thursday July 30, 2026

Lmax - Maximum Sound Level During				
Hour	Leq - Equivalent Sound Level	Hour	L10	L90
0	44	59	44	43
100	44	53	44	43
200	43	46	43	43
300	43	48	43	43
400	43	47	43	43
500	44	55	43	43
600	45	59	45	43
700	45	69	46	43
800	45	59	45	43
900	44	55	45	43
1000	47	67	45	43
1100	44	58	43	43
1200	44	55	43	43
1300	44	68	43	43
1400	43	49	43	43
1500	44	59	43	43
1600	44	69	43	43
1700	44	54	43	43
1800	43	48	43	43
1900	45	65	44	43
2000	44	54	44	43
2100	45	51	45	44
2200	45	50	46	44
2300	45	58	45	44

CNEL: 51