FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

Pacific Gas & Electric Company Rio Dell Feeder 35239524 Project

March 2026

Lead Agency:

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, California 95825
Contact: Sarah Mongano

Applicant:

Pacific Gas & Electric Company
6030 West Oaks Blvd, Suite 300
Rocklin, California 95765
Contact: Maxwell Todi

MISSION STATEMENT

The California State Lands Commission provides the people of California with effective stewardship of the lands, waterways, and resources entrusted to its care based on the principles of equity, sustainability, and resiliency, through preservation, restoration, enhancement, responsible economic development, and the promotion of public access.

CEQA DOCUMENT WEBSITE

www.slc.ca.gov/ceqa/

Geographic Location

Latitude: 40°30'35.65"N
Longitude: 124°06'42.65"W

Prepared by

DUDEK

853 Lincoln Way, Suite 105
Auburn, California 95603
Contact: Michael Henry

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ACRONYMS AND ABBREVIATIONS

A

AAQS	ambient air quality standards

B

BMP	best management practice

C

CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CSLC	California State Lands Commission

E

EIA	U.S. Energy Information Administration
EJ	environmental justice
EPA	U.S. Environmental Protection Agency

F

FEMA	Federal Emergency Management Agency
FHSZ	Fire Hazard Severity Zone
FMMP	California Farmland Mapping and Monitoring Program
FTA	Federal Transit Administration

G

GHG	greenhouse gas
GSP	groundwater sustainability plan

H

HCAOG	Humboldt County Association of Governments
HDD	horizontal directional drilling
HDPE	high density polyethylene
HU	Hydrologic Unit

I

IRCP	Inadvertent Release Contingency Plan
IS	Initial Study

L

LOS	level of service
LRA	Local Responsibility Area

M

MND	Mitigated Negative Declaration

N

NAAQS	National Ambient Air Quality Standards
NCAB	North Coast Air Basin
NCRWQCB	North Coast Regional Water Quality Control Board
NCUAQMD	North Coast Unified Air Quality Management District

O

OEHHA	Office of Environmental Health Hazard Assessment

P

PG&E	Pacific Gas & Electric Company

S

SMAQMD	Sacramento Metropolitan Air Quality Management District
SRA	State Responsibility Area
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board

T

TAC	toxic air contaminant
TCE	temporary construction easement
TCR	tribal cultural resource

V

VMT	vehicle miles traveled

EXECUTIVE SUMMARY

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California State Lands Commission (CSLC), as lead agency under the California Environmental Quality Act (CEQA) (California Public Resources Code Section 21000 et seq.), to analyze and disclose the environmental effects associated with the proposed Pacific Gas & Electric Company (PG&E) Rio Dell Feeder 35239524 Project (Project). PG&E (Applicant) proposes the Project to install two 20-inch-diameter conduit casings using the Horizontal Directional Drilling (HDD) technique to carry the Applicant's electric line and connect to the existing distribution lines and the existing Rio Dell Substation.

The CSLC prepared a Mitigated Negative Declaration (MND) because it determined that the Initial Study (IS) identified potentially significant impacts related to the Project, and mitigation measures incorporated into the Project (and agreed to by the Applicant) would avoid or mitigate those impacts to a point where no significant impacts occur.

PROPOSED PROJECT

The Project site is located in the City of Rio Dell, California, in Humboldt County. The Project site is to the north and south of, and underneath, the Eel River. The Project site would consist of three separate work areas: the Southern Work Area; Northern Work Area; and Staging and Laydown Area. The Southern Work Area would be in a residential area to the north of the intersection between North Pacific Avenue and Eeloa Avenue; the Northern Work Area would be in riparian habitat and on an unnamed dirt road extending eastward of the bend near agriculture fields where Northwestern Avenue turns to the north; and the Staging and Laydown Area would be on a paved parcel located at 725 Northwestern Avenue.

The Project would involve installation of 20-inch-diameter conduit casings within two separate and parallel HDD routes drilled underneath the Eel River (Western HDD Conduit Casing and Eastern HDD Conduit Casing). The Project objective is to carry the Applicant's electric line through the Western HDD Conduit Casing and connect to the existing distribution lines and the existing Rio Dell Substation. The Eastern HDD Conduit Casing would be capped and left empty for a future distribution line, which has not been planned yet. Two No. 7 Boxes, which are precast concrete underground utility enclosures, would be installed: one within the Southern Work Area and one within the Northern Work Area. The No. 7 Boxes

would connect the electric line to the existing distribution lines at the north and south of the Eel River via linear trenching.

ENVIRONMENTAL IMPACTS AND PROPOSED MITIGATION MEASURES

The resources noted below have the potential to be affected by the Project and have at least one impact that would be "potentially significant." The Applicant has agreed to implementation of mitigation measures that would reduce the potential impacts to "less than significant with mitigation," as detailed in Chapter 3, *Environmental Checklist and Analysis*, of this IS/MND. Appendix I, *Mitigation Monitoring Program*, outlines the proposed mitigation measures designed to reduce or avoid potentially significant impacts. With implementation of the proposed mitigation measures, all Project-related impacts would be reduced to less than significant.

Environmental Issues with Potentially Significant Impacts:

- Biological Resources
- Cultural Resources
- Cultural Resources – Tribal
- Geology, Soils, and Paleontological Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mandatory Findings of Significance

Summary of Proposed Project Mitigation Measures:

Biological Resources

- MM BIO-1: Site Restoration Plan
- MM BIO-2: Worker Environmental Awareness Training
- MM BIO-3: Western Bumble Bee
- MM BIO-4: Special Status Amphibian and Reptile Species
- MM BIO-5: Species Relocation
- MM BIO-6: Nesting Birds (including special status birds)

- MM BIO-7: Roosting Bats (including special status bats)
- MM BIO-8: Sonoma Tree Vole, Fisher, and Humboldt Marten
- MM BIO-9: Sensitive Natural Community Tree Protection Zone

Cultural Resources and Cultural Resources – Tribal

- MM CUL-1/TCR-1: Unanticipated Discovery of Cultural/Tribal Cultural Resources
- MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains

Geology, Soils, and Paleontological Resources

- MM GEO-1: Erosion and Sediment Control Plan
- MM GEO-2: Worker's Environmental Awareness Training
- MM GEO-3. Unanticipated Potential Paleontological Resources

Hazards and Hazardous Materials

- MM HAZ-1: Spill Response and Contingency Plan

Hydrology and Water Quality

- MM HYD-1: Inadvertent Release Contingency Plan

1.0 PROJECT AND AGENCY INFORMATION

1.1 PROJECT TITLE

Pacific Gas & Electric Company (PG&E) Rio Dell Feeder 35239524 Project (Project)

1.2 LEAD AGENCY AND PROJECT SPONSOR

Lead Agency

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, California 95825
Contact: Sarah Mongano, Senior Environmental Scientist
Division of Environmental Science, Planning, and Management
Sarah.Mongano@slc.ca.gov
916.574.1889

Applicant

Pacific Gas & Electric Company (PG&E)
Contact: Maxwell A. Todi, Senior Environmental Planner
Land & Environmental Management
m3tw@pge.com
916.201.8547

1.3 PROJECT LOCATION

The Project site is to the north and south of, and underneath, the Eel River (River) in the City of Rio Dell in Humboldt County, California (Figure 1-1). The full Project site area is bounded on the north by the city of Fortuna, the east by the Eel River, the south by single-family residences, and the west by U.S. 101, which crosses over the Eel River. The Project site consists of these three separate work areas (Figure1-2):

- Southern Work Area
- Northern Work Area
- Staging and Laydown Area

Please refer to Section 2, *Project Description*, for further details on the Project work areas.

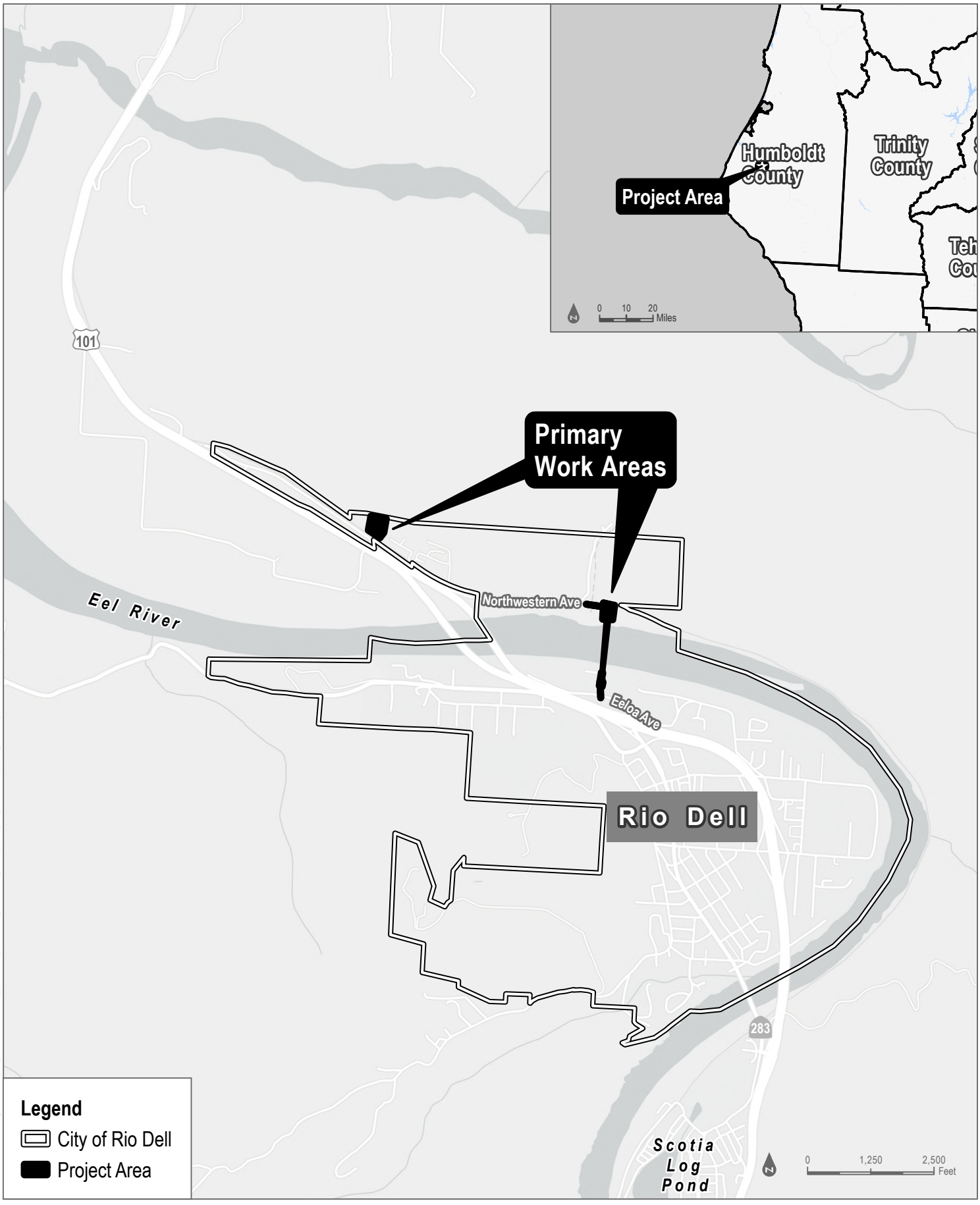

FIGURE 1-1

Project Location

Pacific Gas & Electric Company Rio Dell Feeder 35239524 Project

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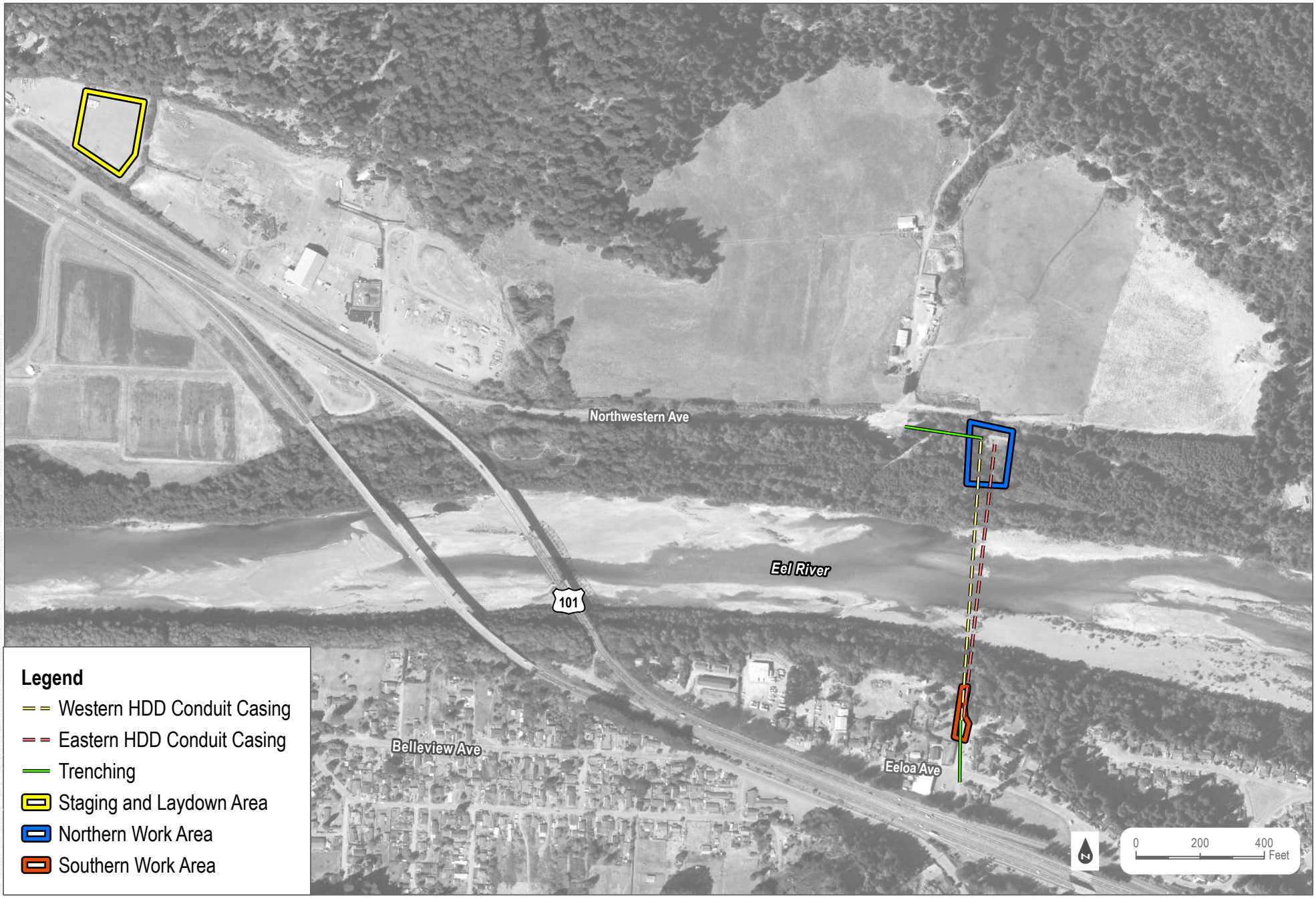

SOURCE: NAIP 2018, OpenStreetMap

FIGURE 1-2

Project Site

Pacific Gas & Electric Company Rio Dell Feeder 35239524 Project

DUDEK

1.4 PROJECT BACKGROUND AND OBJECTIVES

PG&E (Applicant) proposes to install two 20-inch-diameter conduit casings using the Horizontal Directional Drilling (HDD) technique to minimize environmental impacts in the River. Once the conduit casings and their related infrastructure are installed, electrical cables encased in 8-inch-diameter conduit would be pulled through the Western HDD Conduit Casing to provide more reliable electrical service to the existing network on both sides of the River. The Project objective is to carry the Applicant's electric line through the Western HDD Conduit Casing and connect to the existing distribution lines and the existing Rio Dell Substation. The Eastern HDD Conduit Casing would be capped and left empty for a future distribution line, which has not been planned yet. The Project would also increase electrical service capacity in the region to support a proposed development project north of the River.

1.5 ORGANIZATION OF THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

This Initial Study / Mitigated Negative Declaration (IS/MND) is intended to provide the California State Lands Commission (CSLC) as lead agency under the California Environmental Quality Act (CEQA) (Public Resources Code section 21000 et seq.), and other responsible agencies with the information required to exercise their discretionary responsibilities for the proposed Project. The IS/MND is organized as follows:

Section 1 presents the Project background and Project location, agency and Applicant information, Project objectives, anticipated agency approvals, and a summary of the public review and comment process.

Section 2 describes the proposed Project—its alignment, work areas, and equipment—and provides an overview of proposed construction methods and schedule.

Section 3 presents the IS, which includes the environmental setting, identification and analysis of potential impacts, and discussion of Project changes and other measures that, if incorporated into the Project, would mitigate or avoid those impacts, such that no significant effect on the environment would occur. The CSLC prepared this IS/MND pursuant to CEQA Guidelines section 15063 (California Code of Regulations, title 14, section 15000 et seq.).

Section 4 discusses other CSLC considerations relevant to the Project, such as climate change and sea level rise, commercial fishing, and environmental justice that are in addition to the environmental review required pursuant to CEQA.

Section 5 presents information on report preparation and references.

Appendices include the Mitigation Monitoring Program, specifications, technical data, and other information supporting the analysis presented in this IS/MND. They are as follows:

- Appendix A: Major Federal and State Laws, Regulations, and Policies Potentially Applicable to the Project
- Appendix B: Local Laws, Regulations, and Policies Potentially Applicable to the Project
- Appendix C-1: Inadvertent Release Contingency Plan
- Appendix C-2: Geotechnical Engineering Investigation Report
- Appendix D: CalEEMod Outputs
- Appendix E: Biological Resources Assessment
- Appendix F: Multiple Region Operation and Maintenance Habitat Conservation Plan
- Appendix G: Cultural Resources Letter Report
- Appendix H: Noise Modeling Inputs & Outputs
- Appendix I: Mitigation Monitoring Program

1.6 PUBLIC REVIEW AND COMMENT

Pursuant to CEQA Guidelines sections 15072 and 15073, a lead agency must issue a proposed MND for a minimum 30-day public review period. Agencies and the public will have the opportunity to review and comment on the document. Responses to written comments received by the CSLC during the 30-day public review period will be incorporated into the IS/MND, if necessary, and will be included in the CSLC staff report. In accordance with CEQA Guidelines section 15074, subdivision (b), the CSLC will review and consider the IS/MND, together with any comments received during the public review process, prior to

taking any action on the IS/MND and the Project at a later notified public hearing.

1.7 APPROVALS AND REGULATORY REQUIREMENTS

1.7.1 California State Lands Commission

All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the common law Public Trust Doctrine. The State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space.

On tidal waterways and navigable rivers that are tidally influenced, the State's sovereign fee ownership extends landward to the ordinary high-water mark, which is generally reflected by the mean high-tide line, except for areas of fill or artificial accretion. For this Project, the Eel River is tidally influenced at the Project location, and the State's sovereign fee ownership includes the bed of the River, extending landward to the ordinary high-water mark. The CSLC's primary authority is set forth in Division 6 of the Public Resources Code; CSLC's regulations are codified in the California Code of Regulations, title 2, section 1900 et seq. The CSLC has authority to issue leases or permits for the use of sovereign lands held in the Public Trust, including all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways, as well as retain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6009, subd. (c), 6009.1, 6301, 6306.) The CSLC must comply with CEQA when it undertakes an activity defined by CEQA as a "Project" that must receive discretionary approval (i.e., the CSLC has the authority to approve or deny the requested lease, permit, or other approval) and that may cause either a direct physical change or a reasonably foreseeable indirect change in the environment. CEQA requires the CSLC to identify the significant environmental impacts of its actions and to avoid or mitigate those impacts, to the extent feasible.

PG&E applied for a new General Lease – Right-of-Way Use on July 2, 2024, to install two conduits via HDD to carry electric lines through them on State-owned land under the CSLC's jurisdiction in the Eel River.

1.7.2 Other Agencies

In addition to the CSLC approval, the Project may be subject to the review and approval of other federal, state, and local entities with statutory and/or regulatory jurisdiction over various aspects of the Project (Table 1-1).

Table 1-1. Anticipated Agencies with Review/Approval over Project Activities

Permitting Agency	Anticipated Approvals/Regulatory Requirements
State	
California State Lands Commission	1. Lease Agreement 2. California Environmental Quality Act Lead Agency
California Department of Fish and Wildlife	Streambed Alteration Agreement (Fish and Game Code section 1600 et seq.)
State Water Board	1. California Construction Stormwater General Permit (Order No. 2022-0057-DWQ)[1] 2. Stormwater Pollution Prevention Plan
North Coast Regional Water Quality Control Board	Clean Water Act General 401 Water Quality Certification
Federal	
United States Army Corps of Engineers	1. Section 404 Clean Water Act (33 U. S.C. § 1344) 2. Section 10 of the Rivers and Harbors Act (33 U.S.C. § 403) [1]
U.S. Fish and Wildlife Service	Section 7 Consultation (Federal Endangered Species Act [FESA]) [1]
National Marine Fisheries Service	Section 7 Consultation (FESA) [1]
Local	
City of Rio Dell	Encroachment Permit
Humboldt County	Encroachment Permit

[1] This permit would only apply only if the U.S. Army Corps of Engineers determines the project activities to impact Waters of the United States.

2.0 PROJECT DESCRIPTION

Pacific Gas & Electric Company (Applicant) proposes to install two 20-inch-diameter conduit casings (each being 1,400 linear feet in length) using the horizontal directional drilling (HDD) technique under the Eel River (River) in the City of Rio Dell (Figure 1-1). The HDD technique would minimize impacts to the sensitive habitats on land and in the River.

2.1 PROJECT COMPONENTS

The Project would consist of the following components, as seen in Figures 1-2 and 2-1:

- HDD – Two separate and parallel HDD routes drilled to a minimum depth of 50 feet under the Eel River
- Conduit Casings – Two separate and parallel 20-inch-diameter conduit casings would be installed as final products (Western HDD Conduit Casing and Eastern HDD Conduit Casing)
- Conduit and Electrical Cable – Electrical cables encased in 8-inch-diameter conduit would be installed through the Western HDD Conduit Casing
- Upland Connections – Two No. 7 Boxes would be installed adjacent to the westernmost Bore Entry Pit and Bore Exit Pit, and an area would be trenched between each No. 7 Box and the existing distribution lines. A No. 7 box is a precast concrete underground utility enclosure, 4.5 by 8.5 feet in size. Conduit casing would be installed in the trenched area to house the conduit and electrical cable.

2.2 PROJECT WORK AREAS

2.2.1 Southern Work Area

The Southern Work Area (Figure 2-1) would be in an urban residential area to the north of the intersection between North Pacific Avenue and Eeloa Avenue in Rio Dell (Figure 2-2). The center of the Southern Work Area is located at a latitude and longitude of 40.50775N, 124.111972W.

SOURCE: NAIP 2018, OpenStreetMap

FIGURE 2-1

Southern Work Area

Pacific Gas & Electric Company Rio Dell Feeder 35239524 Project

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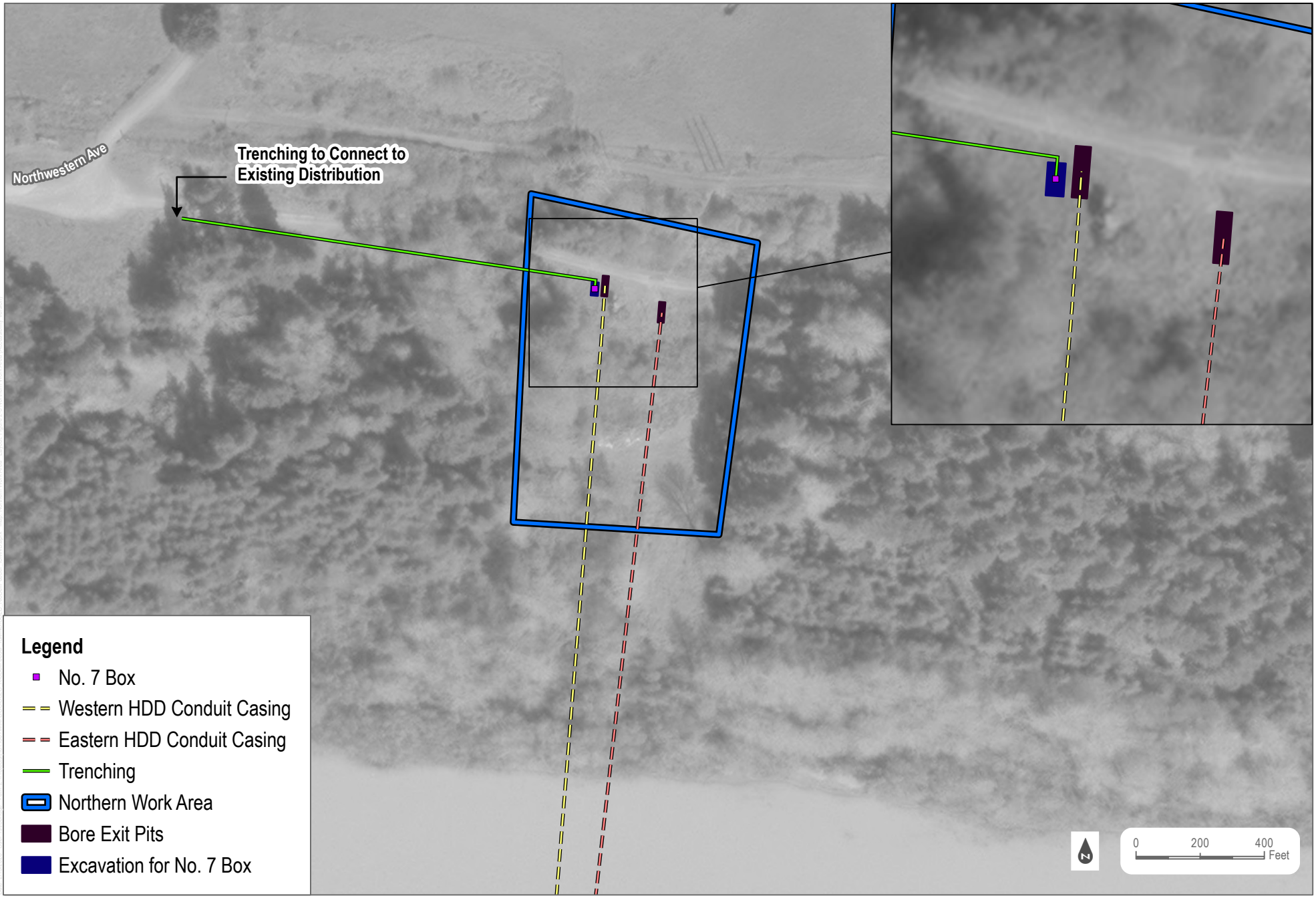
Figure 2-2. Southern Work Area, Facing North

The Southern Work Area would be approximately 0.27 acres in size and would include the two Bore Entry Pits, a new No. 7 Box, and trenching that would extend outside of the Southern Work Area along North Pacific Avenue toward Eeloa Avenue. Construction equipment would be mobilized and set up within the designated work areas. The primary equipment for the Southern Work Area would be a pullback HDD rig as well as a mud recycling unit consisting of two cleaning tanks, a series of shakers, a de-sanding unit, a mud pump, and a diesel generator. Other equipment would include steering and tooling rigs, two vacuum trucks (one with a pressure washer), a backhoe, and an excavator.

2.2.2 Northern Work Area

The Northern Work Area (Figure 2-3) would be in riparian habitat and on an unnamed dirt road extending eastward of the bend near agriculture fields where Northwestern Avenue turns to the north (also known as "Stone"). The center of the Northern Work Area is located at a latitude and longitude of 40.51153N, 124.111764W. A photograph of the Northern Work Area is shown below in Figure 2-4.



SOURCE: NAIP 2018, OpenStreetMap

FIGURE 2-3

Northern Work Area

Pacific Gas & Electric Company Rio Dell Feeder 35239524 Project

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Figure 2-4. Northern Work Area, Facing West

The Northern Work Area would be approximately 1.71 acres (1.17-acre temporary construction easement and 0.54-acre Rio Dell right-of-way) and would include the two Bore Exit Pits, a new No. 7 Box, and trenching that would extend outside of the Northern Work Area. Construction equipment would be mobilized and set up within the designated work areas. The Northern Work Area would contain a diesel generator, a vacuum truck with pressure washer, a backhoe, an excavator, and a plastic welding butt fusion machine.

2.2.3 Staging and Laydown Area

The 2.41-acre Staging and Laydown Area would be located at 725 Northwestern Avenue, Rio Dell (Figure 1-2). The latitude and longitude for the center of the Staging and Laydown Area are 40.515442N, 124.128478W. The area is already paved and would require no further ground disturbance or preparation (Figure 2-5). Access to the Staging and Laydown Area would be from Northwestern Avenue. Equipment that cannot be stored in the work areas, or that is not needed at the time, would be kept in the Staging and Laydown Area.

Figure 2-5. Staging and Laydown Area, Facing Northeast

2.3 PROJECT ACTIVITIES

The following is a summary of key Project activities required to install the two conduit casings using HDD technique to a minimum depth of 50 feet under the Eel River, and to install the associated electrical cable infrastructure:

- Start the HDD bores from the Bore Entry Pits at the Southern Work Area
- Exit the HDD bores from the Bore Exit Pits at the Northern Work Area
- Conduct one or more reaming passes to enlarge the HDD bores to a 30-inch diameter
- Install 20-inch diameter conduit casing in each bore (Western HDD Conduit Casing and Eastern HDD Conduit Casing)
- Install No. 7 Boxes adjacent to the westernmost Bore Entry Site at the Southern Work Area and the westernmost Bore Exit Site at the Northern Work Area
- Pull the electrical cable conduit through the Western HDD Conduit Casing, from the Northern Work Area to the Southern Work area, and connect to both No. 7 Boxes
- Trench and connect the new No. 7 Boxes to the existing distribution lines at the north and south of the River.

2.3.1 Site Preparation

The Southern and Northern Work Areas would be subject to minor vegetation work, including brush clearing and/or vegetation trims, to allow for staging of equipment and vehicle movement. Neither of the work areas would be graveled, graded, or widened.

Access to the Southern Work Area would be on the brief segment of North Pacific Avenue, from Eeloa Avenue. However, an alternative access road requiring minor vegetation work (brush clearance and/or vegetation trim) would be constructed to allow continued access to a residential parcel at the Southern Work Area during drilling activities (Figure 2-6). Vegetation disturbance would be very limited and would not include any tree trimming or removal. Access to the Northern Work Area would be from an unnamed dirt road extending eastward from Northwestern Avenue.

Figure 2-6. Alternative Access Road

2.3.2 HDD and Conduit Casing Installation

HDD technique is a trenchless method for installing underground conduit without disturbing the ground surface along the bore path. HDD technique minimizes

impacts to waterways and sensitive habitats. For this Project, HDD technique would be used to install two parallel 20-inch conduit casings made of high-density polyethylene (HDPE) under the Eel River, with drill heads entering from the Southern Work Area and exiting at the Northern Work Area (Figure 1-2). These parallel conduit casings are referred to as the Western HDD Conduit Casing and the Eastern HDD Conduit Casing (see Figure 1-2). After the conduit casings are installed, as-built construction plans would be submitted to CSLC.

2.3.2.1 Bore Entry and Exit Pits

To initiate the drill entry, two Bore Entry Pits, one for each conduit casing, would be excavated at the Southern Work Area (Figure 2-1), each 10 feet long, 5 feet wide, and 6 feet deep. Two Bore Exit Pits would be excavated at the Northern Work Area for receiving the drill (Figure 2-3), each 20 feet long, 8 feet wide, and 10 feet deep. Excavated soil would be stockpiled on site adjacent to the excavations.

2.3.2.2 HDD Technique

The HDD drill rig would operate on a carriage assembly that would travel by hydraulic power (Figure 2-7). The contractor would use a global positioning system to track the bore route accurately. The drill head would be fitted with a wireline guidance tool to track the direction of the HDD horizontally and vertically. The tracking system within the drill head would be continuously monitored to verify the drill position and path.

Figure 2-7. HDD Drill Rig

The drill would be advanced along the predetermined bore path while drilling fluid is pumped out through the drill head. HDD depends on circulation of drilling fluid to prevent the bore hole from caving in during drilling and to lubricate the drill head; the fluid also coats the wall of the bore hole to minimize fluid losses to permeable rock and soil types. Drilling fluids vary but generally consist of a base mixture of water and bentonite clay products. This mixture is referred to as "drilling fluid."

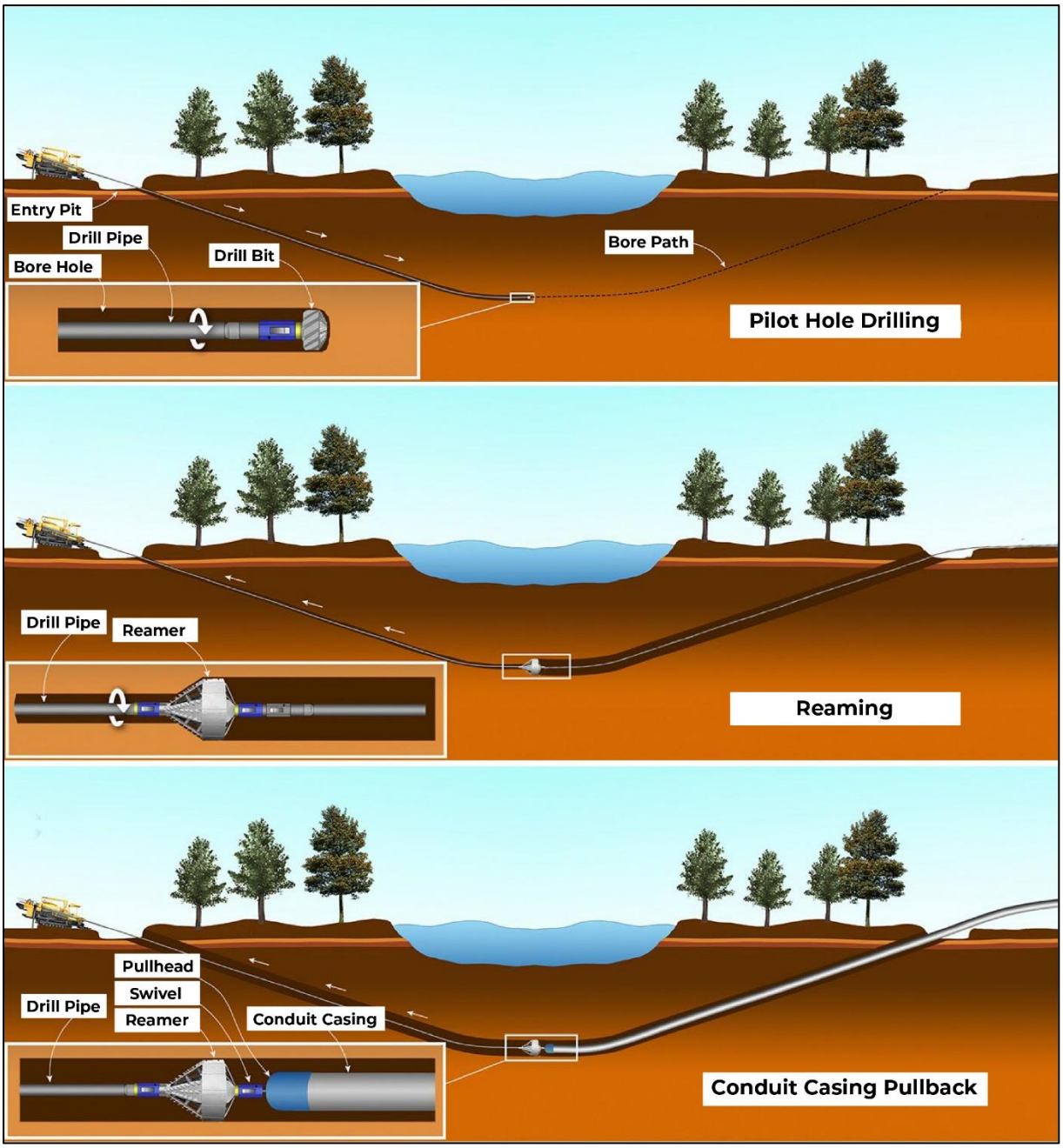
Throughout the process, drilling fluid would return to each Bore Entry Pit in the Southern Work Area (Figure 2-1) through the space between the drill pipe and the edge of the bore hole. A slurry sump pump would be set next to the Bore Entry Pit to pump the returning drill fluid from the pit to a recycling unit in the staging area, where it would be treated and adjusted so it could be reused to the extent feasible. Treatment may include screening, heating, or use of additives.

The drilling fluid that cannot be reused would be temporarily stored for offsite disposal at a designated disposal site. The preferred method is to collect the unrecycled fluid with a vacuum truck to then be hauled off directly in that truck. If direct hauling via vacuum truck is not feasible, then a containment tank would be stored at the Staging and Laydown Area to hold the wet spoils until they are

hauled away. Approximately 30,000 gallons of waste drilling fluid from the bores would be transported to and disposed of at the Yolo County Central Landfill over the course of the Project, an approximately 512-mile round trip. The Applicant estimates that this would require two truck trips per week over 3 weeks, with 5,000 gallons transported per truck trip. The contractor would be responsible for obtaining, transporting, and storing any water required for drilling fluids.

The initial diameter of the bores would be between 4 and 6 inches. After the bores are drilled from Bore Entry Pit to Bore Exit Pit, one or more reaming passes would be made for each to ensure the bores are stable, and to enlarge the bores to a 30-inch-diameter size required to install the 20-inch-diameter conduit casing. Figure 2-8 shows a conceptual diagram of the basic HDD process.

Figure 2-8. HDD Conceptual Diagram



2.3.2.3 Inadvertent Drilling Fluid Release

An inadvertent drilling fluid release from the Project would occur if the drilling fluid moves through cracks or spaces in the geological formation along the drill path (drilled to a minimum depth of 50 feet under the Eel River), coming to the surface and potentially affecting land along the route or the River. The Project would implement monitoring and management measures during HDD

operations to avoid potential inadvertent drilling fluid releases. While drilling occurs, the fluid system operator would monitor the volumes from the pumps and the return flows from the bore hole and ensure with the driller that pressures do not exceed the calculated predicted pressure for hydraulic fracturing and that spikes are noted and steps taken to mitigate or reverse any rise in pressure.

2.3.2.4 Pullback of Conduit Casing

Once the bores are enlarged to a diameter of 30 inches, each conduit casing would be installed from the Northern Work Area (Figure 2-3). The conduit casing would be built within the Northern Work Area from 40- to 50-foot-long HDPE segments that would be welded together using a plastic welding butt fusion machine as the casing is pulled back through the bore exit hole towards the entry hole.

2.3.3 Cable Pulling and Splicing

Once the HDD conduit casings are installed, a steel cable puller would be set up within the Southern Work Area, and a cable spooler would be set up within the Northern Work Area. A standard cable lubricant would be applied to the cable as needed to reduce friction during the pull. Approximately 1,400 feet of cable, housed in 8-inch conduit, would be pulled through the Western HDD Conduit Casing.

Once the cable is pulled through the Western HDD Conduit Casing, the crew would then splice the cable in new No. 7 Boxes in the Northern Work Area and the Southern Work Area.

The Eastern HDD Conduit Casing would be capped with no cable inside and remain available for a future circuit.

2.3.4 No. 7 Box Installation and Trenching

Two No. 7 Boxes would be installed to store slack conductor (transmission line that is not under tension), one within the Southern Work Area and one within the Northern Work Area. Each No. 7 Box would be installed using an excavator to dig an area approximately 13 feet wide, 7 feet long, and 8 feet deep for each box, then the box would be lowered into the area using an excavator arm. The top of the No. 7 boxes would be set at the finished grade of the work area. The excavated areas would be located immediately adjacent to the westernmost

Bore Entry Site and Bore Exit Site so that minimal to no trenching would be required to connect the new HDD conduit casing, conduit, and electrical cable to the No. 7 Boxes.

The No. 7 Boxes and existing distribution lines would be connected with linear trenches approximately 298 feet long that would extend from the Southern Work Area toward Eeloa Avenue (Figure 2-1), and 447 feet long extending from the Northern Work Area toward Northwestern Avenue (Figure 2-3). Both trenches would be approximately 3 feet wide and 4 feet deep. Within the trenched areas, new 16- to 20-inch HDPE conduit casing would be installed to join with existing conduit casing via butt fusion, then would extend up the side of the nearest utility pole to attach to the overhead conductor. Then, the trenches would be backfilled.

2.3.5 Site Restoration and Demobilization

The excavated soils would be stored next to the excavation sites in the Southern and Northern Work Areas to minimize handling. Excavations would be backfilled and compacted with the native soils that were stockpiled during the initial excavations. The Northern Work Area and Southern Work Area excavations would be compacted to match the surrounding areas and contours would be restored to pre-Project conditions. Weed-free straw mulch, 2 to 4 inches of gravel, or wood mulch would be applied to areas of soil disturbance to provide temporary stabilization of exposed soil. A hand-broadcasted native seed mix may also be applied if recommended by the Project biologist. Pending permits and temporary construction easements may include additional site restoration requirements. Additionally, all refuse, trash, and unused waste materials would be removed from the public right-of-way within 4 hours of completing the work. Any soil remaining after backfilling would be hauled to either a PG&E facility or PG&E-approved disposal facility, or donated to a third-party giveaway program.

2.3.6 Estimated Areas and Volumes of Disturbance

The estimated areas and volumes of disturbance from the Project are summarized in Table 2-1, below:

Table 2-1. Estimated Areas and Volumes of Disturbance

Project Feature (dimensions in feet – length x width x depth)	Volume (cubic feet)
2 Bore Exit Pits (20 × 8 × 10)	3,200
2 Bore Entry Pits (10 × 5 × 6)	600
2 Excavations for No. 7 Boxes (13 × 7 × 8)	1,456
Trenching (745 x 4 x 3)	8,940

2.4 PROJECT SCHEDULE AND EQUIPMENT

Project construction is currently planned for June 2026, with completion anticipated in September 2026. Project construction would occur within these months to avoid the salmon spawning season. Project work activities would generally be conducted Monday through Friday between 8 a.m. and 5 p.m. While longer shifts or additional shifts may occur, if necessary, to complete the Project within the defined seasonal constraints, night work past 8 p.m. would not occur.

The estimated construction duration was provided by the Applicant. Note that the drilling fluid disposal phase would occur concurrently with the HDD and No. 7 box installation.

- Mobilization, Staging, Site Preparation – 2 days
- HDD and No. 7 Box Installation – 50 days
- Drilling Fluid Disposal – 6 days
- Conduit Pulling, Trenching to Existing Lines, Site Restoration – 8 days

The construction off-road equipment and on-road vehicles are based on information provided by the Applicant and shown in Table 2-2 and Table 2-3, respectively.

Table 2-2. Construction Off-Road Equipment Assumptions

Phase	Equipment		
	Equipment Type	Quantity	Daily Usage Hours
Mobilization, Staging,	Bore/ Drill Rigs (Auger)	2	8

Table 2-2. Construction Off-Road Equipment Assumptions

Phase	Equipment		
	Equipment Type	**Quantity**	**Daily Usage Hours**
and Site Preparation	Tractors/ Loaders/ Backhoes	2	8
	Excavators	2	8
HDD and No. 7 Box Installation	Bore/ Drill Rigs (Auger)	2	8
	Bore/ Drill Rigs (HDD Rig)	1	8
	Other Construction Equipment (Mud Recycling Unit Pump)	1	8
	Other General Industrial Equipment (Suction Hose)	1	4
	Pressure Washers	2	4
	Off-Highway Trucks (1,000-Gallon Vacuum Truck)	2	4
	Off-Highway Trucks (5,000-Gallon Vacuum Truck)	1	2
	Generator Sets	2	8
Drilling Fluid Disposal	Not applicable	0	0
Conduit Pulling, Trenching to Existing Lines, Site Restoration	Bore/ Drill Rigs (Auger)	2	8
	Tractors/ Loaders/ Backhoes	2	8
	Excavators	2	8
	Other General Industrial Equipment (Cable Puller)	1	8

Source: Appendix D.

Table 2-3. Construction On-Road Vehicle Assumptions

Phase	Average One-Way Vehicle Trips		
	Workers	**Vendor Trucks**	**Haul Trucks**
Mobilization, Staging, and Site Preparation	12	2	2
HDD and No. 7 Box Installation	12	8	0
Drilling Fluid Disposal	0	0	2

Table 2-3. Construction On-Road Vehicle Assumptions

Phase	Average One-Way Vehicle Trips		
	Workers	Vendor Trucks	Haul Trucks
Conduit Pulling, Trenching to Existing Lines, Site Restoration	12	2	2

Source: Appendix D.

Note: Table assumes that each worker will travel in their own vehicle to the work site each day of construction.

3.0 ENVIRONMENTAL CHECKLIST AND ANALYSIS

This chapter contains the Initial Study (IS) that was completed for the proposed Pacific Gas & Electric Company (PG&E) Rio Dell Feeder 35239524 Project (Project) in accordance with the requirements of the California Environmental Quality Act (CEQA). The IS identifies site-specific conditions and impacts, evaluates their potential significance, and discusses ways to avoid or lessen impacts that are potentially significant. The information, analysis, and conclusions in the IS provide the basis for determining the appropriate document needed to comply with CEQA. For the Project, based on the analysis and information contained herein, California State Lands Commission (CSLC) staff has found that the IS shows that there is substantial evidence that the Project may have a significant effect on the environment, but revisions to the Project would avoid the significant impacts or mitigate the impacts to a point where clearly no significant impact on the environment would occur. As a result, the CSLC concluded that a Mitigated Negative Declaration (MND) is the most appropriate CEQA document for this Project.

The evaluations of environmental impacts provided in this IS/MND are based in part on the impact questions contained in Appendix G of the CEQA Guidelines. These questions, which are included in an impact assessment matrix for each environmental category (e.g., Aesthetics, Agriculture/Forest Resources, Air Quality, Biological Resources), are intended to encourage thoughtful assessment of impacts. Each question is followed by a check-marked box with column headings that are defined below.

Potentially Significant Impact. This column is checked if there is substantial evidence that a Project-related environmental effect may be significant. If there are one or more "potentially significant impacts," a Project Environmental Impact Report (EIR) would be prepared.

Less Than Significant with Mitigation. This column is checked when the Project may result in a significant environmental impact, but the incorporation of identified Project revisions or mitigation measures would reduce the identified effect(s) to a less-than-significant level.

Less Than Significant Impact. This column is checked when the Project would not result in any significant impacts. The Project's impact is less than significant even without the incorporation of Project-specific mitigation measures.

No Impact. This column is checked when the Project would not result in any impact in the category or the category does not apply.

The environmental resource areas listed below would be potentially affected by this Project. These were identified because there would be at least one impact that would be a "potentially significant impact" except that the Applicant has agreed to Project revisions, including implementation of mitigation measures, that would reduce the impact to "less-than-significant impact with mitigation."

Environmental Resource Areas with Potentially Significant Impacts:

- Biological Resources
- Cultural Resources
- Cultural Resources – Tribal
- Geology, Soils, and Paleontological Resources
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Mandatory Findings of Significance

Detailed descriptions and analyses of impacts from Project activities and the basis for their significance determinations are provided for each environmental factor on the following pages, beginning with Section 3.1, *Aesthetics*. Relevant laws, regulations, and policies potentially applicable to the Project are listed in Appendix A and Appendix B to this IS/MND.

AGENCY STAFF DETERMINATION

Based on the environmental impact analysis provided by this IS/MND:

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.

Signature Date

Sarah Mongano, Senior Environmental Scientist
Division of Environmental Science, Planning, and Management
California State Lands Commission

3.1 AESTHETICS

AESTHETICS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 day or nighttime views in the area?	☐	☐	☐	☒

3.1.1 Environmental Setting

The Project site is in a non-urbanized area surrounded by scenic natural features including the Eel River, the Scotia Bluffs, redwood trees, and riparian vegetation along the riverbank. These natural features contribute to the area's scenic

character and provide high quality views from publicly accessible vantage points such as U.S. 101 or nearby trails.

Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Scenic vistas are generally accessible from public vantage points, such as public roadways. The City of Rio Dell's (Rio Dell) General Plan Open Space, Conservation, and Recreation Element does not identify specific scenic vista points, but states that sweeping vistas associated with the Eel River valley contribute to Rio Dell's aesthetic setting (City of Rio Dell 2013). Thus, views of the Eel River from U.S. 101 or higher-elevation viewpoints may be considered scenic vistas.

Public views of the Southern and Northern Work Areas are generally limited to adjacent streets such as Eeloa Avenue and Northwestern Avenue due to intervening trees and vegetation; however, there may be intermittent views from vantage points along U.S. 101 or at higher-elevation viewpoints in the area. The Staging and Laydown Area is visible from Northwestern Avenue and U.S. 101 but is screened by trees and other vegetation along Northwestern Avenue.

The segment of U.S. 101 in Humboldt County is an eligible State Scenic Highway (Caltrans 2018). There are no officially designated State Scenic Highways in the vicinity.

Existing sources of light and glare are limited to vehicles traveling on adjacent streets, and residential uses adjacent to the Southern Work Area.

3.1.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to aesthetics that are relevant to the Project. Appendix A contains the State laws and regulations pertaining to aesthetics and relevant to the Project. Local goals, policies, or regulations applicable to the Project are identified in Appendix B.

3.1.3 Impact Analysis

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

Less Than Significant Impact

Temporary (up to 4 months) construction equipment within the Southern and Northern Work Areas may be faintly visible from vantage points along U.S. 101 or at higher-elevation viewpoints in the area, but would not block or alter scenic

views of the Eel River. As discussed in Section 3.1.1, views of both work areas would largely be obscured by existing trees and vegetation. Vegetation disturbance would be very limited and would not include any tree trimming or removal. All construction equipment would be removed upon completion of construction. The only permanently visible component would be a new wire extending up the side of the utility pole closest to each the Southern Work Area and the Northern Work Area to connect the No. 7 Boxes to existing distribution lines. The visual change would be minor and would not block or alter any scenic views. Therefore, the impact would be less than significant.

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

No Impact

There are no designated scenic resources, trees, rock outcroppings, or historic buildings within a state scenic highway within the Project area. In addition, the Project would not damage or alter any scenic resources, such as the Eel River or Scotia Bluffs, that contribute to the eligibility of U.S. 101 as a state scenic highway. Therefore, there would be no impact.

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?

Less Than Significant Impact

As discussed in (a), above, the Project would result in temporary visual changes during construction (up to 4 months). Construction equipment would mainly be visible from adjacent streets, with limited views from more distant vantage points. All equipment would be removed upon completion of construction, and there would be no permanent changes to the visual character of the Project site. Therefore, the impact would be less than significant.

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

No Impact

Project work activities would be limited to daylight hours (8 a.m. to 5 p.m.) and would not introduce any new sources of light or glare. While longer shifts may occur, no work requiring nighttime illumination would take place, as night work past 8 p.m. would not occur. Therefore, there would be no impact.

3.1.4 Mitigation Summary

The Project would have no significant impact to aesthetics; therefore, no mitigation is required.

3.2 AGRICULTURE AND FOREST RESOURCES

AGRICULTURE AND FOREST RESOURCES - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 Natural Resources Agency, to non-agricultural use?	☐	☐	☒	☐
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☒	☐
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☒	☐

3.2.1 Environmental Setting

Agricultural activities within Rio Dell include small scale farming, grazing and limited timber production. The Mozzetti property on the north side of the Eel River and the Dinsmore Plateau in the southeastern area of Rio Dell contain most of Rio Dell's agricultural land (City of Rio Dell 2013). The proposed Project's 1.17-acre temporary construction easement (TCE) within the Northern Work Area is within the Mozzetti property.

The California Farmland Mapping and Monitoring Program (FMMP) is a nonregulatory program that provides analysis of agricultural land use and land use changes throughout the State. The modern soil surveys produced by the U.S. Natural Resources Conservation Service are the basis for the FMMP and data is provided for Counties within the State. However, Humboldt County is not included in the FMMP because the County conducted its own countywide soil survey as part of the 2025 General Plan Update (Humboldt County 2017). The County defines prime agricultural lands based on California Government Code section 51201, subdivision (c). In accordance with this definition, the County has defined the Mozzetti property north of the Eel River, which includes the Northern Work Area, as prime agricultural land.

There are approximately 300,000 acres of Williamson Act contract lands within the County, but none within Rio Dell (Humboldt County 2017). The Project site does not contain any Williamson Act contract lands.

The Northern Work Area is designated and zoned for Natural Resources, which is intended to preserve agriculture, timber production, and conservation uses (City of Rio Dell 2024). The Southern Work Area and Staging and Laydown Area are not zoned for any agricultural or forestry use.

3.2.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to agricultural resources that are relevant to the Project. State laws and regulations pertaining to agricultural resources and relevant to the Project are identified in Appendix A. Local goals, policies, or regulations applicable to the Project are identified in Appendix B.

3.2.3 Impact Analysis

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 Natural Resources Agency, to non-agricultural use?

Less Than Significant Impact

As noted in Section 3.2.1, the Project area and vicinity does not include any lands mapped pursuant to the FMMP. However, impacts to prime agricultural lands, as identified by Humboldt County, are evaluated instead. Project activities on prime agricultural lands are limited to temporary soil disturbance on the portion of the Mozzetti property that is within the Northern Work Area. The Project would also require a TCE with the Mozzetti property owner, which would outline the specific area to be used and include terms and conditions associated with Project construction work. This would ensure that the land remains largely unaltered from its natural state once Project construction is completed and temporary components are removed from the site. While the Project would temporarily preclude agricultural use of the 1.17-acre Project area during the approximately 4 months of construction activities, it would not convert the land to non-agricultural use or preclude agricultural use of the site in the future. In addition, all Project components within agricultural lands would be installed underground and there would be no new above-ground facilities. Therefore, the impact would be less than significant.

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

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Pub. Resources Code, § 12220, subd. (g)), timberland (as defined by Pub. Resources Code, § 4526), or timberland zoned Timberland Production (as defined by Gov. Code, § 51104, subd. (g))?

(b to c) Less Than Significant Impact

As discussed in Section 3.2.1, the Northern Work Area is zoned Natural Resources which is intended to preserve agricultural and timber production uses. However, there are no active agricultural or forestry uses within this Area, and Project activities would be limited to minor vegetation removal and temporary soil disturbance during construction. The Project site would remain largely unaltered from its natural state once Project construction is completed and temporary components are removed from the work area. Thus, the Project would not preclude agricultural, forestry, or timberland production uses of the site in the

future. Additionally, the Project does not contain any areas subject to a Williamson Act contract. Therefore, impacts would be less than significant.

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

No Impact

The Project would not remove or destroy any forest land. As previously discussed, the Project would require only minor vegetation removal, and no trees would be trimmed or removed. Therefore, there would be no impact.

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?

Less Than Significant Impact

As discussed in (a), above, the Project would not result in permanent loss or conversion of agricultural land in a way that would preclude agricultural use in the future. Upon Project completion, the land would be returned to pre-project conditions. Therefore, impacts would be less than significant.

3.2.4 Mitigation Summary

The Project would have no significant impact to agricultural or forestry resources; therefore, no mitigation is required.

3.3 AIR QUALITY

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

3.3.1 Environmental Setting

The Project site is in the North Coast Air Basin (NCAB) and is subject to the North Coast Unified Air Quality Management District (NCUAQMD) air pollutant guidelines and regulations. Air pollutants are emitted by a variety of sources, including off-road construction equipment, on-road mobile sources (vehicles), area sources (hearths, consumer product use, architectural coatings, and landscape maintenance equipment), energy sources (natural gas), and stationary sources (generators or other stationary equipment).

3.3.1.1 Meteorological and Topographical Conditions

The climate of the NCAB is influenced by the Pacific Ocean and mountains of the Coast Range. The Coast Range runs north to south with peaks reaching heights of approximately 9,000 feet that act as a barrier blocking moisture and wind from reaching the east side of the range, resulting in hot, dry summers and cool, snowy winters. Coastal areas experience cool summers and rainy winters. Predominant winds are from the north to northwest in the summer, and from the south to southwest in the winter.

3.3.1.2 Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved. Children, pregnant women, older adults, and people with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses where sensitive-receptor population groups are likely to be located include hospitals, medical clinics, schools, playgrounds, childcare centers, residences, and retirement homes (BAAQMD 2023). The nearest sensitive receptors to the Southern and Northern Work Areas are residences approximately 70 feet and 300 feet from the construction zones, respectively.

3.3.1.3 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the U.S. Environmental Protection Agency (EPA) and California Air Resources Board (CARB) have established ambient air quality standards (AAQS) for outdoor concentrations to protect public health. The federal and state AAQS have been set, with an adequate margin of safety, at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. For this project, criteria air pollutants of concern include ozone (O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$).

Ozone (O_3)

O_3 is a strong-smelling pollutant formed in the atmosphere by a photochemical process involving the sun's energy and oxides of nitrogen (NO_x) and reactive organic gases (ROG). The maximum effects of precursor emissions on O_3 concentrations usually occur several hours after they are emitted and many

miles from the source. Meteorology and terrain play major roles in O_3 formation, and ideal conditions occur during summer and early autumn on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The O_3 that EPA and CARB regulate as a criteria air pollutant is produced close to the ground level, where people live, exercise, and breathe. O_3 in the troposphere causes numerous adverse health effects; short-term exposures (lasting for a few hours) to O_3 can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. These health problems are particularly acute in sensitive receptors such as the sick, the elderly, and young children.

Nitrogen Dioxide (NO_2)

NO_2 is a brownish, highly reactive gas that is present in all urban atmospheres. The major mechanism for the formation of NO_2 in the atmosphere is the oxidation of the primary air pollutant nitric oxide (NO), which is a colorless, odorless gas. Both NO_2 and NO are constituents of NO_x, which is formed from fuel combustion under high temperature or pressure. NO_2 can irritate the lungs, cause bronchitis and pneumonia, and lower resistance to respiratory infections.

Carbon Monoxide (CO)

CO is a colorless, odorless gas formed by the incomplete combustion of hydrocarbon or fossil fuels. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions. The highest levels of CO typically occur during the colder months of the year, when inversion conditions are more frequent. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions.

Sulfur Dioxide (SO_2)

SO_2 is a colorless, pungent gas that is produced from coal and oil used in power plants and industries. SO_2 concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO_2 and limits on the sulfur content of fuels. SO_2 is an irritant gas that affects the throat and lungs and can cause acute respiratory symptoms and diminished ventilator function in children. When combined with particulate matter, SO_2 can injure lung tissue and reduce visibility and the level of sunlight.

Particulate Matter (PM_{10} and $PM_{2.5}$)

Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. $PM_{2.5}$ and PM_{10} represent fractions of particulate matter. Coarse particulate matter (PM_{10}) consists of particulate matter that is 10 microns or less in diameter (about 1/7 the thickness of a human hair). Major sources of PM_{10} include crushing or grinding operations; dust stirred up by vehicles traveling on roads; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; and windblown dust from open lands. Fine particulate matter ($PM_{2.5}$) consists of particulate matter that is 2.5 microns or less in diameter (roughly 1/28 the diameter of a human hair). $PM_{2.5}$ results from fuel combustion (e.g., from motor vehicles and power generation and industrial facilities), residential fireplaces, and woodstoves. $PM_{2.5}$ and PM_{10} pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. $PM_{2.5}$ and PM_{10} can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. People with influenza, people with chronic respiratory and cardiovascular diseases, and the elderly may suffer worsening illness and premature death as a result of breathing particulate matter. Children may experience a decline in lung function due to breathing in PM_{10} and $PM_{2.5}$.

3.3.1.4 Non-Criteria Air Pollutants

Non-criteria air pollutants considered in this analysis include toxic air contaminants (TACs) and odorous compounds.

A substance is considered toxic if it has the potential to cause adverse health effects in humans, including increasing the risk of cancer upon exposure, or acute and/or chronic non-cancer health effects. Diesel particulate matter (DPM), which is part of a complex mixture that makes up diesel exhaust, is a TAC of key concern as it is estimated that about 70 percent of the total known cancer risk related to air toxics in California is attributable to DPM (CARB 2025c). DPM is emitted from a broad range of diesel engines.

In contrast to TACs, odors are generally regarded as an annoyance rather than a health hazard. Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

3.3.2 Regulatory Setting

The EPA is responsible for implementing most aspects of the Clean Air Act, including setting National Ambient Air Quality Standards (NAAQS) for criteria air pollutants. Under the California Clean Air Act, the task of air quality management and regulation has been legislatively granted to CARB, including setting California Ambient Air Quality Standards (CAAQS) for criteria air pollutants, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. NCUAQMD is the regional agency responsible for the regulation and enforcement of federal, state, and local air pollution control regulations in Del Norte, Humboldt, and Trinity Counties. Federal and State laws and regulations pertaining to air quality that are applicable to the Project are identified in Appendix A. Local regulations are detailed in Appendix B.

3.3.2.1 Air Quality Regulation and Planning

The EPA and CARB designate air basins (or portions thereof) as "attainment" or "nonattainment" for each criteria air pollutant, based on whether the AAQS have been achieved. Generally, if the recorded concentrations of a pollutant are lower than the standard, the area is classified as "attainment" for that pollutant. If an area exceeds the standard, the area is classified as "nonattainment" for that pollutant. The designation of "unclassifiable/ attainment" means that the area meets the standard or is expected to be meet the standard despite a lack of monitoring data. The NCAB is listed as "attainment" or "unclassified" for all federal and State AAQS with the exception of the state 24-hour PM_{10} standard in Humboldt County only (EPA 2025, CARB 2023). Accordingly, NCUAQMD adopted a draft PM_{10} Attainment Plan (NCUAQMD 1995).

3.3.2.2 Thresholds of Significance

Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.) indicates that, where available, the significance criteria established by the applicable air quality management district or pollution control district may be relied upon to determine whether the project would have a significant impact on air quality. NCUAQMD has not formally adopted significance thresholds, but rather recommends lead agencies utilize the emission rates for stationary sources as defined and listed in the NCUAQMD Rule 110 (NCUAQMD n.d.). Table 3.3-1

summarizes the NCUAQMD recommendations that are used as the thresholds for air quality analysis.

Table 3.3-1. NCUAQMD Recommended Emission Rates for CEQA Threshold of Significance

Pollutant	Daily Emissions (pounds per day)	Annual Emissions (tons per year)
ROG	50	40
NO_x	50	40
CO	500	100
SO_x	80	40
PM_{10}	80	15
$PM_{2.5}$	50	10

Source: NCUAQMD 2015.
Notes: SOx = oxides of sulfur

3.3.3 Impact Analysis

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

No Impact

The NCUAQMD has not adopted any air quality plans. However, as the Project consists of infrastructure development only, it would not involve increases in population, housing, or commercial/industrial development, which are the typical criteria to evaluate the potential of a project to conflict with or obstruct an air quality plan. As discussed in Section 3.15, *Population and Housing*, the Project would serve existing and planned development, and would not be growth-inducing. Therefore, it would not conflict with local or NCUAQMD growth projections. Additionally, the Project would represent a short-term, localized source of emissions and would not affect long-term regional emissions. Therefore, there would be no impact.

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

Less Than Significant Impact

Past, present, and future development projects may contribute to the NCAB adverse air quality impacts on a cumulative basis. By its nature, air pollution is largely a cumulative impact. Based on these considerations, project-level thresholds of significance for criteria pollutants are used in the determination of whether a project's individual emissions would have a cumulatively considerable contribution to air quality (see Section 3.3.2.2, *Thresholds of Significance*). As discussed in Section 3.3.2.1, *Air Quality Regulation and Planning*, the NCAB is listed as "attainment" or "unclassified" for all NAAQS and CAAQS, except that Humboldt County is nonattainment for the 24-hour PM_{10} CAAQS. The following discussion focuses on short-term construction emissions since the Project would not result in any new long-term operational activities that would result in increased air pollutant emissions in the region.

The Project's construction activity emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.30. For the purposes of modeling, it was assumed that Project construction would commence in April 2026[1] and would last approximately 60 work days (up to 4 months). The analysis contained herein is based on the Project schedule assumptions also found in Section 2.4, *Project Schedule and Equipment*:

- Mobilization, Staging, Site Preparation – 2 days
- HDD and No. 7 Box Installation – 50 days
- Drilling Fluid Disposal – 6 days
- Conduit Pulling, Trenching to Existing Lines, Site Restoration – 8 days

The construction off-road equipment and on-road vehicles used for estimating the construction emissions of the Project is provided in Section 2.4, *Project Schedule and Equipment,* in Table 2-2 and Table 2-3, respectively. Detailed construction equipment modeling assumptions are provided in Appendix D, *CalEEMod Outputs*.

[1] The analysis assumes a construction start date of April 2026, which represents the earliest date construction would initiate. Assuming the earliest start date for construction represents the worst-case scenario for criteria air pollutant emissions because equipment and vehicle emission factors for later years would be slightly less due to more stringent standards for in-use off-road equipment and heavy-duty trucks, as well as fleet turnover replacing older equipment and vehicles in later years.

For the analysis, it was assumed that heavy construction equipment would operate 5 days per week (22 days per month) during Project construction. Construction worker vehicle and truck (vendor and haul) trips were based on Applicant-provided data. However, default worker vehicle and vendor truck one-way trip lengths were increased to 20 miles each based on the rural location of the Project. In addition, the drilling fluid disposal phase was added to CalEEMod to account for the vacuum truck transport of drilling fluid to the Yolo County Central Landfill, approximately 256 miles each way (512 miles roundtrip). Excavated soils were assumed to be backfilled and compacted on site.

A detailed depiction of the construction schedule, including information regarding phases and equipment used during each phase, is included in Appendix D.

Table 3.3-2 and Table 3.3-3 present the estimated maximum daily and annual construction emissions generated by the Project, respectively.

Table 3.3-2. Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Pounds per day					
Peak Daily Emissions	2.25	44.58	52.25	0.09	1.82	1.19
NCUAQMD Threshold	*50*	*50*	*500*	*80*	*80*	*50*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix D.
Note: Construction predicted to occur in 2026.

Table 3.3-3. Estimated Annual Construction Criteria Air Pollutant Emissions

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per year					
Peak Annual Emissions	0.06	1.11	1.40	<0.01	0.04	0.03

Table 3.3-3. Estimated Annual Construction Criteria Air Pollutant Emissions

	ROG	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	Tons per year					
NCUAQMD Threshold	*40*	*40*	*100*	*40*	*15*	*10*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

Source: Appendix D.
Note 1: <0.01 = reported value less than 0.01.
Note 2: Construction predicted to occur in 2026.

As shown in Tables 3.3-2 and 3.3-3, the Project's unmitigated construction emissions would not exceed the established thresholds for any criteria air pollutants. Therefore, the impact would be less than significant.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact

The nearest sensitive receptors to the Southern and Northern Work Areas of the Project site are residences approximately 70 feet and 300 feet from the construction zones, respectively. Potential exposure of sensitive receptors to substantial TAC and criteria air pollutant concentrations is evaluated below.

Toxic Air Contaminants

Project construction would result in emissions of DPM from off-road construction equipment and trucks accessing the Project site. The Office of Environmental Health Hazard Assessment (OEHHA) has identified carcinogenic and chronic noncarcinogenic effects from long-term exposure, but has not identified health effects due to short-term exposure to diesel exhaust. The duration of proposed construction activities would only constitute a small percentage of the total long-term exposure period (60 days compared to the standard 30-year exposure period) and would not result in exposure of proximate sensitive receptors to substantial TACs. In addition, the Project would not require the extensive operation of heavy-duty diesel construction equipment or trucks, which are subject to CARB Airborne Toxic Control Measures that reduce diesel emissions, as described in Appendix A.

Therefore, the Project would not expose sensitive receptors to substantial quantities of TACs during construction. Moreover, as discussed previously in

question (b), above, the Project would not include any new long-term operational activities.

Criteria Air Pollutants

As discussed in Section 3.3.1.3, *Criteria Air Pollutants*, O^3, or ozone, is formed in the atmosphere by a process involving the sun's energy and the pollutants NO_x and ROG. NO_x emissions also contribute to potential exceedances of the NAAQS and CAAQS for NO_2, since NO_2 is a constituent of NO_x. The Project would not exceed the NCUAQMD significance thresholds for ROG or NO_x; thus, implementation of the Project would contribute minimally to regional O_3 and NO_2 concentrations and the associated health effects.

Regarding localized impacts, Code of Federal Regulations, title 40, part 93.123(c)(5), Procedures for Determining Localized CO, PM_{10}, and $PM_{2.5}$ Concentrations (Hot-Spot Analysis), states that "CO, PM_{10}, and $PM_{2.5}$ hot-spot analyses are not required to consider construction-related activities, which cause temporary increases in emissions. Each site which is affected by construction-related activities shall be considered separately, using established 'Guideline' methods. Temporary increases are defined as those which occur only during the construction phase and last five years or less at any individual site" (40 CFR 93.123). While Project construction would involve on-road vehicle trips, off-road equipment, and fugitive dust, construction activities would last approximately 60 days and would not require a project-level construction hotspot analysis and the Project is not anticipated to result in health effects associated with CO, PM_{10}, or $PM_{2.5}$.

Based on the preceding considerations, the Project would not expose sensitive receptors to substantial pollutant concentrations. Therefore, the impact would be less than significant.

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

Less Than Significant Impact

The Project is not anticipated to result in other emissions that have not been addressed in questions (a) through (c), above. As such, this analysis focuses on the potential for the Project to generate odors.

Odors would be generated from vehicles and/or equipment exhaust emissions during Project construction activities. Odors produced during construction

would come from equipment tailpipes releasing concentrations of unburned hydrocarbons. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Therefore, the impact would be less than significant.

3.3.4 Mitigation Summary

The Project would have no significant impact to air quality; therefore, no mitigation is required.

3.4 BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or that is a species of interest to the State Lands Commission or the California Coastal Commission; or cause a marine wildlife population to drop below self-sustaining levels?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, State Lands Commission, or California Coastal Commission?	☐	☒	☐	☐
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,	☐	☒	☐	☐

BIOLOGICAL RESOURCES – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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 (including essential fish habitat)?	☐	☐	☐	☒
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?	☐	☐	☐	☒

The following discussion is based on information from the Biological Resources Assessment (BRA), prepared by Dudek (2025), included as Appendix E. The BRA analyzed additional areas, including distribution lines, which are not considered part of the Project analyzed in this IS/MND. Acreages and species potential to occur were further refined within Section 3.4 to reflect solely the areas and activities that are part of the Project.

3.4.1 Environmental Setting

This section describes the existing biological resources of the Project site and a 50-foot buffer around the Project site that may be subject to indirect effects.

Information on biological resources occurring or potentially occurring in or near the Project site and buffer was obtained by reviewing pertinent literature, mapping vegetation communities and land cover, evaluating the area's potential to support special status plant and wildlife species, and conducting a preliminary jurisdictional aquatic resources assessment. Dudek biologists performed a field survey of the Project site on April 30, 2025. The survey was conducted on foot, and field notes, an aerial photograph with an overlay of the property boundary, and ArcGIS FieldMaps were used to map vegetation communities and record any sensitive biological resources within the Project site. This section summarizes and adapts information presented in the BRA (Appendix E) that is necessary to understand the impacts and mitigation measures.

3.4.1.1 Vegetation Communities and Land Cover Types

Three vegetation communities and two other land cover types were documented in the Project site and buffer: red alder riparian, redwood forest, shining willow riparian, dirt road, and urban/developed (refer to Table 3.4-1 below and Appendix E Figures 5-1 through 5-6, *Vegetation Communities and Land Cover Types*). The vegetation communities and land covers were determined from *A Manual of California Vegetation*, Online Edition (CNPS 2025b). Appendix E contains a description of each vegetation community or land cover type.

Table 3.4-1. Vegetation Communities and Land Cover Types in the Project site

CDFW Alliance Code	Vegetation Community or Land Cover Type	Rarity Rank		Acreage
		Global	State	
Vegetation Communities				
61.410.00	Red alder riparian	G5	S4	1.19
86.100.00	Redwood forest	G3[a]	S3[a]	0.06
61.204.00	Shining willow riparian	G4	S3	0.23
Other Land Cover Types				
00.000.00	Dirt road	—	—	0.07
00.000.00	Urban/developed	—	—	2.60
			Total[b]	**4.15**

Notes:
Global ranks: G5 = secure; G=4 apparently secure; G3 = vulnerable.
State ranks: S4= Apparently secure in state; S3 = vulnerable.
State ranks of S1–S3 are considered sensitive by the California Department of Fish and Wildlife.
[a] CDFW 2025b.
[b] Total may not sum precisely due to rounding.

3.4.1.2 Special Status Biological Resources

Sensitive Natural Communities

The Project site supports three natural communities: redwood forest, red alder riparian, and shining willow riparian. Natural communities are evaluated based on rarity and threats by the California Department of Fish and Wildlife (CDFW). Sensitive natural communities are considered rare or threatened within the state. Redwood forests and shining willow riparian communities are considered sensitive natural communities or special status habitat, both ranked S3-vulnerable (see Table 3.4-1). Of the 6.31 million acres mapped in the Northern California Coast and Northern California Coast Range ecoregions by CDFW, only 20 stands of shining willow were mapped, totaling less than 100 acres.

Waters and Wetlands

Stantec biologists conducted an initial jurisdictional aquatic resources delineation on February 3, 2025. During the February delineation, however, unusually high water levels in the Eel River obscured areas of the Project site. Concurrent with the fieldwork on April 30, 2025, Dudek biologists conducted a separate jurisdictional delineation to identify and map the extent of aquatic resources within the Project site that are potentially subject to regulation under federal Clean Water Act sections 401 and 404, California Fish and Game Code section 1600, and/or the provisions of the Porter–Cologne Water Quality Control Act. Aquatic resource delineation methods and results are detailed in Appendix E.

A total of approximately 1.4 acres (138 linear feet) of potential jurisdictional aquatic resources, including federal and state jurisdictional wetlands, non-wetland waters, and riparian habitat (Table 3.4-2) have been mapped and delineated within the Project site with one intermittent channel (NWW-02) and one freshwater emergent wetland (WET-01). Both delineation surveys confirmed the emergent wetland. Additionally, the red alder riparian and shining willow riparian vegetation communities in the Project site are assumed to be under the jurisdiction of CDFW pursuant to California Fish and Game Code section 1602.

Table 3.4-2. Aquatic Resources Mapped in the Project site

Resource Type	Anticipated Jurisdiction	Linear Feet[a]	Acreage
Non-Wetland Waters			
NWW-02: Intermittent Channel (OHWM)	USACE/RWQCB/CDFW	138	0.015
NWW-02: Intermittent Channel (TOB)	RWQCB/CDFW	—	0.051
	Subtotal Non-Wetland Waters	*138*	*0.066*
Wetland Waters			
WET-01: Emergent Wetland	USACE/RWQCB/CDFW	—	0.065
Riparian			
RIP-01 through RIP-04: Riparian	CDFW	—	1.286
	Total Aquatic Resources	***138***	***1.418***

Notes: OHWM = ordinary high water mark; TOB = top of bank; RWQCB = Regional Water Quality Control Board; USACE = U.S. Army Corps of Engineers.

[a] "—" is used to avoid duplicating linear feet calculations for the OHWM and TOB.

The emergent wetland (WET-01) is characterized by erect, rooted herbaceous hydrophytes (water-dwelling plants) that require saturation or at least periodic flooding, and is dominated by toad rush (*Juncus bufonius*), annual hairgrass (*Deschampsia danthonioides*), tall flatsedge (*Cyperus eragrostis*), and wild mint (*Mentha arvensis*), with a lesser abundance of hyssop loosestrife (*Lythrum hyssopifolia*), narrowleaf plantain (*Plantago lanceolata*), and eggbract sedge (*Carex leporina*). WET-01 was saturated during the initial delineation conducted by Stantec biologists on February 3, 2025, but dry during the April 30, 2025, field survey (see Appendix E). There is an earthen berm present between the emergent wetland and the Eel River, but based on the high water line mapped during the initial delineation, this wetland appears to be hydrologically connected to the Eel River during periods of high flows. This wetland is also located within the 100-year floodplain of the Eel River (FEMA 2024).

Special Status Plants

Special status plants include those listed, or candidates for listing, as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) and/or CDFW, and species identified as rare by the California Native Plant Society (particularly California Rare Plant Rank [CRPR] 1A – presumed extinct in California; CRPR 1B – rare, threatened, or endangered throughout its range; and CRPR 2 – rare or endangered in California, more common elsewhere).

Dudek biologists performed a desktop review of literature, existing documentation, and GIS data to evaluate the potential for special status plant species to occur within the Project site. Out of 31 special status plant species identified as known to occur in the Project's region, 14 special status plant species were determined to have potential to occur within the Project site based on the habitat present. However, no special status plants were observed during the April 2025 field survey, which occurred when many of the potentially occurring species would have been evident and identifiable. ~~In addition, no special status plant species were observed within the Project site during focused surveys from April through July 2021 (the blooming period for all applicable special status plant species) (McGraw 2021; Appendix B of Appendix E), nor have they been observed during other previous surveys (Harris & Associates 2019; McGraw 2021-2023).~~ Finally, no critical habitat has been designated for federally listed plant species within the Project site.

The following species (all 31 special status plants) are not expected to occur near or be impacted by Project activities and are not discussed further (See Appendix E: Appendix E, *Special Status Plant Species Potential to Occur Table*, for details):

- Pink sand-verbena (*Abronia umbellata* var. *breviflora*)
- Coastal marsh milk-vetch (*Astragalus pycnostachyus* var. *pycnostachyus*)
- Seaside bittercress (*Cardamine angulata*)
- Northern clustered sedge (*Carex arcta*)
- Bristle-stalked sedge (*Carex leptalea*)
- Lyngbye's sedge (*Carex lyngbyei*)
- Humboldt Bay owl's-clover (*Castilleja ambigua* var. *humboldtiensis*)
- Oregon coast paintbrush (*Castilleja littoralis*)
- Point Reyes salty bird's-beak (*Chloropyron maritimum* ssp. *palustre*)
- Whitney's farewell-to-spring (*Clarkia amoena* ssp. *whitneyi*)
- Cascade downingia (*Downingia willamettensis*)
- Bluff wallflower (*Erysimum concinnum*)
- Menzies' wallflower (*Erysimum menziesii*)
- Giant fawn lily (*Erythronium oregonum*)

- Coast fawn lily (*Erythronium revolutum*)
- Minute pocket moss (*Fissidens pauperculus*)
- Pacific gilia (*Gilia capitata* ssp. *pacifica*)
- Dark-eyed gilia (*Gilia millefoliata*)
- Short-leaved evax (*Hesperevax sparsiflora* var. *brevifolia*)
- Beach layia (*Layia carnosa*)
- Western lily (*Lilium occidentale*)
- Howell's montia (*Montia howellii*)
- Baker's navarretia (*Navarretia leucocephala* ssp. *bakeri*)
- Kneeland Prairie pennycress (*Noccaea fendleri* ssp. *californica*)
- Seacoast ragwort (*Packera bolanderi* var. *bolanderi*)
- White-flowered rein orchid (*Piperia candida*)
- Crinkled rag lichen (*Platismatia lacunosa*)
- Oregon polemonium (*Polemonium carneum*)
- Siskiyou checkerbloom (*Sidalcea malviflora* ssp. *patula*)
- Coast checkerbloom (*Sidalcea oregana* ssp. *eximia*)
- Western sand-spurrey (*Spergularia canadensis* var. *occidentalis*)

Special Status Wildlife

Special status wildlife species include those listed, or candidates for listing, as threatened or endangered by USFWS, the National Marine Fisheries Service (NMFS), and CDFW, and those designated as species of special concern by CDFW and sensitive by USFWS.

Wildlife observed during the surveys was characteristic of the region and the riparian forest habitat that occurs on-site. Thirty-two species of birds were observed including species often associated with riparian forest, such as black-headed grosbeak (*Pheucticus melanocephalus*), Pacific-slope flycatcher (*Empidonax difficilis*), Swainson's thrush (*Catharus ustulatus*), chestnut-backed chickadee (*Poecile rufescens*), Wilson's warbler (*Cardellina pusilla*), orange-crowned warbler (*Leiothlypis celata*), Townsend's warbler (*Setophaga*

townsendi), Pacific wren (*Troglodytes pacificus*), and wrentit (*Chamaea fasciata*). Additionally, many grassland-associated bird species were observed, such as house finch (*Haemorhous mexicanus*), American goldfinch (*Spinus tristis*), red-tailed hawk (*Buteo jamaicensis*), and white-crowned sparrow (*Zonotrichia leucophrys*). One special status amphibian species, northern red-legged frog (*Rana aurora*), was recorded during the field survey. At least two species of bumble bee (*Bombus* spp.) were observed foraging during the survey. Other wildlife species observed include disturbance-adapted species such as northern raccoon (*Procyon lotor*), black-tailed deer (*Odocoileus hemionus columbianus*), American crow (*Corvus brachyrhynchos*), and common raven (*Corvus corax*).

Dudek biologists performed a desktop review of literature, existing documentation, and GIS data to evaluate the potential for special status wildlife species to occur within the Project site or the Eel River above the HDD routes. Of the 35 special status wildlife species known to occur in the region, 24 were determined to have potential to occur, and one (northern red-legged frog) was observed in the Project site and 50-foot buffer of the Northern Work Area (Table 3.4-3). For detailed descriptions of the special status wildlife species refer to the BRA, Appendix E. Critical habitat for the Northern California distinct population segment (DPS) of steelhead and California Coastal evolutionarily significant unit (ESU) of Chinook salmon is designated in the Eel River above the Project's HDD bore routes.

Based on available data, the following species are not expected to occur near or be impacted by Project activities and are not discussed further (See Appendix E: Appendix F, *Special Status Wildlife Potential to Occur Table*, for details):

- Monarch – California overwintering population 1 (*Danaus plexippus plexippus*)
- Tidewater goby (*Eucyclogobius newberryi*)
- Longfin smelt (*Spirinchus thaleichthys*)
- Green sea turtle (*Chelonia mydas*)
- Grasshopper sparrow (*Ammodramus savannarum*) (nesting)
- Marbled murrelet (*Brachyramphus marmoratus*) (nesting)
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) (nesting)
- California condor (*Gymnogyps californianus*)
- Short-tailed albatross (*Phoebastria albatrus*)

- Mountain plover (*Anarhynchus montanus*) (wintering)
- Western snowy plover (*Anarhynchus nivosus nivosus*) (nesting)

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Invertebrates				
Bombus occidentalis	western bumble bee	None/SCE	Meadows and seeps, riparian forests, riparian scrubs, valley and foothill grassland	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are four CNDDB records of this species within 5 miles of the Project site (CDFW 2025). There are no recent Bumble Bee Watch records of this species within 5 miles of the Project site (Bumble Bee Watch 2025).
Fishes				
Acipenser medirostris pop. 1	green sturgeon – southern DPS	FT/SSC	Spawns in deep pools in large, turbulent, freshwater rivers; adults live in oceanic waters, bays, and estuaries	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There are

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				no CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Green sturgeon are known to occur in the Eel River.
Entosphenus tridentatus	Pacific lamprey	None/SSC	Freshwater habitat includes lakes, rivers, and creeks; soft substrates in shallow areas along banks; in Goose Lake, Klamath and Shasta Rivers, and Copco Lake	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Pacific lamprey are known to occur in the Eel River.
Lampetra richardsoni	western brook lamprey	None/SSC	Gravel riffles and clear, cool streams	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species'

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Western brook lamprey are known to occur in the Eel River.
Oncorhynchus clarkii clarkii	coast cutthroat trout	None/SSC	Small streams, with gravel bottoms and gentle gradients	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There is one CNDDB record of this species within 5 miles of the Project site (CDFW 2025). Coast cutthroat trout are known to occur in the Eel River.

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
Oncorhynchus mykiss irideus pop. 48	steelhead - northern California DPS summer-run	FT/SE	Naturally spawning population of the stream-maturing summer-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution within range more limited.	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There are two CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Steelhead are known to occur in the Eel River.
Oncorhynchus mykiss irideus pop. 49	steelhead - northern California DPS winter-run	FT/SSC	Naturally spawning population of the ocean-maturing winter-run ecotype. From Redwood Creek watershed south to and inclusive of Gualala River watershed. Distribution throughout range.	**Potential to occur above the HDD routes.** The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There are four CNDDB records of this species within 5 miles of the Project site (CDFW 2025).

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				Steelhead are known to occur in the Eel River.
Oncorhynchus tshawytscha pop. 17	chinook salmon – California coastal ESU	FT/None	Federal listing refers to wild spawned, coastal, spring and fall runs between Redwood Cr, Humboldt Co and Russian River, Sonoma Co.	**Potential to occur above the HDD routes**. The Eel River, above the Project's HDD bore routes, is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Chinook salmon are known to occur in the Eel River.
Amphibians				
Ascaphus truei	Pacific tailed frog	None/SSC	Low-temperature permanent streams in conifer forests	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There is one CNDDB record of this species within 5 miles of the Project site

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				(CDFW 2025). There are no iNaturalist records of this species within 5 miles of the Project site (iNaturalist 2025).
Rana aurora	northern red-legged frog	None/SSC	Quiet pools in streams, marshes, and ponds	**Observed within the Project site and 50-foot buffer.** The Project site is located within the species' geographic range and habitat is present. There are nine CNDDB records of this species within 5 miles of the Project site (CDFW 2025). Several individuals observed in small stream within the Project site and 50-foot buffer adjacent to the Project site during April 2025 field survey.
Rana boylii pop. 1	foothill yellow-legged frog -	None/SSC	Rocky streams and rivers with open banks in forest, chaparral, and woodland	**Potential to occur.** The Project site is located within the species' geographic

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
	north coast DPS			range and habitat is present. There are 18 CNDDB records of this species within 5 miles of the Project site (CDFW 2025).
Rhyacotriton variegatus	southern torrent salamander	None/SSC	Clear, shallow, well-shaded streams, waterfalls, and seepages in mature to old-growth forests	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB or iNaturalist records of this species within 5 miles of the Project site (CDFW 2025, iNaturalist 2025).
Reptiles				
Actinemys marmorata	northwestern pond turtle	FPT/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are five CNDDB records of this

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				species within 5 miles of the Project site (CDFW 2025).
Birds				
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberry; forages in grasslands, woodland, and agriculture	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There is one CNDDB record of this species within 5 miles of the Project site (CDFW 2025). There are no eBird records of this species within 5 miles of the Project site (eBird 2025).
Aquila chrysaetos (nesting & wintering)	golden eagle	None/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025).

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
			and forages in open habitats	There are multiple eBird records of this species within 5 miles of the Project site (eBird 2025).
Haliaeetus leucocephalus (nesting & wintering)	bald eagle	FD/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025). There are multiple eBird records of this species within 5 miles of the Project site (eBird 2025).
Riparia riparia (nesting)	bank swallow	None/ST	Nests in riparian, lacustrine, and coastal areas with vertical banks, bluffs, and cliffs with sandy soils; open country and water during migration	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are two CNDDB records of this

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				species within 5 miles of the Project site (CDFW 2025).
Strix occidentalis caurina	northern spotted owl	FT/ST	Nests and forages in dense, old-growth, multi-layered mixed-conifer, redwood, and Douglas-fir habitats	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present within the tree farm to the north of the Northern Work Area. There are numerous CNDDB records of this species within 5 miles of the Project site, but the nearest activity center is beyond 0.25 miles from the Project site (CDFW 2025).
Mammals				
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB records of this

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
			in man-made structures and trees	species within 5 miles of the Project site (CDFW 2025).
Arborimus pomo	Sonoma tree vole	None/SSC	Old-growth and other forests including Douglas-fir, redwood, and montane hardwood–conifer forests	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are seven CNDDB records of this species within 5 miles of the Project site (CDFW 2025).
Corynorhinus townsendii	Townsend's big-eared bat	None/SSC	Mesic habitats characterized by coniferous and deciduous forests and riparian habitat, but also xeric areas; roosts in limestone caves and lava tubes, man-made structures, and tunnels	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are four CNDDB records of this species within 5 miles of the Project site (CDFW 2025).
Martes caurina humboldtensis	Humboldt marten	FT/SSC, SE	Coastal coniferous forests	**Potential to occur.** The Project site is located within the species' geographic range and habitat is

Table 3.4-3. Special Status Wildlife Species Potential to Occur in the Project Site

Scientific Name	Common Name	Status (Federal/ State)	Habitat	Potential to Occur
				present. There are three CNDDB records of this species within 5 miles of the Project site (CDFW 2025).
Pekania pennanti	fisher	None/SSC	Ranges widely in forested regions; uses heavy stands of mixed species of mature trees	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025).
Lasiurus frantzii	western red bat	None/SSC	Forest, woodland, riparian, mesquite bosque, and orchards, including fig, apricot, peach, pear, almond, walnut, and orange; roosts in tree canopy	**Potential to occur.** The Project site is located within the species' geographic range and habitat is present. There are no CNDDB records of this species within 5 miles of the Project site (CDFW 2025).

Status Legend
Federal
FD: Federally delisted

FE: Federally listed as endangered
FPT: Federally proposed for listing as threatened
FT: Federally listed as threatened

State

BCC: Birds of Conservation Concern
FP: Fully Protected
SCE: State candidate for listing as endangered
SE: State listed as endangered
SSC: Species of Special Concern
ST: State listed as threatened
WL: Watch List

3.4.1.3 Wildlife Corridors/Habitat Linkages

Wildlife corridors are linear features that connect large patches of natural open space and provide avenues for animal migration. Wildlife corridors contribute to population viability by ensuring continual exchange of genes between populations, providing access to adjacent habitat areas for foraging and mating, and providing routes for recolonization of habitat after local extirpation or ecological catastrophes (e.g., fires).

Habitat linkages are small patches that join larger blocks of habitat and help reduce the adverse effects of habitat fragmentation. Habitat linkages provide a potential route for gene flow and long-term dispersal of plants and animals, and may also serve as primary habitat for smaller animals, such as reptiles and amphibians. Habitat linkages may be continuous habitat or discrete habitat islands that function as steppingstones for dispersal.

The Project site vicinity has been subject to moderate disturbance from cattle grazing and tree farm timber harvest and thinning for several decades. There is pastureland north of the Northern Work Area and riparian forest along the Eel River within and near the Project site that may serve as a corridor linking similar habitat patches from adjacent surrounding rural properties. Native vegetation communities and aquatic resources within the Project site and vicinity are assumed to support local wildlife movement by small terrestrial wildlife species (e.g., birds, mammals, reptiles, and amphibians). The CDFW Terrestrial Habitat Connectivity Mapping Project designates the Project site's area as having "Limited Connectivity Opportunity."

3.4.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to biological resources and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.4.2.1 PG&E Multiple Region Operation and Maintenance Habitat Conservation Plan

The Project site is located within PG&E's USFWS-approved Multiple Region Operation and Maintenance Habitat Conservation Plan (MRHCP) that provides a framework to conserve and protect federally listed, covered species in support of a federal incidental take permit for PG&E Operation and Maintenance (O&M) activities in the Sacramento Valley and Foothills, North Coast, and Central Coast (ICF 2020). The MRHCP is a model-based HCP that

uses modeled habitat for covered species, developed in collaboration with the USFWS. The modeled habitat is then used to assess the impact area, determine covered species occupancy, and evaluate take coverage in the HCP. The Project site and a 50-foot buffer include potential habitat for two MRHCP-covered species, foothill yellow-legged frog (*Rana boylii*) and northern spotted owl (*Strix occidentalis caurina*). All relevant MRHCP field protocols and avoidance and minimization measures will be implemented as part of the Project. A list of field protocols and avoidance and minimization measures to reduce impacts on covered species can be found in the PG&E MRHCP and in Appendix F (ICF 2020).

3.4.2.2 Humboldt County General Plan

The Northern Work Area would be within a Streamside Management Area as designated by the Humboldt County General Plan (Humboldt County 2017):

Biological Resources Standard 8 (BR- S)- Required Mitigation Measures

"Any development in this Streamside Management Area must comply with this standard, which requires the following at a minimum:

- Retaining snags unless felling is required by CAL-OSHA, by California Department of Forestry and Fire Protection (CAL FIRE) forest and fire protection regulations, or for public health and safety reasons. The felling must be approved by the Planning Director. Felled snags shall be left on the ground if consistent with fire protection regulations and the required treatment of slash or fuels.
- Retain live trees with visible evidence of current or historical use as nesting sites by hawks, owls, eagles, osprey, herons, kites or egrets.
- Erosion control measures (as per Standard BR-S9- Erosion Control).
- Maximum feasible retention of overstory canopy in riparian corridors."

3.4.3 Impact Analysis

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, or that is a species of interest to the State Lands Commission or the California

Coastal Commission; or cause a marine wildlife population to drop below self-sustaining levels?

Less Than Significant with Mitigation

Heavy equipment operation and associated noise; potential river disturbance; dust from ground disturbance including grading, excavating and trenching; and an increase in human presence have the potential to impact special status species and their habitat.

3.4.3.1 Impacts to Species' Habitat

The Eel River adjacent to the Project site is designated as critical habitat for the Northern California DPS of steelhead and California Coastal ESU of Chinook salmon. Additionally, the Eel River in this area is Essential Fish Habitat for coho salmon and the Northern California DPS of steelhead. PG&E shall obtain all necessary permits for impacts to jurisdictional aquatic resources from the USACE, RWQCB, and CDFW prior to Project implementation and comply with agency permit conditions.

Vegetation Clearing and Trimming

Project activities, such as equipment operation and excavation, would require proposed ground disturbance and vegetation trimming and removal. As discussed in Section 2.3.1, *Site Preparation*, vegetation disturbance would be limited, would be temporary, and would not include any tree trimming or removal. Nonetheless, clearing shrubs or thickets and clearing ground vegetation could impact nesting and foraging bird habitat; western bumble bee forage habitat; and frog, salamander, and turtle habitat (especially overwintering terrestrial habitat). **MM BIO-1** is proposed for site restoration and revegetation of the site. Additional mitigation measures are proposed to address impacts to specific wildlife species, including those impacts caused by vegetation clearing and trimming, in the discussion under Section 3.4.3.3, *Impacts to Special Status Wildlife,* below. With implementation of this mitigation measure, the impact would be less than significant.

MM BIO-1: Site Restoration Plan. A Site Restoration Plan shall be developed that shall includes restoration and revegetation after the Project is complete. The Site Restoration Plan could include methods for salvaging and segregating topsoil, vegetation transplanting, seed collection (for reseeding or transplant propagation), stockpiling

mineral soils (non-topsoil), and replacing topsoil on top of backfilled excavation areas. The Site Restoration Plan shall establish monitoring and performance criteria to ensure that temporary impact areas are restored to pre-Project conditions. The Site Restoration Plan shall be submitted to CSLC for approval 30 days prior to the start of construction. Should a comparable plan be prepared for another agency's approval/authorization (e.g., Lake and Streambed Alteration Agreement under California Fish and Game Code sections 1600-1616), that plan may be used in lieu of the Site Restoration Plan if the components are substantially the same.

Fuel and Other Chemical Spills

An accidental spill of diesel fuel, oil, or other chemicals from upland construction equipment could result in the injury or mortality of protected fish or wildlife species and/or the temporary degradation of their habitat if it reaches the Eel River or any wetlands in the vicinity. Large equipment would be checked daily for leaks prior to entering the work area and would be parked (when not in use) in designated equipment staging locations away from the river. Regardless, the release of petroleum into the riverine environment is considered a potentially significant impact. **MM HAZ-1** (Section 3.10, *Hazards and Hazardous Materials*) would require implementation of a Spill Response and Contingency Plan to ensure hazardous materials are managed and stored properly to reduce the oil spill potential, and to establish a protocol for notification and clean-up to reduce the impact if a spill occurs. With the implementation of this measure, the impact would be less than significant.

Inadvertent Releases

Although equipment would be located in the upland areas, drilling and reaming activities have the potential for drilling fluids (predominantly bentonite clay) to migrate from the drill hole to surrounding fractured rock and sediments and be discharged to the surface water along the HDD routes in the Eel River. This inadvertent release could impact water quality and aquatic vegetation through increased turbidity. **MM HYD-1** (Section 3.11, *Hydrology and Water Quality*) requires an Inadvertent Release Contingency Plan (IRCP) that monitors and records the drilling fluid volumes, pressures, and flow rates as well as including equipment that will be on site to contain and clean up a drilling fluid spill. The IRCP also includes the procedure to follow if a release occurs, including halting

drilling operations, documenting the drilling fluid release, notifying stakeholders, and containing the spill.

Potential impacts to habitat would be further mitigated to less than significant through implementation of **MM GEO-1** (Section 3.8, *Geology, Soils, and Paleontological Resources*) requiring the preparation and implementation of an Erosion and Sediment Control Plan (ESCP), including standard measures to reduce erosion and sedimentation. With the implementation of these measures, the impact would be less than significant.

3.4.3.2 Impacts to Special Status Plants

The Project site contains potentially suitable habitat for 14 special status plant species. However, habitat on-site is disturbed by past and ongoing human activities. In addition, as discussed in Section 3.4.1.2, *Special Status Plants*, no individuals were identified during focused or site surveys, which all occurred during the blooming season. Therefore, these plant species are not expected to be present at the Project site, and the Project is expected to have no impact on these species.

3.4.3.3 Impacts to Special Status Wildlife

The Project site and vicinity potentially provides foraging or nesting habitat for 24 special status wildlife species. The Eel River adjacent to the Project site is known to provide habitat for numerous special status fish species, foothill yellow-legged frog, and northwestern pond turtle (*Actinemys marmorata*). Unidentified bumble bees were observed in the Northern Work Area during the April 2025 survey. Unidentified juvenile salmonids and a northern red-legged frog were also seen within an intermittent channel within the Project site and 50-foot buffer during the April 2025 survey, just north of the Northern Work Area. As such, **MM BIO-2** would provide education to Project employees on how to recognize and avoid potentially occurring wildlife species.

> **MM BIO-2: Worker Environmental Awareness Training.** PG&E or their designee shall develop and present a worker environmental awareness training program (WEAT), approved by CSLC staff. All contractors and employees involved with the Project shall be required to attend the training program prior to the start of any work at the Project area. The WEAT may also be conducted through a video or electronic presentation created by a qualified biologist specifically for the project. At a minimum, the program

shall cover special status species that could occur on the site, their distribution, identification characteristics, sensitivity to human activities, legal protection, penalties for violation of state and federal laws, reporting requirements, and required Project avoidance, minimization, and mitigation measures. PG&E or their designee shall maintain a list of all contractors who have been trained and shall submit this list and the final training material to CSLC staff within 30 days after Project mobilization and shall provide an updated final list after Project activities are complete.

Western Bumble Bee

The Project site contains habitat for western bumble bees, and several unidentified bumble bees have been observed on-site. Vegetation clearing and trimming activities could impact this species by potentially reducing foraging resources as well as resulting in unintended take. However, because they can forage up to 10 kilometers from their nests, the mere presence of foraging western bumble bees would not require implementation of additional minimization measures. **MM BIO-3** would require pre-construction surveys to determine the presence or absence of an active colony nest (typically in abandoned rodent burrows), and either avoidance of any discovered nests or consultation with CDFW for an incidental take permit (ITP) if the nest could not be avoided. With the implementation of this measure, the impact would be less than significant.

MM BIO-3: Western Bumble Bee. A pre-construction survey for western bumble bee shall be conducted by a qualified biologist with a Scientific Collecting Permit for the species within the Project work area footprint prior to the start of any ground-disturbing Project activities occurring during the western bumble bee Colony Active Period (April-September). The pre-construction survey shall be conducted no more than five days prior to the start of Project mobilization.

If an occupied western bumble bee nest colony is detected within the Project site, no Project activities will occur within 50 feet of the nest. If it is not feasible to avoid the nest resources for the duration of the western bumble bee Colony Active Period, typically ending by September 30, the Project Applicant shall consult with the California Department of Fish and Wildlife (CDFW) regarding the potential for project activities to result in take, and shall obtain and comply with an Incidental Take Permit issued by CDFW.

Fish

No in-water work is proposed, and no aquatic habitat would be removed or converted by the project. However, as described in the Project Description, an inadvertent drilling fluid release from the Project could potentially affect waters along the HDD route including the Eel River. The impacts to special status fish species from chemicals and other spills as well as from inadvertent releases would be similar to the habitat impacts discussed in Section 3.4.3.1, and the IRCP and ESCP would ensure a less than significant impact to California coastal chinook salmon ESU, northern California steelhead winter-run DPS, northern California steelhead summer-run DPS, coast cutthroat trout, western brook lamprey, Pacific lamprey, and green sturgeon southern DPS.

Amphibians and Reptiles

The Project site contains habitat for Pacific tailed frog, northern red-legged frog, foothill yellow-legged frog, southern torrent salamander, and northwestern pond turtle. In addition, at least two northern red-legged frog were observed on-site. Finally, southern torrent salamander are known to burrow into substrates in riparian areas. Vegetation clearing and trimming and heavy equipment operation could crush or kill unobserved individuals of these species as well as turtle nests. In particular, excavated holes and trenching could lead to entrapment or disturbance of underground refugia or turtle nesting sites. **MM BIO-4** would require pre-construction surveys for amphibians and reptiles, relocation of individuals, exclusion fencing, and construction monitoring, and **MM BIO-5** would ensure that Project work stops if any individuals are observed during exclusion fence set-up or construction activities, and that any affected individuals leave of their own volition or are relocated to habitat outside the Project area. While no impacts are expected to the nearby waters, the intermittent channel (NWW-02) or to the Eel River, amphibians breed and deposit their eggs in the water and would be impacted similarly to the habitat impacts discussed in Section 3.4.3.1. **MM BIO-1** would restore and revegetate the temporary impacts in the Project area after construction is complete to ensure that ongoing erosion and sedimentation impacts to wetlands and waters would not occur. With the implementation of these measures, the impact would be less than significant.

While some species of frogs, including northern red-legged frogs, can be sensitive to noise effects impacting their ability to communicate with each other or attract mates, especially at night (Nelson and Garcia 2017), no Project

activities would occur past 8 p.m., which would minimize noise impacts to frogs. Therefore, the impact would be less than significant.

MM BIO-4: Special Status Amphibian and Reptile Species. A pre-construction survey for Pacific (coastal) tailed frog (*Ascaphus truei*), foothill yellow-legged frog, northern red-legged frog, southern torrent salamander (*Rhyacotriton variegatus*), and northwestern pond turtle (signs of terrestrial activity or nesting [e.g. recently disturbed soil, excavated nest sites, nest plugs, etc.]) shall be conducted by a qualified biologist within 48 hours prior to the initiation of ground disturbance or vegetation clearing and trimming in suitable habitat for these species (i.e., damp upland riparian areas). The survey area shall include all suitable habitat within the work areas, plus a 50-foot buffer. Any amphibians found during the pre-construction survey shall be relocated, by a qualified biologist, to nearby habitat outside the construction area that has equivalent value to support the species. If signs of northwestern pond turtle nesting or a nest site are found, an exclusion buffer will be placed around the area, if feasible.

If the northwestern pond turtle is federally listed and an individual or nest is subsequently found on the Project site, the U.S. Fish and Wildlife Service shall be notified and authorization for any handling or relocation shall be required. If the northwestern pond turtle is not listed at the time of work, the species or nests shall be relocated by a qualified biologist, in accordance with MM BIO-14 and without need for USFWS notification, to nearby habitat outside the construction area that has equivalent value to support the species or the nest.

Following the survey, the contractor, under the direction of a qualified biologist, shall install wildlife exclusion fencing along the boundary of the work area containing suitable habitat to prevent special status amphibians and reptiles from entering the work area. The wildlife exclusion fencing must be trenched into the soil at least 4 inches in depth, with the soil compacted against both sides of the fence for its entire length. Turnarounds shall be installed at access points to direct amphibians and reptiles away from gaps in the fencing. Exclusion fencing should be checked daily for tears, gaps, or accidental wildlife entrapment.

A qualified biologist shall monitor low-vegetation and duff clearing, ground disturbance, and excavation work to ensure frogs, salamanders, and turtle nests are not damaged/injured or killed during this work. If species or a nest are discovered during this work, stop-work will be issued to prevent injury to species. The need for veterinary care may be required for injured northwestern pond turtles, depending on listing status.

MM BIO-5: Species Relocation. If special status wildlife species are observed within the construction area during exclusion fence set-up or construction activities, the biologist shall stop-work around the species to prevent injury. The species will be allowed to leave the work area of its own volition or, with proper handling authorization (for listed species), may be captured and relocated out of the area affected by construction activities to nearby habitat that has equivalent value to support the species. The biologist may identify suitable habitats as potential release sites for certain species prior to start of construction activities. If the special status species is a federally or state-listed as threatened or endangered, the biologist shall notify the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and/or National Marine Fisheries Service, as appropriate, prior to capture and relocation to obtain approval, if not already covered by an existing Incidental Take Permit.

Birds

The Project site and 50-foot buffer provides migratory and special status bird habitat for dispersal, foraging, and nesting. Special status birds that could be impacted, include tricolored blackbird, golden eagle, bald eagle, bank swallow, and northern spotted owl. Vegetation clearing and trimming could lead to potential nest destruction. While no trees are planned for removal or trimming, bird nests can be in shrubs or blackberry thickets, or on the ground. For example, tricolored blackbirds often prefer to nest in blackberry thickets. In addition, noise and dust could also impact birds. While adult birds can avoid or escape these impacts, juveniles or hatchlings cannot until they have fledged. In addition, Project activities may impact some species differently, such as northern spotted owls. While this is a nocturnal species, daytime noise could have negative effects on reproductive success. **MM BIO-6** would require pre-construction surveys and, if active nests are found, an Avoidance Plan that would be submitted to the CSLC

and CDFW prior to Project implementation. With the implementation of this measure, the impact would be less than significant.

MM BIO-6: Nesting Birds (including special status birds). Pre-construction surveys must be completed by a qualified biologist no later than two days before the start of Project activities, including site preparation. Surveys will be conducted during the nesting season (March 15 – August 15). The survey shall cover the limits of vegetation removal and suitable nesting habitat within the standard buffers and document species detections, nests, and active nests. All survey results will be submitted to CSLC and CDFW.

If nesting birds are present, then prior to Project activities commencing that may disturb nesting birds, a qualified biologist will prepare an Avoidance Plan to be submitted to CSLC and CDFW which will include, but not be limited to, the following:

a. Results of site-specific literature, desktop studies, and nesting bird survey methods and results including a map or the GPS coordinates of the nest location(s).

b. Nest-specific avoidance buffers between the nesting birds and any project-related activities.

c. Justification and procedure for the qualified biologist to increase or decrease a proposed buffer distance.

d. List of species-specific disturbed bird behaviors which a qualified biologist will be monitoring during the project-related activities to confirm the applied nesting bird buffers are appropriate. Some of these behaviors could include, but are not limited to, birds vocalizing, getting up from brooding position, flying off their nests, making defensive flights at intruders, and birds mimicking physical injuries such as broken wings.

e. Identify any project-related activities that can be done outside of the nesting season (i.e., site preparation and/or staging).

If vegetation removal activities are delayed, additional nest surveys shall be conducted such that no more than 7 days elapse between the survey and vegetation removal activities.

Bats

The Project site and vicinity includes daytime roosting (sleeping) habitat for pallid bat, western red bat, and Townsend's big-eared bat. Of these species, only pallid bats and western red bats are known to roost in trees so are more likely to be found near Project activities. These species also use trees for maternity roosts where female bats congregate to raise their pups, between May and August. No trees are expected to be removed or trimmed, but maternity roosts or individual roosting bats nearby could be impacted by construction noise from Project activities that would occur during the day. Noise disturbance could cause bats to abandon a maternity roost or could cause other stress responses that would decrease survival rates of both pups and adult bats. **MM BIO-7** would require pre-construction emergence surveys. If a roost is found outside of the maternity season, exclusion devices such as exit-only netting can be used to discourage bats from roosting near the Project site. If active maternity roosts are found, noise and disturbing activity will be delayed until the end of the maternity season or until consultation with CDFW is complete. With implementation of this measure, the impact would be less than significant.

MM BIO-7: Roosting Bats (including special status bats). A pre-construction emergence survey for roosting bats shall be conducted within the Work Areas, with a 25-foot buffer area, by a qualified biologist during the maternity season for bats (May 1 through August 31) and no more than 14 days prior to vegetation removal activities. Emergence times may vary depending on species, weather conditions, and time of year and the survey should occur when conditions are favorable (higher temperatures, high humidity, low wind, no precipitation) and be timed to capture bat emergence (typically occurring between sunset and midnight).

If bat maternity roosts are identified within 25 feet of the Project site, heavy equipment use and trimming of vegetation should be delayed until the maternity season is complete, if feasible. If it is not feasible, CDFW should be consulted about alternative mitigation. If a roost is found outside the maternity season, exclusion netting suitable for bats shall be installed at roost openings to allow bats to exit but prevent their re-entry into the roost. Other suitable exclusion methods may be used as determined by a qualified biologist. Nets or exclusion devices shall be checked daily to minimize wildlife entrapment. Exclusion devices shall be left in place and monitored

daily for seven days to confirm the exclusion is successful before resuming heavy equipment use or vegetation trimming.

Other Mammals

The Project site contains habitat for other special status mammals, including Sonoma tree voles, Humboldt martens, and fishers. These species prefer dense, mature forested habitats. Humboldt martens typically choose cavities in large trees, logs, snags, or root wads for their dens. Sonoma tree voles create dome-shaped nests for reproduction that are typically constructed at least 6 feet above ground at the end of branches or on branches close to the trunks of tall trees. Sonoma tree voles typically remain in the nest during the daytime and leave the nest only at night for foraging and other activities. Fishers typically den in protected cavities, brush piles, hollow logs, tree snags, and upturned trees. Project activities involve vegetation clearing and trimming, which could impact active nests or dens. Noise and dust could also impact these species, but adult individuals should be able to avoid or escape the area. While no trees are planned for removal or thinning, **MM BIO-8** would require tree cavity, shrub, blackberry thicket, and brush pile inspection for signs of dens or nests, buffers around active nests/dens, monitoring, and, for nests or dens that cannot be avoided, CDFW approval for relocation. Impacts to denning activities or relocation of individuals from an active den may be subject to compensatory mitigation at CDFW discretion. **MM BIO-5** would ensure Project work stops if any individuals are observed during exclusion fence set-up or construction activities, and any affected individuals leave of their own volition or are relocated to habitat outside the Project area. With the implementation of these measures, the impact would be less than significant.

MM BIO-8: Sonoma Tree Vole, Fisher, and Humboldt Marten. A pre-construction survey shall be conducted to determine whether active or potentially active Sonoma tree vole**,** fisher, or Humboldt marten dens or nests are present in the Northern or Southern Work Areas or vicinity shall be conducted by a qualified biologist approximately two days prior to Project mobilization. Surveys shall encompass both the Work Area and a 25-foot buffer around the Work Area. Surveys shall attain 100% visual coverage and be conducted using a maximum of 10-meter (33-foot) transects (or reduced based on topography and vegetation), to determine the presence or absence of individuals, dens, nests, and other signs of their activity.

If potential Sonoma tree vole, fisher, or Humboldt marten dens or nests are located, a qualified wildlife biologist shall monitor the dens or nests using observation and tracking material and/or trail cameras over a three (3) day period to determine the status of the den. If non-natal active dens or nests can be avoided and buffered from Project activities, the biologist shall flag and monitor a minimum 100-foot disturbance-free buffer zone. The biologist shall block inactive dens within the project area or buffer zone that will not be directly impacted by project activities with rocks and sticks to discourage use. The biologist shall periodically check and ensure the inactive burrows remain blocked and are not occupied. The biologist shall remove the obstruction when Project activities are complete. If a natal den is found, a minimum 500-foot disturbance-free buffer shall be placed and monitored by the biologist around the natal den or nest and maintained until juvenile independence is determined by the biologist. The biologist has the authority to halt or stop work if individuals exhibit signs of disturbance. Established buffers will remain until the biologist determines the young have dispersed or the den is no longer active, or until Project activities cease.

If an active den or vole nest will be impacted and relocation is proposed, CDFW shall be notified and a plan shall be prepared for CDFW review and approval prior to implementing the Project activity or resuming Project activities.

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

Less Than Significant with Mitigation

3.4.3.4 Impacts to Riparian Habitat

The project proposes ground disturbance in riparian habitat as well as vegetation trimming and removal for equipment operation, staging, and excavation at the Project site. No tree removal or tree trimming would occur as part of the Project. Project activities would include digging and trenching (see Table 2-1, *Estimated Areas and Volumes of Disturbance*); however, Section 2.3.5, *Site Restoration and Demobilization*, discusses Project activities to restore much

of the temporary impacts by backfilling and compaction with the native soils and recontouring to match the surrounding areas to pre-Project conditions. In addition, the locations of the Bore Entry Pit and Bore Exit Pit within each work area would be in areas that do not contain woody vegetation.

Impacts to riparian habitat would be further reduced with **MM BIO-1**, which would ensure revegetation and restoration of the Project area after construction is completed. Weed-free straw mulch or wood mulch would be applied to areas of soil disturbance to provide temporary stabilization of exposed soil and allow revegetation to occur. Compaction can impair plant root re-establishment, so allowing six inches of uncompacted topsoil to be laid on top, if feasible, would aid in vegetation recolonizing the site. Therefore, the impact would be less than significant.

3.4.3.5 Impacts to Sensitive Communities

The Project site includes redwood forest, red alder riparian, and shining willow riparian communities. Of these communities, redwood forests and shining willow riparian are considered sensitive natural communities and vulnerable (S3) by CDFW. The Project proposes to complete minor vegetation work at the Southern and Northern Work Areas, including brush clearing and/or vegetation trims, to allow for staging of equipment and vehicle movement. The locations of the Bore Entry Pit and Bore Exit Pit within each work area do not contain woody vegetation, so only limited removal of understory vegetation is anticipated. In addition, the redwood forest community is in the southeastern end of the northern work area and will be avoided. While no trees within the Project site are planned for removal, the shining willow riparian is surrounding the bore pit activities and along the access road in the Northern Work Area. Due to this sensitive natural community's rarity, care should be taken to avoid trees along the access road and avoid compacting tree roots which could lead to tree death or injury. **MM BIO-9** shall be implemented to prevent project impacts to the shining willow riparian community. Therefore, the impact would be less than significant with mitigation.

> **MM BIO-9: Sensitive Natural Community Tree Protection Zone.** A tree protection zone shall be established by an arborist or other qualified biologist around the edge of the shining willow riparian community. This will include, at a minimum, the canopy perimeter of the community, especially along the access road to the Northern Work

Area. Any root compaction shall be treated by aerating the root zones upon project completion.

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?

Less Than Significant with Mitigation

3.4.3.6 Impacts to Waters and Wetlands

No in-water work is proposed, however, as described in Section 2.3.2.3, an inadvertent drilling fluid release from the Project may occur, which could potentially affect waters or wetlands near the work areas and along the HDD route or the Eel River.

The Northern Work Area also overlaps with the emergent wetland (WET-01), and Project activities that would occur in jurisdictional waters and wetlands include disturbance and excavation for pipeline tie-ins and a No. 7 box installation near the western bore pit. The western bore pit exit in the Northern Work Area is immediately adjacent, possibly in the emergent wetland. PG&E shall obtain all necessary permits for impacts to jurisdictional aquatic resources from the USACE, RWQCB, and CDFW prior to Project implementation and comply with agency permit conditions, including potential compensatory mitigation.

Other potential impacts to wetlands could occur from erosion, sedimentation, and turbidity to nearby waters and wetlands if soil excavation and stockpiling are not adequate. Impacts to wetlands could be temporary or permanent, but placement of the No. 7 box outside the wetland boundary would avoid permanent impacts to WET-01.

In addition, **MM GEO-1** would require an Erosion and Sediment Control Plan with standard measures to reduce erosion, turbidity, and sedimentation to waters and wetlands during construction. **MM HYD-1** would require preparation and implementation of an IRCP that would include monitoring and response procedures for inadvertent release of drilling fluids, and implementation of **MM HAZ-1** would reduce the potential for impacts resulting from spills of hazardous materials during construction. Finally, **MM BIO-1** would restore and revegetate the temporary impacts in the Project area after construction is complete to ensure that ongoing erosion and sedimentation impacts to wetlands and waters

would not occur. With the implementation of these measures, the impact would be less than significant.

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

Less Than Significant with Mitigation

3.4.3.7 Impacts to Wildlife Movement

Native Wildlife Nesting Sites

Nursery sites are locations where fish and wildlife congregate for hatching and/or raising young. Native wildlife nursery sites are discussed here, and special status species nursery sites (e.g., nests, dens, etc.) are addressed separately in Section 3.4.3.3.

The Project site contains suitable nesting habitat for bird species as well as suitable roosting habitat for native bat species, particularly within wooded areas and undeveloped lands. No tree removal or trimming or demolition of structures are planned, so direct impacts to potential bat roosting habitat would not occur. If conducted during the nesting season (March 15 to August 15), vegetation removal could directly impact any birds nesting in affected trees or shrubs. Vegetation removal and other construction activities, including increased human disturbance and construction-generated noise and vibration, could cause abandonment of nests by adults and, if conducted during the maternity season (April 16 to August 31), could indirectly impact bat maternity roosts, if present. The Project would implement **MM BIO-6** and **MM BIO-7**, as described in Section 3.4.3.3, to detect nesting birds and roosting bats and address construction impacts to any that may be present. With the implementation of these measures, the impact would be less than significant.

Wildlife Corridors

The CDFW Terrestrial Habitat Connectivity Mapping Project designates the Project site's vicinity as having "Limited Connectivity Opportunity." In addition, no riverine habitat conversion is proposed; however, general Project construction activities may result in short-term temporary impacts to riparian areas and wildlife movement. Heavy equipment and staging areas would interfere with movement, but would be limited to a minimal Project footprint and would incorporate exclusion fencing, which would allow wildlife to avoid work activities by transiting around the Project area in adjacent habitat corridors. In

addition, most of the Project's construction impacts would be temporary and work would be conducted during the day, avoiding the nighttime hours when many animals move across the landscape. Finally, the Project site would be returned to pre-Project conditions with minimal alteration. Therefore, the impact would be less than significant.

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

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?

(e to f) No Impact

3.4.3.8 Conflicts with Policies or Ordinances

The Project would not conflict with the Rio Dell General Plan or the Humboldt County General Plan. While the Northern Work Area would be within a Streamside Management Area, the Project would comply with Biological Resources Standard 8 (BR- S8) (see Section 3.4.2.2, *Humboldt County General Plan*). Therefore, there would be no impact.

3.4.3.9 Conflicts with Adopted Plans

The Project is within the plan area for PG&E's MRHCP. The MRHCP covers PG&E's routine operations and maintenance as well as minor new construction activities on or near its gas and electric system (ICF 2020). MRHCP covered species include foothill yellow-legged frog and northern spotted owl. Implementation of the relevant MRHCP field protocols would ensure Project avoidance of these species is consistent with the MRHCP. In addition, consistent with implementation practices of the MRHCP, standard field protocols would be implemented where physically possible and when they do not conflict with other regulatory obligations or safety considerations. A list of field protocols can be found in Appendix F of the MRHCP. The Project is a covered activity under the MRHCP. Therefore, there would be no impact.

3.4.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to biological resources to less than significant.

- MM BIO-1: Site Restoration Plan
- MM BIO-2: Worker Environmental Awareness Training
- MM BIO-3: Western Bumble Bee
- MM BIO-4: Special Status Amphibian and Reptile Species
- MM BIO-5: Species Relocation
- MM BIO-6: Nesting Birds (including special status birds)
- MM BIO-7: Roosting Bats (including special status bats)
- MM BIO-8: Sonoma Tree Vole, Fisher, and Humboldt Marten
- MM BIO-9: Sensitive Natural Community Tree Protection Zone
- MM GEO-1: Erosion and Sediment Control Plan (ESCP)
- MM HAZ-1: Spill Response and Contingency Plan
- MM HYD-1: Inadvertent Release Contingency Plan

3.5 CULTURAL RESOURCES

CULTURAL RESOURCES- Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines section 15064.5?	☐	☒	☐	☐
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☒	☐	☐

3.5.1 Environmental Setting

3.5.1.1 Precontact Context

The following discussion is adapted from *Northwest California: Ancient Lifeways among Forested Mountains, Flowing Rivers, and Rocky Ocean Shores* (Hildebrandt 2007).

The area surrounding the Project site in Humboldt County has evidence of human occupation dating back more than 10,000 years. The following broad precontact patterns in the area are as follows:

- **The Post Pattern (~10,000 years before present or earlier):** The Post Pattern represents the earliest known occupation in the region, characterized by fluted concave-base projectile points and crescents. All discovered artifacts are either in isolated contexts or are associated with sites lacking well-dated stratigraphy, so little is currently known about these early inhabitants, except that hunting was one of their subsistence strategies.
- **The Borax Lake Pattern (~10,000 to ~5,000 years before present):** The Borax Lake Pattern is characterized by a wider variety of flaked stone tools and

groundstone found in more diverse settings. Stone tools include large wide-stemmed projectile points with indented bases, serrated bifaces, ovoid flake tools, handstones and millingstones. Sites representing this pattern are generally found on ridgetops and river terraces. People living during this time exhibited a forager approach to subsistence, moving frequently to take advantage of resources.

- **The Mendocino Pattern (~5,000 to ~1,450 years before present):** The Mendocino Pattern is characterized by a stylistic change in projectile points, which now include side-notched points, corner-notched points, and concave-base dart points. Handstones and millingstones continue to be the dominant groundstone tools, although cobble mortars and pestles first make their appearance during this time. Most sites are found along the coastline and mountainous areas, and represent temporary hunting camps or short-term residential camps.
- **The Tuluwat (Formerly Gunther) Pattern (~1,450 years before present):** The Tuluwat Pattern is characterized by cultural change as evidenced by a greater degree of sedentism, particularly on the northern coast where offshore rocks and islands exhibit a high quantity of Gunther-barbed projectile points, and concave projectile points used for harpooning marine mammals and fish. Gunther-barbed projectile points are found inland within communities relying on terrestrial resources instead of marine resources.

3.5.1.2 Historic Context

The modern history of Northern California is grouped into three distinct periods: Spanish, Mexican, and American. Due to its distance from San Francisco Bay, the Project site was largely isolated from the Spanish and Mexican periods of California history. The beginning of the American Period is marked by the discovery of gold in the Sierra Nevada mountains in 1849, which prompted a population surge throughout northern California. The gold fields quickly dried up, causing many new arrivals to refocus on other economic opportunities, such as timber production. The history of Rio Dell is closely tied to the history of Scotia, the town across the Eel River to the south, which was built as a company town by the Pacific Lumber Company (City of Rio Dell 2019).

3.5.1.3 Records Search Results

The following discussion summarizes the Cultural Resources Letter Report prepared by Dudek in 2025, included as Appendix G. The Cultural Resources

Letter Report analyzed an area larger than the Project site, extending to the PG&E substation in the southeastern area of Rio Dell. The following discussion does not include any resources identified in the Cultural Resources Letter Report that are beyond a 0.5-mile radius of the Project site.

Dudek requested a records search that was completed by Northwest Information Center staff on June 23, 2025. The search included their collection of mapped prehistoric, historical and built-environment resources, Department of Parks and Recreation Site Records, technical reports, archival resources, and ethnographic references. Additional consulted sources included the National Register of Historic Places, California Register of Historical Resources and listed Office of Historic Preservation Archaeological Determinations of Eligibility, California Points of Historical Interest, California Historical Landmarks, and Caltrans Bridge Survey information.

No previously recorded cultural resources intersect the Project site. Three previously recorded cultural resources are located outside of, but within 0.5 miles of the Project site: two of which are historic-age resources, and one of which is a prehistoric resource. The historic-age resources consist of remnants of the old U.S. 101 crossing and the Eel River Bridge which is part of U.S. 101. The prehistoric resource consists of many marine shell pieces from an unknown location that were redeposited in artificial fill deposits that form a berm or levee north of the Eel River. Table 3.5-1 lists the previously recorded resources.

Table 3.5-1. Summary of Previously Recorded Resources

Primary ID	Trinomial	Resource Name	Age	Description
Resources within the Project Site				
None				
Resources within the 0.5-Mile Radius				
P-12-002564	CA-HUM-001124H	Evans-Old U.S. 101 Crossing	Historic	Foundations/Structure pads; Roads/Trails/Railroad grades
P-12-003800	—	Bridge 04 0016L; Eel River Bridge; Nello J Barsanti Memorial Bridge	Historic	Bridge

Table 3.5-1. Summary of Previously Recorded Resources

Primary ID	Trinomial	Resource Name	Age	Description
P-12-004012	—	Shell Redeposit	Prehistoric	Other: Shell Midden

Source: Appendix G

3.5.1.4 Intensive Pedestrian Survey

On July 21, 2025, Dudek conducted an intensive pedestrian survey of the Project site using standard archaeological procedures and techniques that meet the Secretary of Interior's Standards and Guidelines for cultural resources inventory. Exposed ground surfaces were observed for surface artifacts, undisturbed areas, archaeological deposits, and historic structures; periodic boot scrapes were employed to expose additional ground surface. Ground visibility was moderate within the Southern Work Area, but minimal within the Northern Work Area due to dense grasses and wetland vegetation, and minimal within the Staging and Laydown Area due to coverage with imported gravels. No cultural resources were observed within the Project site.

3.5.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to cultural resources and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.5.3 Impact Analysis

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

No Impact

The proposed Project would not result in a substantial adverse change in the significance of a historical resource as defined in section 15064.5. The Cultural Resources Letter Report for the Project did not identify any historical resources on the Project site that meet the criteria of significance under CEQA. While three previously recorded cultural resources occur within 0.5 miles of the Project site, the Project activities would have no direct or indirect effects on those resources. Therefore, there would be no impact.

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

Less Than Significant with Mitigation

The Project would not cause a substantial adverse change in the significance of a known archaeological resource as defined in section 15064.5 because no archaeological resources were identified on the Project site. However, if previously unknown archaeological resources are encountered during construction of the proposed Project, they could be adversely affected. **MM CUL-1/TCR-1** would ensure that in the event of an accidental discovery of previously unknown Cultural or Tribal Cultural resources, all personnel know how to proceed, and further disturbance would halt until the resource has been appropriately assessed and treated, if necessary. With the implementation of this measure, the impact would be less than significant.

MM CUL-1/TCR-1. Discovery of Previously Unknown Cultural or Tribal Cultural Resources. If any potential tribal cultural resources, archaeological resources, other cultural resources, or articulated or disarticulated human remains are discovered by the designated on-site archaeologist, the Tribal Monitor(s), if one is requested by an affected tribe, or other Project personnel during construction activities, all work shall cease within 100 feet of the find, or an agreed upon distance based on the project area and nature of the find. Work stoppage shall remain in place until PG&E CRS, the designated on-site archaeologist, the Tribal Monitor if there is one, have jointly determined the nature of the discovery, and the significance of the discovery has been determined by either the archaeologist/cultural resources specialist (for cultural resources) or the Tribal Monitor (for tribal cultural resources). Tribal cultural resources shall not be photographed nor be subjected to any studies beyond such inspection as may be necessary to determine the nature and significance of the discovery. If the discovery is confirmed as potentially significant or a tribal cultural resource, an Environmentally Sensitive Area (ESA) will be established using fencing or other suitable material to protect the discovery during subsequent investigation. No ground-disturbing activities will be permitted within the ESA until the area has been cleared for construction. The exact location of the resources within the ESA must be kept confidential and measures shall

be taken to secure the area from site disturbance and potential vandalism. Impacts to previously unknown significant cultural and tribal cultural resources shall be avoided through preservation in place if feasible. If the on-site archeologist or Tribal Monitor, as appropriate, determines that damaging effects on the cultural or tribal cultural resource can be avoided in place, then work in the area may resume provided the area of the discovery remains clearly marked for no disturbance. Title to all archaeological sites, historic or cultural resources, and tribal cultural resources on or in the tide and submerged lands of California is vested in the State and under CSLC jurisdiction. The final disposition of archaeological, historical, and tribal cultural resources recovered on State lands under CSLC jurisdiction must be approved by the CSLC.

c) Disturb any human remains, including those interred outside of dedicated cemeteries?

Less Than Significant with Mitigation

No human remains are known to be in or near the Project site. Though unlikely, the possibility always exists that unmarked burials may be unearthed during subsurface construction activities. Consequently, there is the potential for the Project to disturb human remains during construction, including those outside of formal cemeteries. **MM CUL-2/TCR-2** would ensure that, in the event of an accidental discovery of human remains, any further disturbance would halt until the remains can be properly assessed, and treatment, if necessary, is approved. With the implementation of this measure, the impact would be less than significant.

MM CUL-2/TCR-2. Unanticipated Discovery of Human Remains. If human remains or associated grave goods (e.g., non-human funerary objects, artifacts, animals, ash or other remnants of burning ceremonies) are encountered, all ground disturbing activities shall halt within 100 feet of the discovery or other agreed upon distance based on the project area and nature of the find; the remains will be treated with respect and dignity and in keeping with all applicable laws including California Health and Safety Code section 7050.5 and California Public Resources Code section 5097.98. If representatives are not already on site when a discovery is made, the Project Archaeologist or their designated on-site cultural resources specialist,

Tribal Representative(s), the Applicant, and CSLC shall be notified immediately. The archaeologist shall contact the County Coroner within 24 hours. If human remains are determined by the County Coroner to be of Native American origin, the County Coroner shall notify the Native American Heritage Commission within 24 hours of this determination, and the Native American Heritage Commission shall identify a Most Likely Descendent. No work is to proceed in the discovery area until consultation is complete and procedures to avoid or recover the remains have been implemented. Unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, Cal. Govt. Code § 6250 et seq.

3.5.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to cultural resources to less than significant.

- MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources
- MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains

3.6 CULTURAL RESOURCES – TRIBAL

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

3.6.1 Environmental Setting

3.6.1.1 Ethnographic Context

The Project site is close to the traditional territory boundaries of several tribes, including the Mattole, Nongatl, Sinkyone, and Wiyot (Kroeber 1925).

Before European settlement, Northwestern California supported a diverse array of indigenous people with varying patterns of occupation and sociopolitical structures (see also Section 3.5.1.1, *Precontact Context*). In this area, broad shared cultural traits can be divided into two groups: the Northwest Coast Culture group and the California Culture group.

People of the Northwest Coast Culture, including the Wiyot, lived in dense permanent settlements along the coast and riverways and stored subsistence resources in acorn caches, communal fish weirs, and smokehouses. They used canoes to acquire marine and riverine resources. People of the Northwest Coast Culture organized themselves in family units rather than tribelets.

People of the California Culture group, including the Mattole, Nongatl, and Sinkyone, predominantly settled inland and focused on terrestrial resources, especially acorns. Anadromous fish were an important food resource, as well as large and small terrestrial game, nuts, seeds, berries, and other plant resources. They generally gathered marine and riverine resources such as shellfish from the shore instead of by canoe. People of the California Culture group organized themselves in tribelets, which had a main village center and multiple satellite villages but moved to seasonal camps to gather resources.

3.6.2 Tribal Coordination

Assembly Bill (AB) 52 (Gatto, Chapter 532, Statutes of 2014) amended CEQA to specify that a project that may cause a substantial adverse change in the significance of a "tribal cultural resource" is a project that may have a significant effect on the environment and that tribal knowledge about land and resources should be included in environmental assessments.

The AB 52 process requires the CEQA lead agency to consult with traditionally and culturally affiliated California Native American Tribes with the geographic area of the proposed project, upon request. Draft CEQA documents cannot be released for public review before the tribe(s) has had the opportunity to request consultation and, if requested, for consultation to be completed, including agreeing to acceptable mitigation measures.

Supplementing AB 52 and pursuant to Executive Orders B-10-11 and N-15-19 affirming that state policy requires and expects coordination with tribal governments in public decision making (Appendix A), the CSLC follows its 2016 Tribal Consultation Policy, which provides guidance and consistency for staff in its interactions with California Native American Tribes (CSLC 2016). The Tribal Consultation Policy, which was developed in collaboration with tribes, other state agencies and departments, and the Governor's Tribal Advisor, recognizes that tribes have a connection to areas that may be affected by CSLC actions and "that these Tribes and their members have unique and valuable knowledge and practices for conserving and using these resources sustainably" (CSLC 2016).

Additionally, under AB 52 , lead agencies must avoid damaging effects on tribal cultural resources, when feasible, whether consultation occurred or is required. When considering whether a resource is a tribal cultural resource and determining the significance of potential impacts, the CSLC may consider, among other evidence, elder testimony, oral history, tribal archival information, testimony of an archaeologist or other expert certified by the tribe, official declarations or resolutions adopted by the tribe, formal statements by the tribe's historic preservation officer, or other historical notes and anthropological records.

The CSLC contacted the Native American Heritage Commission (NAHC), which maintains two databases to assist cultural resources specialists in identifying cultural resources of concern to California Native Americans (Sacred Lands File and Native American Contacts). CSLC staff contacted the NAHC to obtain information about known cultural and Tribal cultural resources and request a list of Native American Tribal representatives who may have geographic or cultural affiliation in the Project area. The NAHC responded on June 17, 2025, stating that the Sacred Lands File database did not include any previously identified sacred sites in the Project area. The NAHC also forwarded a list of eight tribal contacts from three Native American tribes, which CSLC used for outreach and engagement.

On December 5, 2025, the CSLC sent project notification letters to the tribes on the NAHC contact list to provide an opportunity for meaningful input on the potential for tribal cultural resources to be found in the proposed Project area and recommend steps to be taken to ensure adverse impacts to tribal cultural resources are avoided. The outreach letters sent in December 2025 included chairpersons and representatives of the following tribes:

- Bear River Band of Rohnerville Rancheria
- Cher-Ae Heights Indian Community of the Trinidad Rancheria

- Wiyot Tribe

The CSLC received a response to the outreach letters from the Wiyot Tribe stating that the activities outlined do not appear to pose significant impacts on cultural resources. They requested that protocols for inadvertent archaeological discoveries be implemented for any ground-disturbing activities. CSLC shared the standard mitigation measure language **MM CUL-1/TCR-1** and **MM CUL-2/TCR-2** used for inadvertent discoveries of resources, or human remains with the Wiyot Tribe, who confirmed that they were satisfied with the measures as written and had no changes to request.

As of this publication, no other tribes have responded to the outreach letters for the Project.

3.6.3 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to tribal cultural resources and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.6.4 Impact Analysis

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

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

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1,

the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant with Mitigation

As discussed in Section 3.5, *Cultural Resources*, and Section 3.6.2, *Tribal Coordination*, no tribal cultural resources were identified within the Project site and Sacred Lands File search results were negative. To date, no known tribal cultural resources have been identified through consultation that would be impacted by the Project. While no tribal cultural resources were identified on-site, the Project could affect previously unknown resources if encountered during construction. **MM CUL-1/TCR-1** would ensure that in the event of an accidental discovery of previously unknown Cultural or Tribal Cultural resources, further disturbance would halt until the resource has been appropriately assessed and treated, if necessary. Additionally, **MM CUL-2/TCR-2** would ensure that, in the event of an unanticipated discovery of human remains, any further disturbance would halt until the remains can be properly assessed, and treatment, if necessary, is approved. With the implementation of these measures, the impact would be less than significant.

3.6.5 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to tribal cultural resources to less than significant.

- MM CUL-1/TCR-1: Discovery of Previously Unknown Cultural or Tribal Cultural Resources.
- MM CUL-2/TCR-2: Unanticipated Discovery of Human Remains

3.7 ENERGY

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

3.7.1 Environmental Setting

California relies on a regional power system composed of a diverse mix of natural gas, petroleum, renewable, hydroelectric, and nuclear generation resources. However, as petroleum would be the only energy source that is anticipated to be consumed by the Project, it is the only source discussed within this energy analysis.

According to the U.S. Energy Information Administration (EIA), California used approximately 628 million barrels of petroleum in 2022, with the majority (534 million barrels) used for the transportation sector (EIA 2024). There are 42 U.S. gallons in a barrel, so this equates to a total daily use of approximately 72.3 million gallons of petroleum among all sectors and 61.4 million gallons for the transportation sector. In California, petroleum fuels refined from crude oil are the dominant source of energy for transportation sources. Petroleum usage in California includes petroleum products such as motor gasoline, distillate fuel, liquefied petroleum gases, and jet fuel.

3.7.2 Regulatory Setting

Federal and State laws and regulations pertaining to energy and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.7.3 Impact Analysis

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

Less Than Significant Impact

Petroleum would be the primary energy resource consumed throughout construction of the Project to fuel off-road equipment, trucks, and worker vehicles. During construction activities, off-road equipment, vendor trucks, and haul trucks would use an estimated combined 21,960 gallons of diesel fuel, and worker vehicles would consume approximately 521 gallons of gasoline (see Appendix D).

For context, the Project's minimal petroleum usage would equate to about 0.000085% of the statewide annual petroleum consumption. There are no unusual Project characteristics or construction processes that would require the use of unique equipment that would be more energy intensive or that would not conform to current emissions standards (and related fuel efficiencies). Construction contractors would be required to comply with applicable CARB regulations regarding retrofitting, repowering, or replacement of diesel off-road construction equipment. Compliance with existing anti-idling and emissions regulations would result in a more efficient use of construction-related energy and would minimize or eliminate wasteful or unnecessary energy consumption. Idling restrictions and the use of newer engines and equipment would also result in less fuel combustion and associated air emissions.

Once construction is complete, the newly installed electrical cable infrastructure would convey electricity within the existing distribution network but would not require any energy to operate nor generate energy on its own. Therefore, the impact would be less than significant.

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

No Impact

As discussed in (a), above, energy use during construction would be minimal and temporary and there would be no increased energy demand associated with operation. The Project's minimal energy consumption would not conflict

with or obstruct any state or local plans for renewable energy or energy efficiency including the Humboldt County Regional Climate Action Plan (Humboldt County 2025). Therefore, there would be no impact.

3.7.4 Mitigation Summary

The Project would have no significant impact to energy; therefore, no mitigation is required.

3.8 GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES

GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☒	☐

GEOLOGY, SOILS, AND PALEONTOLOGICAL RESOURCES - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
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?	☐	☒	☐	☐

3.8.1 Environmental Setting

3.8.1.1 Regional and Site Geology

The project site is located within the Northern Coastline subprovince of the Coast Range Geomorphic Province. The Coast Ranges are northwest-trending mountain ranges (2,000 to 4,000, and occasionally 6,000 feet elevation above sea level), and valleys. The ranges and valleys trend northwest, subparallel to the active San Andreas Fault. Strata dip beneath alluvium (clay, silt, and sand left by flowing floodwater) of the Great Valley. To the west is the Pacific Ocean, and the coastline is uplifted, terraced, and wave-cut. The northern and southern ranges are separated by a depression containing the San Francisco Bay. The northern Coast Ranges are dominated by Cretaceous and Cenozoic landslide-topography of the Franciscan Complex.

The geology of the Eel River channel is characterized by the fluvial (related to, produced by, or found in a river or stream) erosion and deposition of young stream terrace deposits (Qte) and alluvium (Qal)—primarily recent gravel, sand,

and mud (Ogle 1953). The North Work Area is characterized by natural river terrace deposits consisting of gravel with sand and silt. The South Work Area is characterized by natural river deposits of silty sand and imported fill material comprised of gravel with sand.

3.8.1.2 Stratigraphy

The Project site crosses a complex sequence of alluvial sedimentary units within the Eel River Valley. Site-specific geotechnical exploration conducted by BSK Associates (Appendix C-2, *Geotechnical Engineering Investigation Report*) characterizes the subsurface as follows:

The north side of the Eel River consists of alluvium and older terrace deposits up to depths of approximately 131.5 feet below the ground surface (bgs). The surface consists of dense, Poorly Graded Gravel with Sand (GP) with varying amounts of Silt (GP-GM). Underlying the surface gravels are medium dense to very dense, Sandy Silt (ML), Silty Sand (SM), Clay (CL), and Sandy Lean Clay (CL). The south side of the Eel River consists of alluvial deposits with bedrock encountered at a depth of 44 feet bgs. The surface deposits consist of medium dense Silty Sand (SM) and fill material described as Poorly Graded Gravel with Sand (GP). Underlying the south side surface deposits are medium dense to very dense Gravel with varying amounts of Clay and Sand (GP-GC), Heavy Clay (CH), medium stiff to hard Sandy Lean Clay (CL), and unweathered to slightly unweathered siltstone, sandy siltstone, clayey sandstone and shale between 44 feet bgs and 150 feet bgs.

3.8.1.3 Seismicity, Faulting, and Liquefaction

An active fault is a fault that has experienced seismic activity during historic time (approximately within the last 200 years) or exhibits evidence of surface displacement during the Holocene (within the last 11,700 years). The project is located near an area called the Mendocino Triple Junction, which is where the Gorda plate, the North American plate, and the Pacific plate converge off the Pacific Coast of California. The Project site is not in an Alquist-Priolo Earthquake Fault Zone, and no known active faults traverse the site (California Department of Conservation, California Geologic Survey 2021). The closest active fault is the Goose Lake Fault, located approximately 2.35 miles northerly of the project site. The Goose Lake Fault is part of the Little Salmon Fault Zone, which is an active thrust fault associated with the Cascadia Subduction Zone.

Liquefaction is a geologic process in which saturated, unconsolidated soils, typically sands or silts, temporarily lose strength and stiffness in response to strong seismically induced ground shaking. Factors that influence liquefaction include soil type, structure, grain size, relative density, confining pressure, depth to groundwater and intensity and duration of shaking. Soils most susceptible to liquefaction are wet, loose sandy soils and low plasticity (the ability to retain a shape) clays and silts. Liquefaction can cause ground settlement, and structures built on liquefiable soil may undergo settlement. The site is not mapped as being in an area prone to liquefaction hazard site by the California Geological Service (CGS) Seismic Hazards Program (CGS 2019).

3.8.1.4 Paleontological Context

According to surficial geological mapping, the Project area is underlain by Holocene (<11,700 years ago) surficial sediments and the late Pliocene (2.58 to 3.6 million years ago) Ferndale Formation (Rio Dell Sandstone), with the lower Pliocene to upper Miocene (3.6 to 11.63 million years ago) Price Creek Formation (Wildcat Group) mapped nearby and likely underlying the southern area at depth (Dibblee 2008). The Holocene surficial sediments have low paleontological sensitivity at the surface that increases to high sensitivity beneath the surface where the sediments become older. The Ferndale Formation (Rio Dell Sandstone) and the Price Creek Formation (lower Wildcat Series) both have high paleontological sensitivity.

The *Geotechnical Engineering Investigation Report* prepared for the Project (Appendix C-2) reported the depth to bedrock (late Pliocene age sediments) at between approximately 44 feet to greater than 100 feet below ground surface.

3.8.1.5 Records Search and Desktop Geological Review

Dudek requested a paleontological records search from the California State University Chico Earth Sciences Collection on November 4, 2025, and results were received on November 12, 2025. The records search identified several nearby fossil localities. From Scotia Bluffs, which is less than 1 mile east of the Project site, there are unidentified invertebrate fossils from the Rio Dell Sandstone. The records search also consulted Humboldt State University, identifying numerous fossils from Scotia Bluffs and the surrounding area. These localities consisted of plants, invertebrates, and vertebrates all from the Ferndale Formation.

A search of the University of California Museum of Paleontology, Berkeley (UCMP) online database shows fossils reported from the Rio Dell Sandstone including

invertebrates, microfossils, rays, bony fish, elk, unidentified mammal, birds, seals, otter, and fin whale. The database also lists several localities from along the Eel River with no specific locations given, and several localities from the Wildcat series including plants, gastropods, echinoids, and bivalves (UCMP 2025).

A search of the Mindat online database revealed two fossil localities near the Project site. Approximately 0.73 miles east of the Project site, the Scotia Bluffs locality yielded mollusks, echinoids, foraminifera, a giant fur seal, and gray whale from the Rio Dell Sandstone (Mindat 2025). Approximately 1.60 miles southeast of the Project site, the Eel River Locality produced giant fur seal fossils from the Rio Dell Sandstone (Mindat 2025).

3.8.2 Regulatory Setting

Federal and State laws and regulations pertaining to geological and paleontological resources and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.8.3 Impact Analysis

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?

Less Than Significant Impact

The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (California Department of Conservation, California Geologic Survey 2021). However, in the event of a major earthquake, the Northern and Southern Work

Areas may be subjected to strong ground shaking from nearby active faults in the region.

In accordance with CEQA, this analysis addresses the potential impacts of the Project on the environment; it does not address the potential impact that the environment could inflict on the Project. As stated by the California Supreme Court, "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users." (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369, 386 (CBIA)).

The Northern and Southern Work Areas and their immediate vicinities are level, and do not have the potential to slide or experience sliding from adjacent areas. While there are minor slopes associated with the channel banks and temporary bore pits, these are not expected to be at risk of movement during Project activities. The Project would also include backfilling the excavations with native earth material, such that the soil properties (including shear strength and grain size) would not be substantially changed. Therefore, the Project would not result in landslides.

The HDD forces produced by the Project activities are localized, small scale, and are too weak to trigger any movement on existing faults. These forces would also be too weak to produce ground shaking and ground failure resulting in liquefaction and lateral spreading. In addition, although loose materials are present is the subsurface of the Project site, based upon soil boring data collected by BSK Associates, including soil moisture and relative density, the potential for liquefaction at the project site is considered low. Therefore, the proposed installation of the conduit under the Eel River would not cause or exacerbate the potential for seismic impacts such as fault rupture, ground shaking, liquefaction, and lateral spreading to occur.

The installed conduit and associated cable would be subject to potential geologic impacts from seismic shaking or liquefaction; however, the conduit would be designed to ensure it could accommodate these forces without suffering damage.

Project activities would not exacerbate existing geological conditions or the potential for seismic ground shaking. The Project would not result in any long-term impacts to the area due to loss of slope stability, erosion, or landslides. As such, this analysis does not evaluate existing environmental risks that could affect the Project because the Project would not exacerbate them, consistent with the Court's ruling in *CBIA*. Therefore, the impacts would be less than significant.

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

Less Than Significant with Mitigation

Topsoil would be temporarily removed while excavating HDD bore pits in both the Northern and Southern Work Areas, as well as during minor trenching. This soil disturbance could lead to erosion during rain events. However, this topsoil would be replaced as part of backfilling and would not be lost due to Project activities. In addition, the Project activities would not construct any steep slopes or remove substantial amounts of vegetation that could increase soil erosion during rain events. Any remaining potential soil erosion would also be addressed through **MM GEO-1**, which would require implementation of an Erosion and Sediment Control Plan (ESCP) containing standard Best Management Practices (BMPs) including source control measures such as preserving existing vegetation, effective soil cover (e.g., geotextiles, straw mulch, hydroseeding) for inactive areas, and stabilization to prevent sediments from being dislodged by wind, rain, or flowing water. With implementation of this measure, the impact would be less than significant.

MM GEO-1. Erosion and Sediment Control Plan (ESCP). Prior to the start of construction, the project Applicant shall prepare and implement an Erosion and Sediment Control Plan (ESCP) to minimize the loss of topsoil and prevent sedimentation into the Eel River. Because the project involves trenching in alluvial soils, the following measures shall be mandatory:

- Best Management Practices (BMPs): Installation of physical barriers such as fiber rolls (straw wattles), silt fences, or gravel bags around the perimeter of all trenching areas and soil stockpiles.
- Stockpile Management: All excavated soil stored on-site shall be covered with plastic sheeting or weighted tarps during the rainy season (October 15 through May 1) or when rain is forecast.

- Site Stabilization: Upon completion of trenching activities, all disturbed areas shall be re-contoured and stabilized using hydroseeding with a native seed mix, or permanent erosion control blankets, to ensure long-term soil stability.
- Monitoring: A designated inspector shall check all erosion control measures before and after significant rain events to ensure functionality.

The ESCP shall be submitted to the California State Lands Commission for review and approval at least 14 days prior to ground disturbing activities. Should a Stormwater Pollution Prevention Plan (SWPPP) be prepared for the project, the SWPPP may be used in lieu of the ESCP if the SWPPP measures are substantially the same as the ESCP.

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 risks to life or property?

(c to d) Less Than Significant Impact

See the discussion in a), above, related to liquefaction. The project is located on stream terraces and alluvium. While these units are subject to natural fluvial processes and potential lateral spreading near riverbanks, the project would backfill and compact the HDD bore bits and trenches with the same native earth material as was removed and would therefore not result in any changes to geologic units or soils and thus ensure the site remains stable. Therefore, the impact would be less than significant.

Subsoil investigations conducted by BSK Associates identified expansive soils along the HDD borehole path. However, the conduit would be designed to safely withstand expansive soil-related movement, such that the project would not increase the risk of conduit failure. The HDD bore pits would be located on granular material including gravel and sand and would not be affected. Therefore, the impact would be less than significant.

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?

No Impact

The Project would not involve the use of septic tanks or on-site sewage disposal. Portable restrooms would be provided on-site for workers and would be regularly serviced to remove sewage which would be disposed of at a nearby municipal wastewater treatment facility. Therefore, there would be no impact.

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

Less Than Significant with Mitigation

As discussed in Section 3.8.1.5, no existing paleontological resources were identified within the Project site. In addition, the Project site is not anticipated to be underlain by unique geologic features. However, areas of the Project site have high paleontological sensitivity. Based on the results of the institutional records search and desktop geological review, the Staging and Laydown Area has high paleontological sensitivity at the surface, but no ground-disturbing activities are expected to take place, therefore rendering no impact to paleontological resources. The Southern and Northern Work Areas have low paleontological sensitivity at the surface that increases to high sensitivity with depth. However, the depth to these high sensitivity units is far greater than the maximum proposed 10 feet of excavation depth; therefore, no impacts to these high sensitivity formations are expected. Fossils have been found along the river within Rio Dell (City of Rio Dell 2013), and therefore fossils could potentially be encountered within the proposed maximum depth of excavation for the Project, but these fossils would be reworked from the older geological units with high paleontological sensitivity into the younger surficial sediments. Due to this, the overall paleontological sensitivity for the Project would become low to moderate. Regardless, **MMs GEO-2** and **GEO-3** would provide worker training as well as work stoppage and assessment in the case of any inadvertent discovery.. With the implementation of these measures, the impact would be less than significant.

MM GEO-2. Worker's Environmental Awareness Training. PG&E (or contractor) will provide environmental awareness training on paleontological resources protection. This training may be administered as a stand-alone training or included as part of the overall environmental awareness training as required by the Project. The training will include, at minimum, the following: types of fossils that could occur; the types of lithologies in which the fossils could be preserved; the procedures that should be taken in the event of a fossil discovery; penalties for disturbing paleontological resources. PG&E or their designee shall maintain a list of all contractors who have been trained and shall submit this list and the final training material to CSLC staff within 30 days after Project mobilization and shall provide an updated final list after Project activities are complete.

MM GEO-3. Unanticipated Potential Paleontological Resources. If significant paleontological resources are discovered during construction activities, the following procedures will be followed: Stop work immediately within 100 feet; Contact the designated Project inspector and PG&E Cultural Resource Specialist (CRS) immediately; Protect the site from further impacts, including looting, erosion, or other human or natural damage; The PG&E CRS in tandem with pertinent agency staff will arrange for a Principal Paleontologist to evaluate the discovery. If the discovery is determined to be significant, PG&E will implement measures to protect and document the paleontological resource; Work may not resume within 100 feet of the find until approval by the paleontologist, PG&E CRS, and pertinent agency staff**.**

3.8.4 Mitigation Summary

Impacts related to geology, soils, and paleontological resources would be reduced to less than significant with implementation of the following mitigation measures:

- MM GEO-1. Preparation and implementation of an Erosion and Sediment Control Plan (ESCP)
- MM GEO-2. Worker's Environmental Awareness Training
- MM GEO-3. Unanticipated Potential Paleontological Resources

3.9 GREENHOUSE GAS EMISSIONS

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

3.9.1 Environmental Setting

Climate change refers to any significant change in measures of climate, such as temperature, precipitation, or wind patterns, lasting for an extended period (decades or longer). The Earth's atmospheric temperature depends on the balance between energy entering and leaving the planet's system, and many factors (natural and human) can cause changes in this energy balance. The greenhouse effect is the trapping and buildup of heat in the atmosphere near the Earth's surface (the troposphere). The greenhouse effect is a natural process that contributes to regulating air temperatures, and it creates a livable environment on Earth. Human activities that emit greenhouse gases (GHGs) increase the amount of infrared radiation that is absorbed and trapped by the atmosphere, thus enhancing the greenhouse effect and causing the Earth's surface temperature to rise. Global climate change is a cumulative impact; a project contributes to this impact through its incremental contribution combined with the cumulative increase of all other sources of GHG emissions. Thus, GHG impacts are recognized exclusively as cumulative impacts (CAPCOA 2008).

A GHG is any gas that absorbs infrared radiation and traps heat in the atmosphere. As defined in California Health and Safety Code section 38505, subd. (g), for purposes of administering many of the State's primary GHG

emissions reduction programs, GHGs include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3) (see also 14 CCR 15364.5).

The Intergovernmental Panel on Climate Change developed the "global warming potential" concept to compare the capacity of each GHG to trap heat in the atmosphere relative to another gas. The reference gas used is CO_2; therefore, global warming potential-weighted emissions are measured in metric tons (MT) of CO_2 equivalent (CO_2e). Consistent with CalEEMod Version 2022.1, this GHG emissions analysis assumes the global warming potential for CH_4 is 25 (i.e., emissions of 1 MT CH_4 are equivalent to emissions of 25 MT CO_2) and the global warming potential for N_2O is 298, based on the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007).

3.9.2 Regulatory Setting

Federal and State laws and regulations pertaining to GHG emissions and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.9.2.1 Thresholds of Significance

To date, NCUAQMD, Humboldt County, and Rio Dell have not adopted numerical GHG thresholds of significance for construction activities.[2] Therefore, CSLC staff reviewed recommended GHG thresholds for other air districts and determined that, for the purposes of this analysis, the Sacramento Metropolitan Air Quality Management District (SMAQMD) construction threshold of 1,100 MT CO_2e per year would be used for this analysis (SMAQMD 2020). This threshold was determined to be appropriate to evaluate the significance of Project construction emissions, since the SMAQMD is one of the few air districts in the state that has adopted a quantitative construction threshold, the SMAQMD threshold is the most recently adopted, and it has incorporated the SB 32 targets for GHG emissions (SMAQMD 2020).

[2] Humboldt County identified GHG emissions thresholds on a per resident, per employee, and per service population (i.e., residents plus employees) basis as part of the *Humboldt County Regional Climate Action Plan* (Humboldt County 2025). However, these thresholds would not apply to a construction-only project, such as the proposed Project, that would not result in new land uses by residents or employees.

3.9.3 Impact Analysis

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

Less Than Significant Impact

As calculated in Appendix D, *CalEEMod and Petroleum Estimates*, the total GHG emissions during construction of the Project would be approximately 230 MT CO_2e per year, which would not exceed the applied SMAQMD threshold of 1,100 MT CO_2e. In addition, the Project would not result in any new long-term GHG emissions. Therefore, the impact would be less than significant.

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

No Impact

The Project would generate minimal, temporary GHG emissions from construction. As a construction-only project, the Project would not conflict with CARB's 2017 Scoping Plan or 2022 Scoping Plan, which prioritize emissions reductions from long-term sources. Similarly, at the local level, the Humboldt County Regional Climate Action Plan is a long-range planning document that guides the Humboldt Region, including Rio Dell, towards long-term GHG emissions reduction in accordance with the State's goal to reduce GHG emissions by 40% below 1990 levels by 2030 and achieve carbon neutrality by 2045 (Humboldt County 2025). The strategies and measures in the Humboldt County Regional Climate Action Plan focus on the sectors of Building Energy, Transportation, Waste, Water and Wastewater, and Carbon Sequestration and would not apply to the Project. The Project would not conflict with the RCAP or obstruct the State's ability to achieve its carbon neutrality targets. Therefore, there would be no impact.

3.9.4 Mitigation Summary

The Project would not result in significant impacts from GHG emissions; therefore, no mitigation is required.

3.10 HAZARDS AND HAZARDOUS MATERIALS

HAZARDS AND HAZARDOUS MATERIALS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☒	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result	☐	☐	☐	☒

HAZARDS AND HAZARDOUS MATERIALS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
in a safety hazard or excessive noise or people residing or working in the project area?				
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

3.10.1 Environmental Setting

The project site spans the Eel River in Rio Dell, Humboldt County. Several rural residences are located within 500 feet of the South Work Area. Rio Dell contains Monument Middle School and Eagle Prairie Elementary School, both located approximately 0.6 miles southeast of the Southern Work Area. The nearest airport, Rohnerville Airport, is approximately 4 miles to the north.

A search of the State Water Resources Control Board (SWRCB) GeoTracker database identified one cleanup site, Humboldt Pacific Transport, located 0.1 miles west of the Southern Work Area. This former auto wrecking site has documented soil contamination (metals and petroleum hydrocarbons). The case was opened in 1992 and remains open but inactive as of 2008. No clean-up actions have been reported (SWRCB 2026).

The Department of Toxic Substances Control (DTSC) EnviroStor database (commonly referred to as the "Cortese List") identified one site, Former Eel River Sawmill, located 0.1 miles east of the Staging and Laydown Area. This site is subject to a Land Use Covenant due to dioxin and pentachlorophenol contamination (DTSC 2026).

3.10.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to hydrology and water quality and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.10.3 Impact Analysis

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

Less Than Significant with Mitigation

The Project would involve routine storage, transport, use, and disposal of small quantities of hazardous materials. These materials may include gasoline, diesel, hydraulic fluids, lubricants, coolants, bentonite-based drilling fluids, and solvents, all of which are regulated by federal, state, and local laws and regulations. However, improper storage and handling of these materials during Project activities could result in spills or leaks, causing a potentially significant impact to the environment and nearby residences. **MM HAZ-1** would establish the correct storage and handling procedures for all hazardous materials through a Spill Response and Contingency Plan (SRCP). The SRCP would require separate storage for incompatible hazardous materials, secondary containment for hazardous materials storage, trained personnel for hazardous materials handling, on-site spill clean-up kits, and equipment refueling stations to be in specific sites with appropriate spill containment. With the implementation of this measure, the impact would be less than significant.

MM HAZ-1: Spill Response and Contingency Plan (SRCP). A Spill Response and Contingency Plan (SRCP) shall be submitted to CSLC staff and all other pertinent agencies for review and approval at least 30 days prior to Project implementation. The SRCP shall include the following (at a minimum):

- Secondary Containment: All hazardous materials (fuels, lubricants) shall be stored in a dedicated staging area with secondary containment (e.g., berms or spill pallets) capable of holding 110% of the largest container's volume.
- Refueling Protocols: No refueling shall occur within 100 feet of the Eel River bank or any active drainage.

- Spill Kits: "Type II" spill kits (absorbent pads, booms, and neutralizers) shall be maintained at each work area and on every service truck.
- Waste Disposal: All hazardous waste (including oily rags or contaminated soil) shall be profiled and hauled to a Class I or II landfill by a licensed hazardous waste hauler.

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

Less Than Significant with Mitigation

The HDD procedures have been developed using site-specific geotechnical data to ensure that the drilling can be successfully completed while also minimizing the risk of inadvertent drilling fluid loss (frac-outs) into the river or upland areas. Although the HDD activities would be closely monitored, the potential still exists for drilling fluids (predominantly bentonite clay) to migrate from the drill hole to surrounding fractured rock and sediments and be discharged to the land or surface water along the HDD routes. Aquatic release and the associated biological impacts are analyzed in Section 3.4, *Biological Resources*. Terrestrial releases could damage surface structures and smother terrestrial vegetation. This release of unanticipated hazardous materials into the environment is considered a potentially significant impact. **MM HYD-1** would require the Applicant to develop and implement an Inadvertent Release Contingency Plan, including monitoring and recording of the drilling fluid volumes, pressures, and flow rates to minimize the quantity of drilling fluids that might be inadvertently released, as well as listing on-site equipment required to contain and clean up a spill. In addition, **MM HYD-1** will include the procedures to follow if a release occurs, including halting drilling operations, documenting the drilling fluid release, notifying stakeholders, and containing the spill. With the implementation of this measure, the impact would be less than significant.

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

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

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

No Impact

The closest schools, Monument Middle School and Eagle Prairie Elementary School, are both located more than 0.25 miles from the Project site. While the Southern Work Area is 0.1 miles east of the Humboldt Pacific Transport site, the Southern Work Area does not overlap with the identified contaminated mounds. In addition, the Former Lumber Mill Site is 0.1 miles east of the Staging and Laydown Area but there would be no overlap with any contaminated areas. The project is not within an airport land use plan and is located approximately 4 miles from the nearest public airport, exceeding the 2-mile threshold for safety hazards. Therefore, there would be no impacts.

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

No Impact

Project activities are located primarily in off-road areas or floodplains. Regional access via US-101 would not be impaired. Neither Rio Dell nor Humboldt County have an adopted emergency response plan or evacuation plan that applies to the Project site. None of the roads proposed for Project access are considered emergency evacuation routes. Any disruption of local roads or driveways for movement of construction equipment would be temporary and emergency access would be maintained. Therefore, there would be no impact.

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

Less Than Significant Impact

Construction activities may introduce new potential ignition sources to the Project area. While the Project area is in a high Fire Hazard Safety Zone, PG&E

employees and contract partners must follow the fire safety practices outlined in PG&E Utility Procedure EMER-4102P-01 when performing work or operating outdoors on or near any forest-, brush-, or grass-covered land. In addition, the Project proposes to underground the electrical transmission line through the conduit under the river, providing a beneficial impact by reducing the area's overall wildfire risk. Following construction, surface conditions would be the same as pre-Project conditions. See Section 3.20, *Wildfire*, for additional discussion of wildfire risk.

Therefore, the impact would be less than significant.

3.10.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts related to hazardous materials to less than significant.

- MM HAZ-1. Project Work and Safety Plan (PWSP)
- MM HYD-1. Inadvertent Release Contingency Plan

3.11 HYDROLOGY AND WATER QUALITY

HYDROLOGY AND WATER QUALITY - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☒	☐	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would:				
i) Result in substantial erosion or siltation on or off site;	☐	☒	☐	☐
ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on or off site;	☐	☐	☐	☒
iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒

HYDROLOGY AND WATER QUALITY - Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
iv) Impede or redirect flood flows?	☐	☐	☐	☒
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☒	☐	☐

3.11.1 Environmental Setting

3.11.1.1 Surface Water Characteristics

The Project site spans both sides of the Eel River, which is located within the North Coast hydrologic region (North Coast Region). The North Coast Region is divided into two natural drainage basins: the Klamath River Basin and the North Coastal Basin. The Project site is within the Eel River Hydrologic Unit (HU) of the North Coastal Basin. The Eel River HU covers approximately 3,682 square miles across the counties of Humboldt, Trinity, Mendocino, Glenn, and Lake. Surface waters within the Eel River HU include six major branches of the Eel River (Upper Mainstem, Middle Mainstem, Lower Mainstem, North Fork, Middle Fork, and South Fork), the Van Duzen River, a tributary to the Eel River, and Lake Pillsbury, a reservoir created by Scott Dam. Downstream of Scott Dam is the Cape Horn Dam, which is part of the Potter Valley Project that diverts water from the Eel River to the Russian River Basin through the Potter Valley Tunnel (North Coast Regional Water Quality Control Board [NCRWQCB] 2018). The Project site is located in the Lower Mainstem section of the Eel River.

3.11.1.2 Surface Water Quality

The NCRWQCB has developed the Water Quality Control Plan (Basin Plan) for the North Coast Region to protect the region's surface and groundwaters

(NCRWQCB 2018). The Basin Plan designates beneficial uses of waters within the region, sets narrative and numerical water quality objectives to protect beneficial uses, and describes implementation programs intended to meet the Basin Plan objectives.

The Lower Eel River section is considered impaired under section 303(d) of the Clean Water Act due to elevated levels of aluminum, dissolved oxygen, sedimentation/siltation, and elevated water temperature (SWRCB 2022). The surface water in the Project area is considered impaired because data indicates that the adopted water quality objectives are continually exceeded or that beneficial uses are not being protected.

3.11.1.3 Flood Hazard

The Project site is included within Flood Insurance Rate Maps 06023C1240F and 06023C1220F in Humboldt County (Federal Emergency Management Agency [FEMA] 2024). The Flood Insurance Rate Maps delineate Special Flood Hazard Areas: areas subject to inundation by the 1 percent annual chance flood (100-year flood or base flood), which is the flood that has a 1 percent chance of being equaled or exceeded in any given year. As shown on the respective Flood Insurance Rate Maps, the Southern Work Area is divided between Zone X (area of minimal flood hazard), Zone X (0.2 percent annual chance flood or 500-year flood) and Zone AE (Special Flood Hazard Area; base flood elevation of 95 feet). The Northern Work Area is entirely within Zone X (area of minimal flood hazard). The Staging and Laydown Area is divided between Zone AE (Special Flood Hazard Area; base flood elevation of 87 feet) and Zone A (Special Flood Hazard Area, no determined base flood elevation).

3.11.1.4 Groundwater Environment and Management

The Project site is located within the Eel River Valley Groundwater Basin (Basin). The California Department of Water Resources categorizes groundwater basins into four priority levels (high, medium, low, and very low) based on the criteria in California Water Code section 10933. The Basin is designated as a medium-priority basin. The 2014 Sustainable Groundwater Management Act requires the formation of groundwater sustainability agencies (GSAs) in high- and medium-priority groundwater basins and preparation of a groundwater sustainability plan (GSP) to achieve quantifiable objectives and sustainability goals no later than 20 years after adoption of the GSP. The Eel River Valley GSP, prepared by Humboldt County GSA, was adopted on January 25, 2022 (Humboldt County GSA 2022). According to the

GSP, Rio Dell utilizes groundwater only as a secondary or emergency source of water; the primary source is surface water from the Eel River.

3.11.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to hydrology and water quality and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.11.3 Impact Analysis

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

Less Than Significant with Mitigation

In the absence of proper controls, ground disturbance associated with site preparation, excavation, and trenching activities could result in erosion and sedimentation, which in turn could result in adverse water quality impacts to the Eel River. **MM GEO-1** requires an Erosion and Sediment Control Plan that would avoid significant impacts associated with runoff and sedimentation through implementation of best management practices (BMPs).

As discussed in Section 3.10, *Hazards and Hazardous Materials*, project construction could also result in incidental spills of drilling fluids, lubricants, or fuels due to user error or equipment malfunction. **MM HAZ-1** would address potential spills during construction with the implementation of a Spill Response and Contingency Plan. This would ensure the proper storage and handling of hazardous materials and prompt clean-up and containment of any incidental spills, should they occur.

Finally, HDD drilling fluids could migrate from the drill hole to surrounding fractured rock and sediments and be discharged to the land or surface water along the HDD routes. However, the proposed bore path under the Eel River would be a minimum depth of 50 feet beneath the river channel, reducing the potential for any inadvertent release of drilling fluids to the river which could degrade surface water quality. To further reduce risk from inadvertent release, a draft Inadvertent Release Contingency Plan (IRCP) has been prepared for the Project and would be implemented as needed in the unlikely event of a drilling fluid release (Appendix C-1). The draft IRCP includes monitoring measures and details the procedures to follow if a release occurs, including halting drilling

operations, documenting the drilling fluid release, notifying stakeholders and overseeing agencies (e.g., Regional Water Quality Control Board, and containing the spill using onsite spill containment materials. **MM HYD-1** would require submittal of a final IRCP to CSLC for review and approval prior to commencement of construction.

With the implementation of these measures, the impact would be less than significant.

> **MM HYD-1: Inadvertent Release Contingency Plan.** The Applicant shall finalize and implement the Inadvertent Release Contingency Plan (IRCP) to detect and address any inadvertent release of drilling fluids associated with the Project's directional drilling operation. The plan shall establish the operational procedures and responsibilities for the prevention, containment, and clean-up of inadvertent release. At least 30 days prior to initiation of construction activities, the Applicant shall submit a Final IRCP to CSLC for review and approval.

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

Less Than Significant Impact

The Project would require an estimated 5,000 gallons of municipal water per day during construction for drilling fluid, dust suppression, and other construction activities, which would be drawn from a Rio Dell fire hydrant on Eeloa Avenue. Once construction is complete, the Project would have no water demands. Given that the Project's construction water demand is temporary and minimal groundwater is used by Rio Dell (see Section 3.11.1.4), such water use would not hinder sustainable groundwater management for the Basin. In addition, the Project would not introduce new paving or other impervious surfaces, and precipitation would be allowed to percolate into the subsurface just as with current existing conditions. Therefore, the impact would be less than significant.

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 that would:

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

Less Than Significant with Mitigation

The Project would not alter the drainage pattern of the Eel River or any other tributary. However, stormwater run-off from Project work areas may result in minor and short-term erosion and siltation associated with site preparation, excavation, and trenching activities if not managed appropriately. **MM GEO-1** would reduce impacts associated with runoff and sedimentation through implementation of construction BMPs. With the implementation of this measure, the impact would be less than significant.

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

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

iv) Impede or redirect flood flows?

(ii to iv) No Impact

The Project would not increase impervious surfaces or substantially alter topography, slope, or drainage to or near the Eel River or any other tributary. All Project components that could affect flood flows would be buried. Excavations would be compacted to match the surrounding areas, and contours would be restored to pre-Project conditions. The Project would not alter the rate or amount of stormwater runoff from pre-Project conditions.

As discussed in Section 3.11.1.3, portions of the Project site are within a flood hazard area. However, the Project does not include any above-ground components that would impede or redirect flood flows. Both on-site and off-site flooding would remain unaffected. Therefore, there would be no impacts.

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

No Impact

Although portions of the Project site are within a flood hazard area, there would be no onsite storage of any hazardous materials that could release pollutants during flooding events and potential Project site inundation. The Project site is not located within a tsunami hazard area as mapped by the California Geological

Survey and is not located near an enclosed or semi-enclosed body of water that would be susceptible to seiches. Therefore, there would be no impact.

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

Less Than Significant with Mitigation

The relevant water quality control plan is the NCRWQCB Basin Plan. As previously discussed in (a), above, ground disturbance and inadvertent releases of drilling fluid could result in water quality impacts, but implementation of **MM GEO-1**, **MM HAZ-1**, and **MM HYD-1** would reduce the potential for the Project to substantially degrade surface or groundwater quality which is consistent with the objectives and policies of the Basin Plan. With the implementation of these measures, the impact would be less than significant.

The relevant sustainable groundwater management plan is the Eel River Valley GSP. As discussed in (b), above, given that Project's water demand would be relatively small and temporary, and minimal groundwater is used by Rio Dell, the Project would not conflict with or obstruct sustainable groundwater management for the Basin. Therefore, the impact would be less than significant.

3.11.4 Mitigation Summary

Implementation of the following mitigation measures would reduce the potential for Project-related impacts to hydrology and water quality to less than significant.

- MM GEO-1: Erosion and Sediment Control Plan
- MM HAZ-1: Spill Response and Contingency Plan
- MM HYD-1: Inadvertent Release Contingency Plan

3.12 LAND USE AND PLANNING

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

3.12.1 Environmental Setting

The Project site is located within Rio Dell in Humboldt County. The Southern Work Area is designated and zoned for Urban Residential, the Northern Work Area is designated and zoned Natural Resources, and the temporary staging and laydown area is designated and zoned for Industrial/Commercial (City of Rio Dell 2024).

3.12.2 Regulatory Setting

There are no Federal laws, regulations, or policies pertaining to land use that are relevant to the Project. Appendix A contains the State laws and regulations pertaining to land use relevant to the Project. At the local level, no goals, policies, or regulations are applicable to the Project.

3.12.3 Impact Analysis

a) Physically divide an established community?

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

(a to b) No Impact

The Project does not propose any new roadways, aboveground structures, or other components that would physically divide an established community. In addition, the Project does not propose any change in land use that would conflict with local land use plans, policies, or regulations. The Project site would ultimately revert to pre-Project conditions, and the only permanent aboveground component would be a new wire extending up the side of the utility pole closest to each the Southern Work Area and the Northern Work Area to connect the No. 7 Boxes to existing distribution lines. Therefore, there would be no impact.

3.12.4 Mitigation Summary

The Project would have no impact to land use or planning; therefore, no mitigation is required.

3.13 MINERAL RESOURCES

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

3.13.1 Environmental Setting

The Eel River is a major source of sand and gravel mined in Humboldt County (City of Rio Dell 2013). However, there are no mineral resources operations within Rio Dell. The nearest sand and gravel mining operation is located approximately 1.5 miles northeast of the Project site along the Van Duzen River, which is a tributary to the Eel River (CGS 2016). Humboldt County is not included in the California Department of Conservation Mineral Land Classification Study Area (CGS 2022).

3.13.2 Regulatory Setting

There are no federal laws, regulations, or policies pertaining to mineral resources that are relevant to the Project. State laws and regulations pertaining to mineral resources and relevant to the Project site are identified in Appendix A. There are no identified local goals, objectives, or policies pertaining to mineral resources that are applicable to the Project.

3.13.3 Impact Analysis

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

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

(a to b) No Impact

Aside from the floodplain gravel, there are no mineral resources found within the Project site, and there are no mineral resources recovery sites or known mineral resources near the Project area. Project activities would not hinder access to any mineral resource extractions in the vicinity or region. Installation of the HDD conduit would not result in the loss of any known mineral resources in the area. In addition, floodplain gravel would not be harvested, removed, or permanently disturbed as a result of the Project, and the Project would not prevent future gravel extraction. Therefore, there would be no impact.

3.13.4 Mitigation Summary

The Project would have no impact to mineral resources; therefore, no mitigation is required.

3.14 NOISE

NOISE – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generate excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐
c) Be 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 and expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

This section is based on technical analysis conducted by Dudek, including quantitative estimates of noise emissions based on assumptions developed in consultation with the Applicant. The results of the noise estimates are provided as Appendix H, *Noise Modeling Inputs & Outputs*, to this IS/MND. Noise impacts on biological resources are analyzed in Section 3.4, *Biological Resources*.

3.14.1 Environmental Setting

Ambient noise levels in the Project vicinity are influenced primarily by local traffic, residential activity, natural sounds, and the presence of U.S. 101, a major highway. Other sources of ambient noise include occasional agricultural operations, local road traffic, and natural sounds such as wind, birds, and the Eel

River. Sensitive receptors in the area include residences adjacent to the Southern Work Area and agricultural workers and wildlife near the Northern Work Area. The nearest noise-sensitive, residential (human) receptors are approximately 70 feet surrounding the Southern Work Area and 600 feet northwest of the Northern Work Area.

Overall, the existing noise environment at the Project site is characteristic of rural residential areas with moderate influence from nearby highway traffic.

3.14.1.1 Ground-Borne Vibration

In contrast to airborne noise, ground-borne vibration is not a common environmental problem. Vibration from sources such as buses and trucks are not usually perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

Ground-borne vibration can cause detectable building floor movement, window rattling, items shaking on shelves or walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Human annoyance from vibration can often occur and can happen when the vibration exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance would be well below the damage threshold for normal buildings.

Vibration is an oscillatory motion which can be described in terms of displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement, and acceleration is the rate of change of the speed. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. PPV is often used in monitoring of blasting vibration since it is related to the stresses that buildings undergo.

3.14.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to noise and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.14.3 Impact Analysis

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

Less Than Significant Impact

Project construction activities would result in the temporary generation of noise at the Project site. Construction would involve the use of heavy equipment and machinery, such as backhoes, excavators, and an HDD rig. Construction would generate levels of noise that can vary from hour to hour and day to day depending on the equipment in use, the operations being performed, and the distance between the source and receptor. Typically, construction equipment operates in alternating cycles of full power and low power, producing average noise levels less than the maximum noise level. The average sound level of construction activity also depends on the amount of time that the equipment operates and the intensity of construction activities during that time.

Neither Rio Dell nor Humboldt County have established a numeric limit for construction noise exposure. As noted in Appendix B, Rio Dell's noise ordinance permits construction and heavy equipment operation between 7:00 a.m. and 8:00 p.m., Monday through Saturday, and Project construction activities would occur entirely within Rio Dell's permitted hours. Therefore, the impact would be less than significant.

In addition, the Applicant is providing rent compensation for all the property owners near the Project site, at specific ratios based on proximity to the Work Area(s), for all construction-related inconveniences to property owners. Finally, adjacent residents would be given advanced written notification of proposed construction activities, scheduling, and hours of construction. Signage would also be posted at the Project site to notify the general public.

b) Generate excessive ground-borne vibration or ground-borne noise levels?

Less Than Significant Impact

Construction activities may expose people to excessive groundborne vibration or groundborne noise. Groundborne vibration attenuates rapidly, even over short distances. By way of example, for a bulldozer operating on site and as close as the Southern Work Area boundary (i.e., ~70 feet from the nearest property), the estimated vibration velocity would be 0.019 inches per second, per the equation as follows (Federal Transit Administration [FTA] 2018):

$$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.019 = 0.089 * (25/70)^{1.5}$$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receptor position, PPV_{ref} is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receptor.

Neither Rio Dell nor Humboldt County have adopted quantitative vibration limits. Accordingly, this IS/MND relies on the Federal Transit Administration's vibration criteria, which recommends a PPV threshold of 0.2 inches per second (in/sec) for residential buildings (FTA 2018). Information from FTA guidance also suggests that vibration level exposures having a PPV of approximately 0.2 in/sec would be considered annoying. These criteria are widely recognized and provide a conservative basis for evaluating potential construction-related vibration impacts. As discussed above, most heavier pieces of construction equipment have PPVs of approximately 0.089 inches per second or less at a reference distance of 25 feet (FTA 2018). Therefore, at this predicted PPV and compared to the 0.2 in/sec PPV threshold, the impact of vibration-induced annoyance to occupants of the nearby residences would be less than significant.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, anticipated construction vibration associated with the Project would yield a maximum amplitude of 0.019 inches per second, which does not surpass the 0.2 in/sec PPV for "non-engineered timber and masonry buildings" (i.e., a building category consistent with most residential structures) (FTA 2018). Therefore, the impact would be less than significant.

c) Be 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 and expose people residing or working in the project area to excessive noise levels?

No Impact

There are no public airports or private airfields within 2 miles of the Project site. Rohnerville Airport is located approximately 2.75 miles to the north. The Project site is within Review Area 2 of the Rohnerville Airport Land Use Compatibility Plan; however, Review Area 2 is outside of the airport noise contours for aviation traffic. Construction workers would not be exposed to significant aviation noise levels. Therefore, there would be no impact.

3.14.4 Mitigation Summary

The Project would have no significant impact from noise; therefore, no mitigation is required.

3.15 POPULATION AND HOUSING

POPULATION AND HOUSING – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Induce substantial 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 housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.15.1 Environmental Setting

According to the U.S. Census, Humboldt County had a population of 136,463 and Rio Dell had a population of 3,379 in 2020 (U.S. Census Bureau 2020). No housing units are located within the project site. Several single-family residences are located near the Southern Work Area.

3.15.2 Regulatory Setting

There are no State or federal laws, regulations, or policies pertaining to population and housing that are relevant to the Project. At the local level, no goals, policies, or regulations are applicable to the Project.

3.15.3 Impact Analysis

a) Induce substantial 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)?

Less Than Significant Impact

As discussed in Section 1.4, *Project Background and Objectives*, the Project would provide more reliable electric service within the region. The project would also ensure an adequate electrical service capacity to support the Humboldt Rio Dell Business Park (HRDBP), which is located at the north end of Rio Dell, across the Eel River and at the former Eel River Sawmills site. The HRDBP allows for the cultivation, manufacturing, processing, distribution, and retail sales of commercial cannabis as a conditional use. The HRDBP has been planned for and approved by Rio Dell and analyzed in previous CEQA documents: the 2008 Annexations, General Plan and Zoning Amendments MND (State Clearinghouse # 2008082022), and the 2012 Eel River Industrial Park General Plan Amendment and Zone Reclassification MND (State Clearinghouse # 2012042053). The Project is intended to serve development that has already been planned for and evaluated under CEQA, and would not extend infrastructure such that substantial unplanned population growth would occur. The Project also would not construct any new homes or businesses.

A limited number of crew would be working on the Project construction at any one time and would either already reside in the local area or surrounding area or would be staying in short-term (rental) housing or hotel accommodations and would not require the introduction of any permanent housing or other structures. Therefore, the impact would be less than significant.

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

No Impact

The Project would not displace any housing units because there are no housing units at the Project site. Therefore, there would be no impact.

3.15.4 Mitigation Summary

The Project would have no significant impacts to population and housing; therefore, no mitigation is required.

3.16 PUBLIC SERVICES

PUBLIC SERVICES	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

3.16.1 Environmental Setting

Fire Protection Services. The Southern Work Area is within the Rio Dell Fire Protection District service area, while the Northern Work Area and Staging and Laydown Area are within the Fortuna Fire Protection District service area. These fire protection districts have mutual aid agreements with each other and with nearby fire protection districts (City of Rio Dell 2024). The nearest fire station to the Project site is the Rio Dell Volunteer Fire Department, located approximately 0.7 miles from the Southern Work Area.

Police Protection Services. The Rio Dell Police Department provides law enforcement services for Rio Dell. Rio Dell has mutual aid agreements with the City of Fortuna, the City of Ferndale, and the Humboldt County Sheriff's

Department. The California Highway Patrol assists Rio Dell Police with technical traffic assistance and officer back up (City of Rio Dell 2024).

Schools. The closest school to the Project site is Eagle Prairie Elementary School located at 95 Center Street in Rio Dell, approximately 0.55 miles southeast of the Southern Work Area.

Parks and Recreational Facilities. The closest park to the Project site is Riverside Triangle Park, which is a small triangular parcel bordered by Riverside Drive, North Fern Street, and South Fern Street, located approximately 0.3 miles east of the Southern Work Area.

3.16.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to public services and relevant to the Project are identified in Appendix A. At the local level, no goals, policies, or regulations are applicable to the Project.

3.16.3 Impact Analysis

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

- ***Fire protection?***
- ***Police Protection?***
- ***Schools?***
- ***Parks or other public facilities?***

No Impact

The Project would not result in an increase in the number of public service calls because the Project does not involve the construction of any residences, buildings, or other land uses requiring additional fire, emergency medical services, or police services. The Project would neither induce population growth nor require the construction, expansion, and/or physical alteration of existing government facilities (fire, police, school, public parks or other public facilities). Therefore, there would be no impact.

3.16.4 Mitigation Summary

The Project would have no impact to public services; therefore, no mitigation is required.

3.17 RECREATION

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

3.17.1 Environmental Setting

As discussed in Section 3.16, *Public Services*, the closest park to the Project site is Riverside Triangle Park located approximately 0.3 miles east of the Southern Work Area. This park is an approximately 0.4-acre grassy parcel with several public benches. Rio Dell owns and maintains four small pocket parks, including Riverside Triangle Park, and has a Joint Use Agreement with the Rio Dell School District for the playing fields located on school grounds (City of Rio Dell 2025).

The Eel River is publicly accessible and provides recreational boating opportunities. The closest boating facility located upstream of the Project site is in Weott, approximately 18 miles southeast of the Southern Work Area (California State Parks 2025).

3.17.2 Regulatory Setting

There are no State or federal laws, regulations, or policies pertaining to recreation that are relevant to the Project. At the local level, no goals, policies, or regulations are applicable to the Project.

3.17.3 Impact Analysis

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

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

c) Would the project interfere with existing use of offshore recreational boating opportunities?

(a to c) No Impact

The Project would not result in population growth in the area or otherwise result in the increased use of existing recreational facilities. The Project does not include any recreational facilities and would not require the construction or expansion of recreational facilities or restrict use of existing recreational facilities. Therefore, there would be no impact.

While the Project would extend electrical service across the Eel River, all infrastructure would be installed underground, and recreational boating would be unaffected by the Project's construction and operation. Therefore, there would be no impact.

3.17.4 Mitigation Summary

The Project would have no impact to recreation; therefore, no mitigation is required.

3.18 TRANSPORTATION

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

3.18.1 Environmental Setting

3.18.1.1 Regional Context and Site Access

Access to Rio Dell is primarily from U.S. 101. Rio Dell currently maintains approximately 14.2 miles of streets, the vast majority of which are two-lane roads. Rio Dell has limited non-motorized transportation facilities, and no formal trails or bicycle lanes are within or adjacent to the Project site. The Humboldt Transit Authority operates the Redwood Transit System, which provides bus service from Trinidad to Scotia ("Mainline" route) and from Eureka to Garberville ("Intercity" route). Within Rio Dell, there are three bus stops on the Mainline route and one stop on the Intercity route (City of Rio Dell 2013b). The closest bus stop to the Project site is on the Mainline route at Painter Street and Wildwood Avenue, located approximately 0.4 miles southeast of the Southern Work Area.

The Southern Work Area would be accessed from Eeloa Avenue and North Pacific Avenue, while the Northern Work as well as Staging and Laydown Areas would be accessed from Northwestern Avenue, with the Northern Work Area then accessed via an unnamed dirt road (see Section 2.2, *Project Work Areas*, for reference).

The Humboldt County Association of Governments (HCAOG) has adopted the Regional Transportation Plan, *Variety in Rural Options of Mobility 2022-2024* (VROOM 2022-2024), which identifies strategies to address the region's mobility needs, including those of Rio Dell (HCAOG 2022).

3.18.1.2 Vehicle Miles Traveled

Under SB 743 (Steinberg, 2013), automobile delay, as measured by level of service (LOS) or similar metrics, is no longer considered a significant environmental impact under CEQA. CEQA Guidelines section 15064.3 identifies vehicle miles traveled (VMT) as the appropriate measure of transportation impacts. The intent of this new measure is aimed at promoting the reduction of GHG emissions and the development of multimodal transportation networks. This policy direction is reflected in regional transportation planning documents such as HCAOG's VROOM 2022-2024 (HCAOG 2022, pp. 7-11, 7-12). Cities and counties throughout California are in the process of implementing the transition from level of service to VMT.

3.18.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to transportation and relevant to the Project are identified in Appendix A. At the local level, no goals, policies, or regulations are applicable to the Project.

3.18.3 Impact Analysis

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

No Impact

The Project would not result in a permanent change to the existing or planned circulation system in Rio Dell. The Project would not involve any new or modified land uses that would generate long-term vehicle trips or other features that may

conflict with programs or plans addressing the circulation system, such as HCAOG's VROOM 2022-2024. Therefore, there would be no impact.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact

As the Project is not a land use or a transportation project, CEQA Guidelines section 15064.3(b)(3) identifies that "…(f)or many projects, a qualitative analysis of construction traffic may be appropriate." As such, this IS/MND provides a qualitative analysis of the Project's construction traffic.

During Project activities, no more than 20 personnel would be traveling daily to the Project area from nearby residences, hotels, or rental properties at any given time. In addition, temporary increased traffic would result from the Project equipment's initial transport to the staging areas as well as from the two haul trucks leaving the Project site with materials for recycling or disposal. These construction-related trips would generate VMT; however the Project's construction activities and related trips would last for no more than four months and would occur on an intermittent basis (see Section 2.4, *Project Schedule and Equipment*). Therefore, the impact would be less than significant.

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

Less Than Significant Impact

The Project would not involve any permanent roadway modifications or incompatible uses that would increase traffic hazards. However, construction of the Project would require the movement of heavy construction equipment on North Pacific Avenue, a street that provides access to several residences as well as the Southern Work Area. The movement of heavy equipment would be temporary, occurring only during project staging and demobilization. Movement of oversized equipment is already regulated on Highway 101 by Caltrans, and on local streets by the City of Rio Dell. Given the temporary nature and small number of trips associated with the equipment, this impact would be less than significant.

d) Result in inadequate emergency access?

Less Than Significant Impact

No street closures are proposed as part of the Project. However, construction of the Project may partially obstruct North Pacific Avenue within the Southern Work Area, which is a residential area. Ingress and egress would be maintained for nearby residents and construction workers with the Applicant's proposed construction of an alternative access road (see Figure 2-6). Therefore, the impact would be less than significant.

3.18.4 Mitigation Summary

The Project would have no significant impacts to transportation; therefore, no mitigation is required.

3.19 UTILITIES AND SERVICE SYSTEMS

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

UTILITIES AND SERVICE SYSTEMS – Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
reduction statutes and regulations related to solid waste?				

3.19.1 Environmental Setting

As discussed in Section 2.3, *Project Activities,* the Project would dispose of drilling fluid at the Yolo County Central Landfill. As of 2022, the landfill had a remaining capacity of approximately 33 million cubic yards (CalRecycle 2022). Any soil remaining after backfilling would be hauled to a PG&E or PG&E-approved disposal facility with capacity, or donated to a third-party giveaway program.

3.19.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to utilities and service systems and relevant to the Project are identified in Appendix A. At the local level, no goals, policies, or regulations are applicable to the Project.

3.19.3 Impact Analysis

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

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

(a to b) Less Than Significant Impact

The Project does not include activities or permanent components requiring new or expanded water, wastewater treatment, stormwater drainage, natural gas, or telecommunications facilities. However, the Project involves the extension of electric power infrastructure, the environmental effects of which have been evaluated in this document. As discussed in Section 3.11, *Hydrology and Water Quality,* the Project would use limited water for drilling fluid, work crew needs, and

dust control that would come from a municipal source, but would not result in any long-term demand for water. Therefore, the impacts would be less than significant.

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

No Impact

The Project would not generate any wastewater that would be treated at a wastewater treatment plant. Therefore, there would be no impact.

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?

(d to e) Less Than Significant Impact

The Project would generate solid waste including drilling fluid and excavated soils, but would dispose of all materials at either the Yolo County Central Landfill or other approved facility with capacity to accept the waste. Any hazardous waste would be disposed of in accordance with local, state, and federal laws. The Project would only generate waste during construction and would not result in any long-term generation of waste that would be sent to a landfill. Therefore, the impacts would be less than significant.

3.19.4 Mitigation Summary

The Project would have no significant impact to utilities or service systems; therefore, no mitigation is required.

3.20 WILDFIRE

WILDFIRE - Would the project:	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, 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 on the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

3.20.1 Environmental Setting

3.20.1.1 Fire Hazard Severity Zones

The Project site is in the Local Responsibility Area (LRA) where a local agency has the primary responsibility for fire suppression. According to the CAL FIRE Fire Hazard

Severity Zone (FHSZ) Maps, the Northern Work Area and Staging and Laydown Area are located in LRA High FHSZ. The Southern Work Area is located in LRA Moderate FHSZ. The nearest Very High FHSZs are located in the State Responsibility Area (SRA), approximately 10 miles south and 11 miles east of the Project site. The State adopted the updated SRA FHSZ maps on April 1, 2024, and Humboldt County Board of Supervisors adopted the updated LRA FHSZ maps on June 24, 2025.

3.20.1.2 Terrain, Vegetation, and Fire History

Topography and terrain influence fire risk by affecting fire spread rates. Typically, and in the absence of wind, steep terrain results in faster fire spread up-slope and slower fire spread down-slope. Flat terrain tends to have little effect on fire spread, resulting in fires that are driven by wind. The three Project Work Areas are flat, with only a minor change in elevation throughout. Outside of the Work Areas, elevation drops in the direction toward the Eel River.

The Project Work Areas are within or immediately adjacent to forested areas, however the vegetation along the riverbanks may be less flammable due to moisture content. According to available data from CAL FIRE, there have been 4 fires within 5 miles of the Project site, 1 fire within 1 mile of the Project site, and no fires have burned onto the footprint of the Project site. The closest fire was the 2006 Rio Fire located 1 mile east of the site along the Eel River, which was contained at 1.35 acres. Fires that burned within 5 miles of the Project are the 2016 Stafford Fire, 2011 Yager Fire, and the 1958 Mendes Fire (CAL FIRE 2025).

3.20.1.3 Fire Protection Services

Fire protection services for the Project site would be provided by the Rio Dell Fire Protection District and the Fortuna Fire Protection District, as described in Section 3.16, *Public Services*.

3.20.2 Regulatory Setting

Federal and State laws, regulations, and policies pertaining to wildfire and relevant to the Project are identified in Appendix A. At the local level, applicable policies and programs are identified in Appendix B.

3.20.3 Impact Analysis

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

No Impact

Neither Rio Dell nor Humboldt County have an adopted emergency response plan or evacuation plan that applies to the Project site. None of the roads proposed for Project access are considered emergency evacuation routes. In the event of evacuation due to wildfire, PG&E would comply with all evacuation orders provided by the jurisdictional agencies and, as required, roads would be kept clear for emergency evacuation. The Project does not propose permanent physical changes to circulation or access such as realigned or closed-off roadways that would interfere or impair emergency response or evacuation. Therefore, there would be no impact.

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, 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 on the environment?

(b to c) Less Than Significant Impact

The Project would not involve permanent occupants or habitable structures. The only occupants at the Project site would be construction workers present during working hours for Project construction. However, construction equipment may introduce new potential ignition sources to the Project area, and PG&E employees and contract partners must follow the fire safety practices outlined in PG&E Utility Procedure EMER-4102P-01 when performing work or operating outdoors on or near any forest-, brush-, or grass-covered land (PG&E 2024). Following construction, surface conditions would be similar to pre-Project conditions. The only aboveground component would be new wire extending up the side of each utility pole closest to the Southern Work Area and the Northern Work Area to connect the No. 7 Boxes to existing distribution lines. All Project components would be grounded, preventing the potential for electrical shorts or arcing. Therefore, the impact would be less than significant.

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

No Impact

As proposed, the Project would not exacerbate wildfire ignition, spread, or post-wildfire risks. Workers would only be present on-site during Project construction and would be required to follow applicable fire safety procedures. As discussed in Section 3.8, *Geology, Soils, and Paleontological Resources*, and Section 3.11, *Hydrology and Water Quality*, the Project would not permanently alter terrain or drainage in the Project area. As such, the Project would not expose people or structures to risks from runoff, post-fire instability, or drainage changes. Therefore, no impact would occur.

3.20.4 Mitigation Summary

The Project would have no significant impact related to wildfire; therefore, no mitigation is required.

3.21 MANDATORY FINDINGS OF SIGNIFICANCE

The lead agency shall find that a project may have a significant effect on the environment and thereby require an EIR to be prepared for that project where there is substantial evidence, in light of the whole record, that any of the following conditions may occur (see below). Where prior to commencement of the environmental analysis a project proponent agrees to mitigation measures or project modifications that would avoid any significant effect on the environment or would mitigate the significant environmental effect, a lead agency need not prepare an EIR solely because without mitigation the environmental effects would have been significant (per CEQA Guidelines Section 15065).

MANDATORY FINDINGS OF SIGNIFICANCE –	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are	☐	☒	☐	☐

MANDATORY FINDINGS OF SIGNIFICANCE –	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of past, present, and probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Impact Analysis

a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant with Mitigation

The potential for the Project to impact biological resources, including environmental quality and the viability of sensitive species and habitats, has been thoroughly evaluated. As discussed in Section 3.4*, Biological Resources,* the Project would not result in significant adverse effects on fish or wildlife habitat, would not lead to population declines below self-sustaining levels, and would not threaten the continued existence of plant or animal communities or reduce the range or number of endangered, rare, or threatened species.

Mitigation measures **MM BIO-1** through **MM BIO-9, MM GEO-1**, **MM HAZ-1**, and **MM HYD-1** would reduce the minor, temporary, and localized impacts to special status species and their habitats to less than significant.

The Project has also been evaluated for its potential to eliminate important examples of major periods of California history or prehistory. The Project's potential impacts on historic and archaeological resources are addressed in Section 3.5, *Cultural Resources*, and Section 3.6, *Cultural Resources – Tribal*. A review of cultural resources records indicates that no known cultural resources are located within the Project footprint. As such, impacts to cultural and tribal cultural resources are considered unlikely. However, to address the potential for impacts to previously undiscovered resources, implementation of **MM CUL-1/TCR-1** and **MM CUL-2/TCR-2** would reduce any such impacts to less than significant.

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

Less Than Significant with Mitigation

As detailed in this IS/MND, the Project has the potential to significantly impact the following environmental resource areas: Biological Resources (Section 3.4); Cultural Resources (Section 3.5); Cultural Resources – Tribal (Section 3.6); Geology, Soils, and Paleontological Resources (Section 3.8); Hazards and Hazardous Materials (Section 3.10); and Hydrology and Water Quality (Section 3.11). However, mitigation measures have been identified that would reduce all potentially significant impacts to less-than-significant levels.

The Eel River Bridge Seismic Retrofit project (SCH #2022100650) is proposed on northbound U.S. 101 in Rio Dell (Caltrans 2025). Construction of this project is anticipated to begin in 2026 with completion in 2030. However, as stated in the IS/MND prepared and adopted by Caltrans for this project, construction activities would be performed within the Caltrans right-of-way (Caltrans 2023). Prior to bridge demolition, Rio Dell water lines and a PG&E gas line would also be relocated using HDD techniques under the Eel River. Both the bridge construction and utility relocation would occur in an area that does not overlap geographically with the proposed Project.

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

Less Than Significant with Mitigation

The Project's potential impacts on human beings are evaluated throughout Sections 3.1 to 3.20 of this IS/MND. These analyses include potential effects on resources used or valued by the public, residents, and visitors (such as aesthetics, public services, and recreation); resources related to public health and safety (such as air quality, geology and soils, greenhouse gas emissions, and water quality); and elements influencing community character and essential services (such as land use, population and housing, transportation, and utilities). None of the analyses identified adverse effects that could not be avoided or reduced to a less-than-significant level through implementation of the proposed mitigation measures or compliance with applicable regulations. Therefore, with mitigation in place, Project impacts would be less than significant.

4.0 OTHER COMMISSION CONSIDERATIONS

In addition to the environmental review required pursuant to CEQA, a public agency may consider other information and policies in its decision-making process. This chapter presents information relevant to the CSLC's consideration of the Project. The considerations addressed below are:

- Climate change and sea level rise
- Recreational fishing
- Environmental justice
- Significant Lands Inventory

Other considerations may be addressed in the staff report presented at the time of the CSLC's consideration of the Project.

4.1 CLIMATE CHANGE

4.1.1 Introduction

The climate crisis and rising sea levels are impacting California's coastal and inland waterways now. Likely impacts to the lease premises include, but are not limited to, sea level rise, saltwater intrusion, prolonged drought, extreme heat, and changes to the intensity and timing of precipitation events. These impacts can exacerbate natural hydrological processes such as erosion, scour, and sedimentation. These impacts may affect the project components subject to the proposed lease, located on the Eel River.

4.1.2 Data & Projections

Water levels in tidally-influenced rivers will rise as sea levels rise. The California Ocean Protection Council updated the State of California Sea Level Rise Guidance in 2024 to provide a synthesis of the best available science on sea level rise projections and rates for multiple emissions scenarios. Commission staff evaluated the "intermediate-high" and "high" scenarios due to the vulnerability and exposure of the lease location and the continued global reliance on fossil fuels. The North Spit, Humboldt Bay tide gauge was used for the projected sea level rise scenario for the Eel River HDD crossing in Rio Dell, as listed below.

Year	Intermediate-High (feet)	High (feet)
2040	1.0	1.1
2050	1.4	1.6
2070	2.7	3.5
2100	6.5	8.7

Source: Table 6, State of California Sea Level Rise Guidance: 2024 Update
Note: Projections are with respect to a 2000 baseline.

In addition to rising seas, warmer temperatures have led California and the Southwest region to experience a megadrought from 2000 to 2022, measured as the driest 22 years in the past 1200 years, and more megadroughts are projected through the end of the century (Fifth National Climate Change Assessment: Southwest Region, 2023). Hotter and drier conditions have led to declines in snowpack volumes, higher-elevation snow lines, earlier snowmelt, and reduced overall runoff. Streamflow and river volumes are lower and will be drawn down farther as temperatures continue to rise and demand for water increases. Despite the region's increasing aridity, flooding from extreme precipitation events is projected to increase, attributed to earlier snowmelt, sea level rise, and more intense and frequent atmospheric rivers. Minor and moderate flooding (flooding events defined as disruptive to damaging), attributed to higher water levels, is expected to increase five to ten orders of magnitude by 2100, according to NOAA's 2022 Sea Level Rise Technical Report.

4.1.3 Analysis

The lease premises are likely to experience more extreme conditions over the lease term than in the past, due to climate change. Changes to the timing and amount of runoff from the higher elevations of the watershed, stronger storm surge, and rising water levels will result in higher flood risks. Bank stability may be compromised due to increased channel erosion and undercutting from more intense precipitation and floods. Structures on the lease premises may be exposed to saltier water and corrode faster than before. However, Project components would be installed underground, set well back from the bank, and a minimum depth of 50 feet under the Eel River and are unlikely to be impacted by these weather events, nor would they contribute to climate-driven riverine processes such as scour or erosion. The Project's contribution to climate change is limited to the generation of GHG emissions during construction; however the

project would not result in new long-term emissions of GHGs that would contribute to climate change.

4.2 RECREATIONAL FISHING

The Eel River supports recreational fishing; however, no in-water work would occur that would interfere with use of the river for recreation fishing. The closest boating facility located upstream of the Project site is in Weott, approximately 18 miles southeast of the Southern Work Area (California State Parks 2025). Construction of the Project may temporarily restrict access to the Eel River where work is occurring, but access would be restored once the construction is complete, and no permanent changes would occur that would impact recreational fishing. Additionally, because Project construction would occur outside of the salmon spawning season, there would be no impacts to the salmon hatch that would consequently impact future salmon runs for recreational fisherman. The closest boating facility located upstream of the Project site is in Weott, approximately 18 miles southeast of the Southern Work Area (California State Parks 2025). The Weott boating access would not be affected by the Project.

4.3 ENVIRONMENTAL JUSTICE

Environmental justice is defined by California law as "the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies" (Gov. Code, § 65040.12, subd. (e).) This definition is consistent with the Public Trust Doctrine principle that the management of trust lands is for the benefit of all people. The CSLC adopted an Environmental Justice Policy in December 2018 (Item 75, December 2018) to ensure that environmental justice is an essential consideration in CSLC's processes, decisions, and programs (CSLC 2018). Through its policy, the CSLC reaffirms its commitment to an informed and open process in which all people are treated equitably and with dignity, and in which its decisions are tempered by environmental justice considerations. Among other goals, the policy commits the CSLC to, "Strive to minimize additional burdens on and increase benefits to marginalized and disadvantaged communities resulting from a proposed project or lease."

4.3.1 U.S. Census Bureau Statistics

Table 4-1 presents population and race data for the State, County, and City from the U.S. Census Bureau 2020 Decennial Census (U.S. Census Bureau 2020). Table 4-2 presents employment and income data based on the most recently available information from U.S. Census Bureau 2023 American Community Survey 5-Year Estimates (U.S. Census Bureau 2023).

4.3.2 Population and Economic Characteristics

4.3.2.1 Demographics

As indicated in Table 4-1, the Humboldt County and Rio Dell population are predominantly white (71.9 percent in Humboldt County and 77.5 percent in Rio Dell). The percentage of Hispanic or Latino persons is 13.6 percent in Humboldt County and 14.4 percent in Rio Dell.

Table 4-1. Population and Race Statistics

Parameter	California	Humboldt County	City of Rio Dell
Total Population	38,538,223	136,463	3,379
Race (by percentage)			
White	41.2	71.9	77.5
Black or African American	5.7	1.4	0.9
American Indian and Alaska Native	1.6	6.2	3.5
Asian	15.4	2.6	0.7
Native Hawaiian and Other Pacific Islander	0.4	0.3	0.0
Other Race	21.2	5.7	6.4
Two or More Races	14.6	11.8	10.9
Hispanic or Latino (of any race)	39.4	13.6	14.4

Source: U.S. Census Bureau 2020

4.3.2.2 Socioeconomics

As shown in Table 4-2, Humboldt County and Rio Dell have lower median household income levels and higher percentages of poverty compared to the State. Residents in Humboldt County and Rio Dell are predominantly

employed in the educational, professional, retail, public administration, and construction industries.

Table 4-2. Income and Employment Statistics

Parameter	California	Humboldt County	City of Rio Dell
Income			
Median Household Income	$96,334	$61,135	$46,055
Percentage of population below the poverty level	12.0	18.9	12.8
Employment by Industry (Percentage of Population)			
Agriculture, forestry, fishing and hunting, mining	2.0	4.5	2.6
Construction	6.7	8.1	14.2
Manufacturing	8.9	4.8	7.4
Wholesale trade	2.5	1.5	2.0
Retail trade	10.1	11.7	6.7
Transportation and warehousing, and utilities	6.0	3.9	5.6
Information	2.9	1.5	0.0
Finance and insurance, and real estate and rental and leasing	5.7	3.8	3.0
Professional, scientific, and management, and administrative and waste management services	14.3	9.9	17.5
Educational services and health care and social assistance	21.7	25.3	21.5
Arts, entertainment, and recreation, and accommodation and food services	9.5	11.0	2.5
Other services, except public administration	4.8	5.6	6.1
Public administration	4.7	8.4	10.8

Source: U.S. Census Bureau 2023

4.3.3 California Office of Environmental Health Hazard Assessment CalEnviro Screen Results

According to the California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0) data (OEHHA 2021), the Project area (within Census Tract 6023011100) has a score in the 42nd percentile, meaning that 42 percent of census tracts in California have a comparably lower Cumulative Environmental Justice (EJ) Impact score. The Cumulative EJ Impact is determined by the Pollution Burden and Population Characteristics scores of a census tract.

Contributors to the Pollution Burden score include Exposures[3] and Environmental Effects[4]. The existing Pollution Burden for this tract is in the 15th percentile, with lead from housing as the highest Exposure factor (61st percentile) and solid waste as the highest Environmental Effects factor (91st percentile).

Contributors to the Population Characteristics score include Socioeconomic Factors[5] and Sensitive Populations[6]. This tract has a Population Characteristics score in the 66th percentile, with unemployment as the highest Socioeconomic Factor (93rd percentile), and cardiovascular disease as the highest Sensitive Populations factor (92nd percentile).

4.3.4 Conclusion

As shown by the data above, the primary contributor to the Project area's Cumulative EJ Impact score is Socioeconomic Factors. The area's Pollution Burden is low, with only 15 percent of census tracts having a lower score. In other words, the population may be more vulnerable to pollutant exposure due to socioeconomic and health disadvantages, but the presence of existing pollutants is comparably low. The Project's construction-related activities will have minor and temporary impacts on nearby residential communities, regardless of their socioeconomic make-up. Following incorporation of identified mitigation measures, the Project is not anticipated to add new pollution burdens or exacerbate existing pollution burdens felt by a vulnerable community. Additionally, the Project would not result in long-term or permanent impacts.

3 Factors include O_3, $PM_{2.5}$, DPM, toxic releases, traffic, pesticides, drinking water, and lead from housing.
4 Factors include cleanup sites, groundwater threats, hazardous waste, impaired waters, and solid waste.
5 Factors include education, linguistic isolation, poverty, unemployment, and housing burden.
6 Factors include asthma, low birth weight, and cardiovascular disease.

4.4 SIGNIFICANT LANDS INVENTORY

The Project would involve drilling and installation of electrical infrastructure underneath lands identified as possessing significant environmental values within CSLC's Significant Lands Inventory, pursuant to Public Resources Code section 6370 et seq. The Eel River is in the Significant Lands Inventory as parcel number 12-081-000 with use classification A, which applies to areas where public use should be minimized (CSLC 1975). Environmental values identified for the Eel River include biological resources, fish spawning, scenic resources, and recreational. Based on CSLC staff's review of the Significant Lands Inventory and the CEQA analysis provided in this MND, the Project, as proposed, would not significantly affect those lands and is consistent with the use classification.

5.0 IS/MND PREPARATION SOURCES AND REFERENCES

This IS/MND was prepared by the staff of the CSLC's Division of Environmental Science, Planning, and Management, with the assistance of Dudek. The analysis in the IS/MND is based on information identified, acquired, reviewed, and synthesized based on Division of Environmental Science, Planning, and Management guidance and recommendations.

5.1 CALIFORNIA STATE LANDS COMMISSION STAFF

Nicole Dobroski, Chief, Division of Environmental Science, Planning and Management

Alexandra Borack, Assistant Chief, Division of Environmental Science, Planning and Management

Sarah Mongano, Senior Environmental Scientist, Division of Environmental Science, Planning, and Management

Christopher Hall, Environmental Scientist, Division of Environmental Science, Planning and Management

Afifa Awan, Senior Environmental Scientist, Division of Environmental Science, Planning, and Management

Yessica Ramirez, Environmental Justice and Tribal Liaison

Christopher Workman, Staff Attorney

Jannalisa Toy, Public Land Management Specialist, Land Management Division

Marlene Schroeder, Public Land Management Specialist, Land Management Division

Palani Chandrasekaran, Associate Engineer, Mineral Resources Management Division

5.2 SECTION AUTHORS AND REVIEWERS

Dudek

Mike Henry, Associate Practice Director: Project Director

Brian Grattidge, Senior Project Manager: Project Manager

Angelica Chiu, Environmental Planner: Section 3.1, *Aesthetics*; Section 3.2, *Agriculture and Forest Resources*; Section 3.5, *Cultural Resources*; Section 3.6, *Cultural Resources – Tribal*; Section 3.11, *Hydrology and Water Quality*; Section 3.12, *Land Use and Planning*; Section 3.13, *Mineral Resources*; Section 3.15, *Population and Housing*; Section 3.16, *Public Services*; Section 3.17, *Recreation*; Section 3.18, *Transportation*; Section 3.19, *Utilities and Service Systems*; Section 3.21, *Mandatory Findings of Significance*; Section 4, *Other Commission Considerations*

Elizabeth Meisman, Biologist: Section 3.4, *Biological Resources*

Connor Burke, Environmental Acoustician: Section 3.14, *Noise*

Mathew Morales, Air Resources Specialist: Section 3.3, *Air Quality*; Section 3.7, *Energy*; and Section 3.9, *Greenhouse Gas Emissions*

Nicholas Lorenzen, Air Resources Specialist: Section 3.3, *Air Quality*; Section 3.7, *Energy*; and Section 3.9, *Greenhouse Gas Emissions*

Shawna Johnson, Paleontologist: Section 3.8.3(f), *Paleontological Resources*

Rachel Strobridge, Geospatial Analyst: Figures for Chapter 1, *Project and Agency Information*; Chapter 2, *Project Description*

Soar

Evan Studley, Senior Manager: Section 3.8, *Geology, Soils, and Paleontological Resources*; Section 3.10, *Hazards and Hazardous Materials*

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