

Draft

**Initial Study/Mitigated Negative
Declaration (IS/MND)**

**Former Eureka Manufactured Gas Plant (MGP)
West 14th Street and Railroad Avenue
Eureka, California**

December 2016

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LIST OF ACRONYMS AND DEFINITIONS

AADT	Annual Average Daily Traffic
BMP	Best management practice
BTEX	Benzene, toluene, ethylbenzene, and xylenes
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CCR	California Code of Regulations
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CDI	Coastal-Dependent Industrial
CDP	Coastal Development Permit
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH ₄	Methane
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	Carbon monoxide
CO ₂	Carbon dioxide
CRHR	California Register of Historic Resources
CWA	Clean Water Act
dB	Decibel
EFP	Eureka Forest Products
EPD	Eureka Police Department
ERM	ERM-West, Inc.
ETS	Eureka Transit Service
FEMA	Federal Emergency Management Agency
FGC	California Fish and Game Code
FR	Federal Register
FS/RAP	Feasibility Study/Remedial Action Plan
GHG	Greenhouse gas

H ₂ O	Water vapor
HASP	Health and Safety Plan
HBFB	Humboldt Bay Fire
HCAOG	Humboldt County Association of Governments
IPaC	Information, Planning and Conservation
IS	Initial Study
LCP	Local Coastal Program
Leq	Equivalent sound level
LOS	Level of Service
MGP	Manufactured Gas Plant
MND	Mitigated Negative Declaration
N ₂ O	Nitrous oxide
NCAB	North Coast Air Basin
NCUAQMD	North Coast Unified Air Quality Management District
ND	Negative Declaration
NOD	Notice of Determination
NO _x	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
PAH	Polycyclic aromatic hydrocarbon
PG&E	Pacific Gas and Electric Company
PM ₁₀	Inhalable particulate matter
PM _{2.5}	Fine particulate matter
PNSN	Pacific Northwestern Seismic Network
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act
ROG	Reactive organic gases
RDIP	Remedial Design and Implementation Plan
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
S/S	Stabilization/solidification
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	California State Water Resources Control Board

TCR	Tribal Cultural Resources
TPH	Total petroleum hydrocarbons
TPZ	Timber Production Zones
US 101	U.S. Route 101
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
WWTP	Wastewater Treatment Plant

PROJECT SPECIFICS

- 1. Project Address and Title** Former Eureka Manufactured Gas Plant Remediation Project,
West 14th Street and Railroad Avenue,
Eureka, California
- 2. Lead Agency Name and Address** City of Eureka, Development Services
Department
531 K St, Third Floor, Eureka, CA 95501
- 3. Contact Person and Phone Number** Kristen M. Goetz/Senior Planner –
(707) 441-4166
- 4. Project Applicant's Names and Addresses** Pacific Gas and Electric Company (PG&E),
Environmental Remediation, Project
Manager: Ben LePage
3401 Crow Canyon Road,
San Ramon, CA 94583
- 5. Existing General Plan Designation and Zoning** Coastal-Dependent Industrial
- 6. Project Description:** Remediation and restoration of the former
PG&E Manufactured Gas Plant property.
See Section 2.0 for further detail.
- 7. Location of Project** 1206 West 14th Street
West 14th Street and Railroad Avenue in
Eureka, California (Figure 1),
APNs 003-082-02, 003-082-06, and 003-082-
07

Pacific Gas and Electric Company (PG&E) is proposing to remediate contamination associated with the operations of the Former Eureka Manufactured Gas Plant (MGP) at West 14th Street and Railroad Avenue, Eureka, California (“proposed Project site”; Figure 1). PG&E has performed environmental investigation and remedial planning on a voluntary basis under the oversight of the North Coast Regional Water Quality Control Board (RWQCB). Based on its assessment of available data – as documented in a Draft Feasibility Study/Remedial Action Plan (FS/RAP) (ERM-West, Inc. [ERM] 2015) – PG&E proposes to implement remediation as follows:

- Stabilization/solidification (S/S) of impacted media from portions of the proposed Project site that contain wastes resulting from historical MGP operations that exceed the soil leaching and soil gas action levels.
- Excavation and offsite disposal of an adjustable volume of impacted soil, with this volume to be based on:
 - Pre-mobilization treatability study results indicating which portions of the targeted treatment area can be successfully stabilized/solidified; and
 - Post-mobilization in-field determinations regarding the effectiveness of S/S.
- Long-term groundwater monitoring including installation of new monitoring wells to confirm natural attenuation of residual groundwater impacts.
- Installation of an engineered cap.
- Installation of asphalt surface and associated storm water management system, which will include a vegetated swale.
- Application of institutional controls, including a land use covenant.

The area to be remediated (the proposed Project site) is part of a larger property (the “property”) owned by Eureka Forest Products (EFP), which has granted PG&E access to perform the remediation.

The City of Eureka has prepared this Initial Study/Mitigated Negative Declaration (IS/MND) to evaluate potential Project impacts in accordance with the requirements of the California Environmental Quality Act (CEQA). The proposed Project evaluated in this analysis is consistent with that defined in the FS/RAP. Conservative estimates or assumptions are defined and evaluated where appropriate to ensure all potential impacts are analyzed.

Source: Basemap provided by ESRI web mapping services



Created By: Mike Appel Date: 1/4/2017 Project: 0213968

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Figure 1
 Site Location
 Initial Study for Proposed Remedial Cleanup
 Eureka Former MGP
 Railroad Avenue and 14th Street
 Eureka, California

CEQA applies to all discretionary activities proposed to be implemented or approved by a California public agency, unless an exemption applies. The City of Eureka is the Lead Agency that will make the discretionary decision whether to approve the proposed Project and issue a Coastal Development Permit (CDP) pursuant to the City's approved Local Coastal Program (LCP).

CEQA requires an agency to review the potential effects of a project's actions on numerous environmental resources, and the State CEQA Guidelines are the primary rules and source of interpretation of CEQA (Public Resources Code [PRC] Section 21083).

An Initial Study (IS) is used to determine whether the action may have a significant environmental effect. It is a preliminary analysis prepared by the Lead Agency. The IS may use a checklist format, but fact-based explanations should be used to support the checklist. If the IS concludes that the proposed Project may have a significant effect on the environment, an Environmental Impact Report should be prepared; otherwise, the Lead Agency may prepare a Negative Declaration (ND) or Mitigated Negative Declaration (MND) (State CEQA Guidelines Section 15063).

CEQA requires an IS to include the project environmental setting, potential environmental impacts, and mitigation measures for any significant effects. When describing potential environmental effects in an IS, the Lead Agency may use a checklist, matrix, or other form. The checklist includes four possible levels of environmental effects: potentially significant, less than significant with mitigation incorporated, less than significant, and no impact (State CEQA Guidelines Section 15063[d][3],[f]).

During preparation of the IS, the Lead Agency must make a determination whether a project may have a significant effect on the environment. If the Lead Agency concludes the proposed Project would not have a significant effect, it prepares an ND or MND, which is a written statement explaining why the proposed Project would not have a significant environmental effect. For MNDs, the document must describe the mitigation measures included in the proposed Project to avoid potentially significant effects (State CEQA Guidelines Sections 15063, 15371; PRC Section 21092.6[a]).

CEQA requires the Lead Agency to provide the public and relevant agencies an opportunity to comment by filing and distributing a Notice of Intent to adopt an ND or MND on a project. Following the 30-day public review period, the Lead Agency considers the ND or MND, together with any comments received, before approving the proposed Project. Although there is no requirement to prepare formal responses to comments, the Lead Agency should have adequate

information in the record explaining why the comment does not affect the conclusions that there would be no significant effects, and the Lead Agency must notify any commenting agencies of the date of any public hearing on the proposed Project for which the ND or MND is prepared (State CEQA Guidelines Sections 15072, 15073).

When adopting an MND, the Lead Agency must also adopt a monitoring and reporting program for the mitigation measures included in the MND, and, if it approves the project, the Lead Agency must file a Notice of Determination (NOD) with the State Clearinghouse within 5 working days after project approval (State CEQA Guidelines Sections 15074[d], 15075; PRC Sections 21081.6, 21092.3). Where, as here, the Lead Agency is a local agency, the NOD must also be filed with the County Recorder's Office (State CEQA Guidelines Section 15075[d]).

1.2 **BACKGROUND**

The proposed Project site is located on level terrain with a ground surface elevation of approximately 10 feet above mean sea level.

The MGP facility was constructed on the proposed Project site in 1907 and operated through the early 1940s. The facility was abandoned and removed in the early 1950s. MGP wastes and impacted soil, soil gas, and groundwater have been identified at the proposed Project site. The former MGP operation spanned two parcels divided by present-day Railroad Avenue (Figure 2). The western parcel is the proposed Project site and contained the heart of the MGP operation where oil gas was produced. The eastern parcel, which is currently an active PG&E substation and maintenance yard, was remediated between 2001 and 2002.

The former Eureka MGP used fuel oil as the feedstock for producing oil gas. The MGP produced several process residuals, including lampblack (a fine sooty material) and oil tar. Constituents of potential concern associated with these materials at the proposed Project site include benzene, toluene, ethylbenzene, and xylenes (BTEX) total petroleum hydrocarbons (TPH), and polycyclic aromatic hydrocarbons (PAHs). Metals associated with the artificial fill underlying the site are also present.

As shown on Figure 2, the proposed Project site was, until recently, occupied by two buildings: (1) Building A (the former Gas Generation Building), which was a large, barn-like structure, open on two sides, and most recently used to house machinery and supplies; and (2) Building B (the former Boiler Room, Turbine Room, and Switch House), which was an enclosed workshop with a large, roll-up door that was formerly used for equipment maintenance and repair activities. Replacement structures were constructed in 2014 on the northeastern corner of

the EFP property, and Buildings A and B were razed in May/June 2015. The concrete foundations of each building and the former gas holder remain.

Two other buildings exist adjacent to and north of the proposed Project site on the EFP property: (1) Building C, which is a small office and scale house approximately 60 feet north of the proposed Project site adjacent to the truck scales; and (2) Building D, which is a small former house used as an office located approximately 70 feet north and 110 feet west of the northeastern corner of the proposed Project site.

Figure 2 shows the land uses surrounding both the proposed Project site and the property. Land uses are generally active industrial and are zoned Coastal-Dependent Industrial (CDI), consistent with the City of Eureka General Plan and zoning ordinance (City of Eureka 1997).

Source: Basemap provided by ESRI web mapping services, Bing Maps



- Legend**
- Proposed Work Area
 - Former Eureka MGP Site
 - Parcel Boundaries

Figure 2
 Surrounding Land Use
 Initial Study for Proposed Remedial Cleanup
 Eureka Former MGP
 Railroad Avenue and 14th Street
 Eureka, California

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1.3

PROPOSED PROJECT ACTIVITIES

The proposed Project consists of the implementation of the preferred remedy selected in the draft FS/RAP, which is Adaptively Managed Combination of Focused Excavation, Stabilization/Solidification, and Offsite Disposal. This proposed Project includes the following elements:

- Mobilization and site preparation;
- Implementation of environmental controls;
- Focused excavation and ex situ S/S treatment of impacted soils above the Bay Mud;
- In situ S/S treatment of impacted soils below the Bay Mud;
- Offsite disposal of highly impacted soil that cannot be treated onsite by S/S;
- Installation of an engineered cap;
- Site restoration including placement of asphalt surface and associated storm water management system;
- Well installation;
- Implementation of land use controls; and
- Post-remediation groundwater monitoring and cap inspections.

Depending on the effectiveness of S/S at treating highly impacted soil, the amount of soil for disposal offsite may vary. Material to be removed from the site for disposal or recycling would be loaded into end-dump trucks or roll-off bins for transport. These materials could include concrete debris, wood waste, and highly impacted soil. PG&E estimates the following:

- Approximately 4,000 cubic yards of soil has chemical concentrations below soil leaching action levels that can be reused onsite without prior treatment;
- Approximately 12,000 cubic yards of soil will undergo onsite treatment;
- Up to 1,000 tons - or 650 truckloads - of wood debris could potentially be trucked away for offsite disposal;
- Up to 4,000 tons - or 180 truckloads - of impacted soil could potentially be trucked away for offsite disposal;
- Up to 1,500 tons - or 100 truckloads - of subsurface concrete could potentially be trucked away for offsite recycling;
- Up to 2,000 tons - or up to 100 truckloads - of binders would be imported for S/S application;

- Approximately 4,900 cubic yards – 410 truckloads – of clean fill would be delivered to install the engineered cap following onsite treatment;
- Approximately 3,300 cubic yards – or 330 truckloads – of aggregate base would be imported to serve as the base of the engineered cap;
- Approximately 270 truckloads of asphalt would be delivered during the 2-week restoration period following remediation; and
- Up to 2,000 tons of binders – or up to 100 truckloads – would be imported to the proposed Project site.

These estimates are comprehensive for the purpose of providing a thorough consideration of potential impacts. Likewise, it is estimated that up to 20 crew members could be onsite for the duration of the project.

The mobilization and site preparation process is anticipated to take 6 weeks. This allows adequate time to establish the site layout and fully conform to traffic ordinances when mobilizing heavy equipment on local roadways. During this period, heavy equipment to be used during the remedial action would be mobilized and staged on the proposed Project site (Figure 3). The project footprint was defined to take into account the necessary space for staging of both construction vehicles and equipment and crew vehicles. During site preparation activities, the following equipment might be onsite: two man lifts, two boom forklifts (“grade-all”), and possibly a bull dozer. Environmental controls and best management practices (BMPs), such as storm water and odor controls, would be established. Materials and equipment needed for onsite treatment would be laid out and stockpiling and staging areas would be established. Security fencing and a tensioned membrane structure (“tent”) would be erected.



Legend

- Focused Excavation Area
- Anticipated Tent Footprint Area (Single Tent Erected in Multiple Locations where Active Excavation is Occuring)
- Approximate Boundary of Vegetative Swale
- Area of Proposed Engineered Cap and Asphalt Pavement
- Parking and Staging Area
- Parcel Boundaries (Adapted from Humboldt County GIS - 6/1/2016)
- Site Boundary

Figure 3
Proposed Remedial Cleanup Staging and Layout
Eureka Former MGP
Railroad Avenue and 14th Street
Eureka, California

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Standard environmental controls would be applied as needed during implementation of remedial action activities to reduce the potential for impacts to (1) proposed Project site workers or nearby tenants and residents due to impaired air quality, hazards, noise, and traffic; and (2) the environment in general, including air quality, biological habitats, plants and animals near the proposed Project site, surface soils (i.e., prevention of erosion), surface water and groundwater quality, and cultural resources. These controls are standard for construction activities and include the following:

- Proposed Project construction and monitoring activities would generally be performed on standard work days (Monday through Friday) during daylight hours and the daily work period would be between the hours of 7:00 a.m. to 7:00 p.m., consistent with the City's noise ordinances. Construction activities outside these hours and days may be allowed with prior approval from the City. Vehicles associated with the work would be required to follow all applicable speed limits and traffic laws.
- Proposed Project construction activities would employ BMPs to (1) suppress dust arising from these activities; (2) eliminate/reduce the movement of silt or sediment from excavation areas into storm water runoff through the use of silt fences, sandbag berms, hay bales, and grading; (3) manage soil stockpiles built during construction to prevent the movement of silt into storm water runoff through diversion of drainage from the stockpile areas, placement of sandbags and silt fencing, sloping of stockpiles to encourage sheet flow, and covering of stockpiles; and (4) street sweeping would be conducted on a daily basis.
- Proposed Project construction activities would further employ track-out controls to minimize the potential for offsite transport of sediments of materials. These controls would generally consist of designated gravel/cobble-lined roadways, dry decontamination procedures to remove debris and larger particles, rumble plates for cleaning the tire treads, and final cleaning using a truck tire wash as needed.
- Standard noise suppression techniques specified in City permits would be incorporated as needed to reduce noise levels at the proposed Project site. These might include such BMPs as:
 - Scheduling the hours of remedial action in coordination with the City of Eureka;
 - Proper muffling and maintenance of equipment;
 - Prohibition of unnecessary idling of construction vehicles and equipment;
 - Implementation of engineering controls such as replacing defective equipment and tightening loose or vibrating equipment parts;

- Noise shielding of stationary equipment;
 - Locating stationary equipment away from any potential sensitive receptors;
 - Selection of quiet equipment; and/or
 - Designating a *noise disturbance coordinator* to respond to noise complaints.
- At the end of each work day, the work area would be secured to restrict access to authorized personnel only. Security monitoring by a private party may also be provided for certain work areas. Open ditches would be covered with trench plates to provide an additional measure of security and safety precaution. Mechanized construction equipment would be de-energized and secured/locked.
 - Excavations not under a tent would be covered with clean import or native material found to have concentrations below soil leaching action levels or treated and appropriate for backfill to prevent release of dust and odors. Backfilling would be completed in a manner consistent with current engineering standards and in accordance with the specifications.
 - Site controls, including fencing and exclusion zones, would be established to prevent unauthorized persons from entering areas where such entry could pose a threat to themselves or others, or where such entry could interfere with the remedial action activities.
 - Dumpsters or other closable containers would be used to contain solid waste including investigation-derived waste, soil, spent carbon, spent bag filters, and spent resin. Remedial action activities would employ BMPs to avoid releases of such materials outside the work areas, including during offsite transport. For all groundwater generated during excavation and dewatering activities, wastes would be properly profiled, manifested, and disposed of at a licensed waste disposal facility in accordance with local, state, and federal regulations, including the U.S. Environmental Protection Agency (USEPA) Off-Site Rule (Title 40, Section 300.440 of the Code of Federal Regulations [CFR]). Groundwater removed during dewatering activities would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka¹.
 - Proposed Project site and activity-specific management plans would be developed prior to proposed Project site work, as follows:

¹ Discharge from the City of Eureka Elk River WWTP to Humboldt Bay is regulated by the North Coast RWQCB under Water Board Order No. R1-2004-001 (NPDES Permit No. CA002449).

- A site-specific Health and Safety Plan (HASP) would be developed prior to any site mobilization or activity and updated as appropriate to account for any changes to the proposed Project or new conditions. Field activities would be governed by the task-specific HASPs specifying practices to be employed by workers to avoid physical and chemical exposures during cleanup activities, including air monitoring, as necessary.
- An Environmental Control and Monitoring Plan would be developed prior to work activities to outline an appropriate monitoring approach to minimize potential environmental impacts, including protecting nearby communities.
- A Storm Water Pollution Prevention Plan (SWPPP) would be developed prior to work activities that substantially affect the ground surface over a large portion of the proposed Project site.
- A Traffic Control Plan would be developed to dictate the flow of proposed Project-associated traffic and safety controls on the proposed Project site, as well as into and out of the site. In addition to controlling safe traffic on and near the proposed Project site, the routes into and out of the City of Eureka, as well as the routes to material-source and/or disposal facilities, would be stipulated in the plan. Truck haul routes would be specified to identify peak congestion areas and timeframes and sensitive resource areas including schools and hospitals. Trucks would be staged onsite to avoid the potential for backing up or associated congestion along Railroad Avenue or West 14th Street. At least two dedicated flaggers would be used as necessary to direct truck traffic entering and exiting the EFP property and the proposed Project site.
- A Waste Management Plan would be developed to guide all handling, characterizing and profiling, containerizing, and disposition (transport, disposal, or recycling, etc.) of waste generated during the proposed Project implementation.
- A Hazardous Materials Business Plan, including a proposed Project site map, would be developed prior to the introduction of hazardous materials to the proposed Project site and would describe all hazardous materials to be stored on the proposed Project site, including the location, type, quantity, and health risks of the various materials. Applicable materials expected to be on the proposed Project site include fuels, lubricants, dewatered groundwater, cement, stockpiled impacted media or product, chemicals in sampling containers or calibration chemicals, and potentially oxidative or reductive remediation chemicals.
- A Spill Response Plan would specify the engineering (e.g., secondary containment) and administrative controls (e.g., placement of spill kits, compliance audits, vehicle inspections, vehicle staging) that would be used to mitigate the risk of spills.

- A Well Installation Work Plan would include implementation details and plans for managing the waste generated by this activity.
- Although no Traditional Cultural Resources have been identified, in consultation with Wiyot tribal representatives, PG&E has agreed to perform cultural resources monitoring during earthwork as mitigation for potential impacts to unknown buried resources, where applicable (e.g. in previously undisturbed natural soils in high sensitivity areas as identified by the tribes and professional archaeologists) as determined in consultation with the tribal representatives as part of the Remedial Design and Implementation Plan. A cultural resources monitoring plan would be developed prior to earthwork.
- Environmental compliance monitoring might be implemented during specified phases of the proposed Project, including:
 - Pre-construction nesting bird survey;
 - Noise and vibration monitoring; and
 - Volatile dust and odor emissions monitoring.

Stabilization involves the addition of chemical amendments to soils to change the state of the constituents and ultimately reduce their solubility, toxicity, and mobility. It does not necessarily change the physical nature of the waste. Solidification includes encapsulation of waste using cementitious reagents to form a low-permeability matrix that restricts constituent mobility, decreases the surface area exposed to leaching and enhances physical (geotechnical) properties of the waste. The binders may include one or more of the following: (1) Type II/V Portland cement; (2) ground-granulated blast furnace slag; (3) Class N pozzolan (a non-calcined silified shale mineral); (4) rice hull silica; and/or (5) a volcanic ash-based pozzolan.

As previously stated, it is anticipated that up to 2,000 tons, or up to 100 truckloads, of binders would be imported to the proposed Project site. S/S would be implemented using one or both of the following methods: (1) in situ mixing of the binders with excavator buckets or large-diameter augers, or (2) ex situ mixing by excavating and blending the soils with the binders in a pug mill and then returning the treated soils to the excavation. Both approaches have been retained to allow for inclusion in the review of potential environmental impacts and flexibility during implementation, and the timeline for both is approximately the same. Table 1-1 shows the basic process and equipment used for these two approaches.

Table 1-1 In Situ and Ex Situ Stabilization and Solidification Techniques

	Process	Equipment
In Situ	Pre-clearing the treatment area Blending the reagents into the soil	Conventional backhoes and excavators, large-diameter auger, or functionally similar equipment attached to an excavator
Ex Situ	Excavating impacted soil Screening it to remove large debris Feeding it into a pug mill Placing the treated soils back in the excavated area	Screening bucket installed on an excavator or a functionally similar equipment/method to pre-treat the material, mobile batch plant/pug mill

Excavation and S/S treatment would occur inside a tent to control fugitive volatile organic compounds, dust, and odor. Figure 3 shows the area that will be tented during active remediation. Material that has undergone the S/S process would be sampled to confirm that performance specifications have been met. Sample specimens of S/S treated material would be collected in concrete sample cylinders. The specimens would be cured in accordance with an appropriate method guideline and tested for physical properties, including unconfined compressive strength and permeability.

In the case of ex situ S/S, highly impacted soil, such as light nonaqueous-phase liquid-saturated soil, would be segregated into separate stockpiles. The material would be characterized, evaluated, and either used in the S/S mixing process or transported offsite for disposal, as discussed below. Clean overburden, debris, and impacted soil would be placed into separate stockpiles to enable onsite reuse or treatment, or offsite recycling or disposal. All stockpiles would be built and maintained with the use of BMPs to mitigate impacts to storm water, air quality, or the media on which the stockpile is placed.

After the S/S treatment process has been completed and performance specification confirmed, an engineered cap consisting of clean fill and possibly geosynthetics would be installed over the extent of the impacted area. Cap materials would be delivered to the proposed Project site continually over the course of 1 to 2 weeks as the cap is installed. The following equipment might be onsite during the cap installation process: multiple end-dump trucks for the delivery and placement of fill, asphalt, and other materials; a bull dozer; a fine grader; and a vibratory drum compactor. Multiple construction materials have been retained for the engineered cap to allow for inclusion in the review of potential environmental impacts and flexibility during implementation, and the timeline for all is approximately the same. The engineered cap would be inspected annually, and periodic cap maintenance would be performed as needed for at least the next 30 years.

Following placement of the engineered cap, proposed Project site restoration would include placement of a base layer and an asphalt pavement layer. This is to support future use of the proposed Project site. Hot mix asphalt would be delivered to the site continually over the course of 1 to 2 weeks as the cap is installed. The following equipment might be onsite as the pavement layer is installed: multiple end-dump trucks for the delivery and placement of asphalt base and asphaltic concrete, a fine grader, a vibratory drum compactor, two hand-controlled vibratory plate compactors, and a wheeled or tracked asphalt paver.

In addition, a vegetative swale 18 feet wide would be installed along the southern and western boundary (Figure 1) for the purpose of post-remediation storm water management in accordance with City requirements. The intent of the vegetative swale would be to reduce, or slow, storm water runoff at the site, which would be increased by the planned addition of paved surface area. The vegetative swale would also allow for the capture of the “first flush” of potential contaminants, such as oil and grease, and settling of sediment, thus improving the quality of storm water runoff as well. Construction of the vegetative swale would be integrated with the installation of the engineered remedial cap and completed at the end of the project. Construction of a vegetative swale would require the following specific equipment, or similar: excavator, backhoe or bull dozer, and end-dump truck. These pieces of equipment would not necessarily need to be in addition to equipment already on site for use on other tasks.

The relatively small volume of soil excavated during construction of the vegetative swale may be reused onsite during final grading activities if sampling results are below action levels. Imported materials for construction of a vegetative swale may include the following: large rock or gravel or a clean soil fill, geotextile fabric, and seed or hydro-seeding material. If rock or soil is imported, a maximum of 150 tons – or approximately 10 truckloads – is expected. Construction of the vegetative swale would require approximately one operator and one driver for approximately 5 days of work, to complete excavation and placement of rip-rap or import soil. Up to five additional manual workers would be required for placement of textile fabrics, drainage infrastructure, or seeding/planting. These components are estimated to take 1 week.

Following completion of soil remediation, approximately eight groundwater monitoring wells would be installed to monitor the performance of the remedy. During drilling activities, the following equipment would be onsite: drill rig, support truck, decontamination trailer, well construction material, forklift, and waste storage containers. Approximately two drilling staff and one geologist would be onsite during drilling activities, which are anticipated to occur over seven working days. Following completion of drilling, the well would be developed using bailing, swabbing, and pumping. During development activities, the following equipment would be onsite: development rig,

decontamination trailer, and waste storage containers. Approximately two staff would be onsite during development activities, which are anticipated to occur over three working days.

These wells plus selected existing wells would be retained as compliance points for post-remediation groundwater monitoring. It is estimated that this will total 14 wells located around the perimeter of the proposed Project site. All wells would be monitored twice per year (post-remediation) for site-specific constituents of concern (BTEX, diesel-range TPH, motor oil-range TPH, PAHs, and metals) and selected wells may be monitored for natural attenuation parameters (nitrate, sulfate, dissolved iron, dissolved manganese, and methane). Other monitored natural attenuation parameters (dissolved oxygen and reduction-oxidation potential) may be collected as field parameters. Semiannual monitoring generally would include a crew of two in a pickup truck over the course of 1 week for each event. Additionally, the crew would inspect the cap during the second semiannual groundwater monitoring event. The semiannual groundwater monitoring events and annual cap inspection would be captured in an annual report submitted to the North Coast RWQCB. It is anticipated that this operation and maintenance activity would occur for 30 years or until the North Coast RWQCB confirms completion.

A land use covenant would be recorded against the property, owned by EFP, to restrict future site uses to commercial/industrial use, consistent with current land use and zoning. Two components of the land use covenant would be (1) an Operations and Maintenance Plan, which would require regular inspection of the engineering controls (e.g., engineered cap) and the proposed Project site to ensure compliance with the land use covenant and (2) a Soil Management Plan, which would provide standard procedures for subsurface work at the former MGP parcel that could expose future workers to impacted soils. The land use covenant would also restrict use of groundwater beneath the proposed Project site. State and Humboldt County groundwater regulations would prohibit the installation of water supply wells in impacted parts of the aquifer.

1.4

SCHEDULE

It is anticipated that the remediation program would be implemented according to the following schedule:

Task	Duration	Projected Timeframe
Mobilization and Site Preparation	Up to 6 weeks	May/June 2017
Excavation and Stockpiling	6 months	June/December 2017*

Task	Duration	Projected Timeframe
Tent Relocation		
Stabilization and Solidification		
Transportation and Offsite Disposal of Waste		
Engineered Cap Installation		
Site Restoration		
Well Installation	2 weeks	December 2017
Remedial Action Completion Report	9 months	December 2017- August 2018
Environmental Controls	1 year	October 2019
Semiannual Groundwater Monitoring and Reporting	Estimated 10 years	
Annual Cap Inspections and Reporting	Permanent (30 years)	January 2018 + estimated 30 years

*It is estimated that at least 90 percent of the waste hauling will occur prior to November 15th to avoid peak traffic periods.

1.5

LAND USE CONFORMITY

The proposed Project is located in a highly industrialized area of Eureka. The site is designated CDI (Coastal-Dependent Industrial) in the City of Eureka General Plan and zoned MC (Coastal Dependent Industrial) (City of Eureka 1997). Properties designated and zoned as coastal dependent industrial are intended for coastal-dependent and coastal-related industrial uses along Humboldt Bay (City of Eureka 2015a). Although the proposed Project is not coastal-dependent or -related, the proposed Project activities are industrial in nature and will allow the site to be used according to its zoning and land use designations in the future. Additionally, the proposed Project will protect Humboldt Bay by the excavation, S/S, and offsite disposal of materials that may be harmful to the Bay.

Properties that immediately surround the proposed Project site are also industrial in nature. The site is within the boundaries of the EFP timber product staging site, creating an immediate boundary on all sides. Immediately to the north and west of the proposed Project site in the larger property owned by EFP, but not leased to PG&E, are a log storage and wood chip handling and shipping operation currently operated by Sierra Pacific Industries. Other surrounding land uses include the Unocal Bulk Terminal Site to the north, west, and south; and an

inactive railroad alignment, Railroad Avenue, and a PG&E substation maintenance yard to the east. Similar to the proposed Project site, the adjacent Unocal Bulk Terminal site has been designated an open remediation site by the State Water Resources Control Board (SWRCB) and is currently undergoing remediation and groundwater monitoring. Other properties in close proximity to the proposed Project include the Renner Petroleum Products facility to the northeast and Simpson Timber Company to the south. As such, proposed Project activities would be consistent with the current industrial land uses in the area.

1.6 APPROVALS/PERMITS REQUIRED

The proposed Project will require the following regulatory approvals:

- Landowner approval for proposed remedial approach from EFP.
- A CDP pursuant to the California Coastal Act of 1976 from the City of Eureka Development Services Department for work within the designated Coastal Zone pursuant to the City's approved LCP.
- FS/RAP approval from the North Coast RWQCB.
- Air permits from the North Coast Unified Air Quality Management District (NCUAQMD) for the proposed tent and use of carbon filters.
- A grading/building permit for the proposed remedy implementation and use of a remediation tent from the City of Eureka Public Works Department Building Division.
- A Traffic Control Plan and Spill Response Plan.
- Storm Water Control Plan approval from the City of Eureka Public Works Department for compliance with post-construction storm water requirements based on the Humboldt County low impact development design standards.
- Monitoring well installation permits from Humboldt County Department of Health and Human Services Division of Environmental Health.
- A wastewater discharge permit from the City of Eureka Public Works Department.²

² A permit for discharge of treated groundwater to a particular outfall at the proposed Project site is currently held by PG&E (Wastewater Discharge Permit No. 124), and is valid until 5 January 2020.

EVALUATION OF ENVIRONMENTAL IMPACTS AND CITY'S MITIGATION DETERMINATION

The environmental factors checked below have the potential to be significantly adversely affected by the proposed Project. Mitigation was identified to offset each of these impacts to a less than significant level. The following section provides a more detailed checklist and discussion of each environmental resource.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Geology and Soils |
| <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Hydrology and Water Quality |
| <input type="checkbox"/> Land Use | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Noise |
| <input type="checkbox"/> Population and Housing | <input type="checkbox"/> Public Services and Recreation | <input type="checkbox"/> Transportation |
| <input type="checkbox"/> Utilities and Service Systems | <input type="checkbox"/> Mandatory Findings of Significance | |

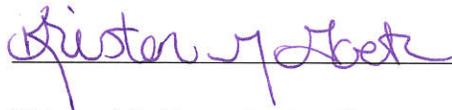
DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation

measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

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



Kristen M. Goetz, Senior Planner



Date

2.1

AESTHETICS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.1.1

Thresholds of Significance

This IS considers whether the proposed Project may have a significant effect on visual aesthetics because of: (1) the short-term or long-term presence of proposed Project-related equipment or structures; (2) proposed Project-related changes in the visual character of the proposed Project area that may be perceived by residents or visitors as a detraction from the visual character of the proposed Project area; (3) permanent changes in physical features that would result in the effective elimination of key elements of the visual character of the proposed Project area near a State scenic highway; or (4) the presence of short-term, long-term, or continuous bright light that would detract from the proposed Project area that is otherwise generally dark at night or that is subject to artificial light.

2.1.2

Discussion and Impact Evaluation

a. Would the Project have a substantial adverse effect on a scenic vista?

Level of Impact **No Impact**

The City of Eureka is located near the California coastline and various plans have called for policies to designate scenic vista points throughout the City to protect views of the coast. However, these plans have not been successful and there are currently no designated scenic vistas located in Eureka (City of Eureka 2015a). As such, there would be no impact to scenic vistas.

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

Level of Impact **No Impact**

The proposed Project site and surrounding areas have been highly disturbed by human activity and minimal representation of native habitats or landscapes exist in the vicinity of the site. There are no trees or outcroppings at the proposed site. U.S. Route 101 (US 101), located less than 0.5 mile from the proposed Project site, is not an officially designated state scenic highway, although it is considered eligible (California Scenic Highway Mapping System 2011). The proposed Project is not visible from the highway. Project vehicles may travel along US 101 during construction and operation; however, moderate to heavy traffic is typical on US 101 and neither the highway nor views from the highway would be adversely impacted by proposed Project activities.

No resources eligible for listing on the California Register of Historic Resources (CRHR) or National Register of Historic Places (NRHP) (PG&E 2011) or listing as a scenic resource in the Eureka General Plan occur at the proposed Project site. Two historic buildings formerly at the proposed Project site—the steam electric plant and the MGP—have been dismantled and removed, leaving only the foundations on the proposed Project site. No other scenic resources exist in the vicinity of the proposed Project site. Therefore, there would be no impact.

-
- c. Would the Project substantially degrade the existing visual character or quality of the site and its surroundings?

Level of Impact **No Impact**

The proposed Project is surrounded by other industrial properties to the north, east, west, and south that are similar in visual character. Humboldt Bay is a natural resource located west of the proposed Project site and contributes to the visual form and character of the city; however, the Bay is not designated as a scenic resource in the Eureka General Plan Community Background Report (City of Eureka 2015a), and there would be no direct effects on the Bay from the proposed Project. The stretch of land east of Humboldt Bay that encompasses the proposed Project site is reserved specifically for industrial land uses intended to grow the fishing and shipping industries in the city. As such, the proposed Project would align with the current visual character of the site and its surroundings, and there would be no impact.

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

Level of Impact **Less than Significant**

The operation of construction vehicles and equipment may cause an additional source of light; however, use of the remediation tent would preclude most sources of light from shedding off of the property. Any additional light or glare during construction would occur on a short term, temporary basis between the hours of 7:00 am to 7:00 p.m. The nearest residential properties to the site are about 0.38 mile to the southeast (Google Earth Pro 2016); the properties immediately surrounding the proposed Project site are zoned for industrial purposes, and any additional light or glare from proposed Project activities would be similar in nature to the light and glare at surrounding properties. Additional light from operation and maintenance activities such as groundwater monitoring and reporting and annual cap inspections and reporting would occur on a semiannual or annual basis and would have a negligible impact on current light in the area. Therefore, the light and glare from proposed Project activities would have a less than significant adverse impact on daytime and nighttime views in the area.

AGRICULTURE AND FORESTRY RESOURCES

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.2.1

Thresholds of Significance

This IS considers to what degree the proposed Project would: (1) change the availability or use of agriculturally important land areas designated under one or more of the programs above; (2) cause or promote changes in land use regulation that would adversely affect agricultural activities in lands zoned for those uses, particularly lands designated as Agriculture Exclusive or under Williamson Act contracts; or (3) change the availability or use of agriculturally important land areas for agricultural purposes.

- a.-b. Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown in maps prepared pursuant to Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?

Level of Impact	No Impact
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None of the approximately 564 acres of agricultural land distributed throughout the City of Eureka are in the vicinity of the proposed Project site; most are concentrated primarily in the northeastern and southern areas of the city. According to the Eureka General Plan Community Background Report, the proposed Project site is located on land zoned for industrial purposes and is not within an area protected by a Williamson Act contract (City of Eureka 2014). The proposed Project is not located in the vicinity of any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown in maps prepared pursuant to the California Resources Agency Farmland Mapping and Monitoring Program and would not convert or disturb such areas. As such, there would be no impact.

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

Level of Impact	No Impact
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The proposed Project site is zoned as MC and is not located within a Timber Production Zone (City of Eureka 2015a). Project activities would align with such land uses and would occur within the boundaries of the proposed Project site. Excavated impacted soils would be transported along paved city roads and highways and disposed of at permitted hazardous waste disposal facilities, so as to not impact surrounding land uses or resources. Since the proposed Project does not impact or result in the rezoning of forest land or timberland zoned for production, the Project would not result in a change or loss of these public resources.

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

Level of Impact **No Impact**

As previously discussed, the proposed Project site is located in an industrial zone and is outside all areas designated for farmland and agricultural purposes by the City of Eureka. The proposed Project site currently has chemical impacts, and the proposed Project would involve remediation of the existing site. While proposed Project activities require the transport of impacted soils, these activities would occur along paved city roads and highways and would not impact surrounding resources. The agriculture and forest resources nearest the proposed Project site are located approximately 3.5 miles to the south, along Herrick Avenue, and would not be directly or indirectly impacted by the nature or location of the proposed Project (Google Earth Pro 2016).

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable Air Quality Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is classified as non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.3.1

Thresholds of Significance

This IS considers to what degree the proposed Project would (1) directly interfere with the attainment of long-term air quality objectives identified by the NCUAQMD; (2) contribute pollutants that would violate an existing air quality standard, or contribute to a non-attainment of air quality objectives in the proposed Project’s air basin; (3) produce pollutants that would contribute as part of a cumulative effect to non-attainment for any priority pollutant; (4) produce pollutant loading near identified sensitive receptors that would cause locally significant air quality impacts; or (5) release odors that would affect a number of receptors.

The City is located within the North Coast Air Basin (NCAB) under the regulation of the NCUAQMD. A large portion of the NCAB, including the proposed Project area, is classified as non-attainment for the State 24-hour PM₁₀ standard by the California Air Resources Board (CARB). The rest of the regulated pollutants are classified as “attainment” or “unclassified” (NCUAQMD 2016).

The thresholds of significance used by the NCUAQMD for CEQA review are given in terms of emissions, as follows:

- Carbon monoxide (CO) – 100 tons per year; 500 pounds per day;
- Oxides of nitrogen (NO_x) and reactive organic gases (ROG) – 40 tons per year; 50 pounds per day;
- Inhalable particulate matter (PM₁₀) – 15 tons per year; 80 pounds per day; and
- Fine Particulate Matter (PM_{2.5}) – 10 tons per year; 50 pounds per day.

Emissions from the proposed Project that would exceed these levels would be considered significant.

2.3.2

Discussion and Impacts Evaluation

- a. Would the Project conflict with or obstruct implementation of the applicable Air Quality Plan?

Level of Impact Less than Significant

The NCUAQMD area is classified as “nonattainment” for the State PM₁₀ 24-hour standard. A nonattainment plan was therefore established in 1995 to address these issues and to identify cost-effective control measures to bring down ambient PM₁₀ levels that will meet California Ambient Air Quality Standards. In Eureka, primary sources of PM₁₀ are on-road vehicles (engine exhaust and dust from paved and unpaved roads), open burning of vegetation (both residential and commercial), residential wood stoves, and stationary industrial sources (factories) (NCUAQMD 2016).

According to the methodology described below under Item (b.), estimated proposed Project PM₁₀ emissions would be well below the NCUAQMD CEQA thresholds on both a daily and annual basis. Pollutant levels for the other criteria pollutants are also below these thresholds. In addition, proposed Project activities generating pollutant emissions would only take place for approximately 24 weeks. Thus, the proposed Project would not conflict with or obstruct implementation of an applicable Air Quality Plan.

- b. Would the Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Level of Impact Less Than Significant

Proposed Project activities that would generate air pollutant emissions include heavy construction equipment use and haul truck travel, plus the ROG emissions from disturbed soil during remediation activities. Table 2-1 below summarizes estimated proposed Project emissions. Construction emission factors from off-

road heavy equipment were estimated by using the CARB OFFROAD emissions estimation program (included as Appendix A, along with default load factors that are presented in CalEEMod program documentation). On-road vehicle emission factors were obtained from EMFAC2011, a CARB web-based program designed to assess emissions from on-road vehicles. The year 2016 was selected for both the OFFROAD and EMFAC models. Inputs for both off-road and on-road vehicles such as miles traveled and number of round trips were based on the description of the proposed Project. On-road vehicles traveling onsite (e.g., pickup trucks and mechanic trucks) were assumed to travel at 10 miles per hour. As shown on Table 2-1, the calculations showed emissions well below the NCUAQMD CEQA Thresholds. Because of this, impacts are considered less than significant. Emissions of ROG from soil remediation would be negligible (less than 0.02 pound per day), due to the control from the carbon adsorption units. Emissions of PM₁₀ and PM_{2.5} from soil remediation would be negligible since soil remediation activities will occur under total enclosure (i.e., “tented”) with frequent water misting and the use of foams or thick fibrous cover (e.g., ConCover, HydroSeal, etc.) as needed to further suppress dust and vapors. Therefore, ROG, PM₁₀, and PM_{2.5} emissions from soil remediation are not included in Table 2-1.

Table 2-1 *Air Pollutant Emissions for Heavy Construction Equipment Use and Haul Truck Travel*

	Subtotal, Heavy Construction Equipment Use	Subtotal, Haul Vehicles	TOTAL Emissions	NCUAQMD CEQA Thresholds
CO (tons)	0.87	0.27	1.14	100
CO (lb/day)	14.51	4.47	18.97	500
NOx (tons)	1.21	0.41	1.62	40
NOx (lb/day)	20.18	6.80	26.97	50
PM ₁₀ (tons)	0.08	0.06	0.14	15
PM ₁₀ (lb/day)	1.31	0.94	2.26	80
PM _{2.5} (tons)	0.07	0.03	0.10	10
PM _{2.5} (lb/day)	1.22	0.51	1.73	50
ROG (tons)	0.12	0.05	0.18	40
ROG (lb/day)	2.06	0.88	2.95	50
CO ₂ (tons)	134.05	605.69	799.74	N/A

	Subtotal, Heavy Construction Equipment Use	Subtotal, Haul Vehicles	TOTAL Emissions	NCUAQMD CEQA Thresholds
CO ₂ (lb/day)	2,234.19	11,094.76	13,328.95	N/A

lb/day = pounds per day

-
- c. Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?

Level of Impact Less Than Significant

A project's contribution to a cumulative air quality impact would be considerable if the incremental increase in emissions from the project exceeds significance thresholds. As shown above in Table 2-1, the proposed Project's pollutant emissions would be below the significance thresholds. Thus the contribution is not considerable, and the impact would be less than significant.

-
- d. Would the Project expose sensitive receptors to substantial pollutant concentrations?

Level of Impact Less Than Significant

Sensitive receptors, as defined by the USEPA, "include, but are not limited to, hospitals, schools, daycare facilities, elderly housing and convalescent facilities. These are areas where the occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants" (USEPA 2016). Residential locations would also be considered "sensitive receptors." There are no known sensitive receptors around the construction area. The closest school is approximately 0.75 mile away and the closest residence is 0.38 mile away. Furthermore, any such pollutant emissions would be below significance thresholds. Thus, the impacts would be less than significant.

-
- e. Would the Project create objectionable odors affecting a substantial number of people?

Level of Impact Less Than Significant

The air emissions from this proposed Project are capable of producing a noticeable odor. In particular, naphthalene is one of the prevalent contaminants to be remediated. Naphthalene has a strong, mothball-like odor. OEHHA (2000)

cites a low odor threshold of 40 parts per billion. PG&E proposes to erect a remediation tent over ongoing cleanup efforts to contain these odors, venting them through a carbon control system, resulting in negligible naphthalene emissions. Thus, the impact would be less than significant.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.4.1

Thresholds of Significance

This IS considers whether the proposed Project would result in a significant adverse direct or indirect effects to: (1) individuals of any plant or animal species (including fish) listed as rare, threatened, or endangered by the federal or state government, or effects to the habitat of such species; (2) more than an incidental and minor area of riparian habitat or other sensitive habitat (including wetlands) types identified under Federal, State, or local policies; (3) more than an incidental

and minor area of wetland identified under Federal or State criteria; 4) key habitat areas that provide for continuity of movement for resident or migratory fish or wildlife, or (5) other biological resources identified in planning policies adopted by the City of Eureka.

2.4.2

Discussion and Impacts Evaluation

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

Level of Impact	Less Than Significant with Mitigation Incorporated
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Candidate, sensitive, or special-status species are commonly characterized as species that are at potential risk or actual risk to their persistence in a given area or across their native habitat. These species have been identified and assigned a status ranking by governmental agencies such as the California Department of Fish and Wildlife (CDFW), the U.S. Fish and Wildlife Service (USFWS), and private organizations such as the California Native Plant Society (CNPS). The degree to which a species is at risk of extinction is the determining factor in the assignment of a status ranking. Some common threats to a species' or population's persistence include habitat loss, degradation, and fragmentation, as well as human conflict and intrusion. For the purposes of this biological review, special-status species are defined by the following codes:

1. Listed, proposed, or candidates for listing under the federal Endangered Species Act (50 CFR 17.11 - listed; 61 Federal Register [FR] 7591, February 28, 1996, candidates);
2. Listed or proposed for listing under the California Endangered Species Act (Fish and Game Code [FGC] 1992 Section 2050 et seq.; 14 California Code of Regulations [CCR] Sections 670.1 et seq.);
3. Designated as Species of Special Concern by the CDFW;
4. Designated as Fully Protected by the CDFW (FGC Sections 3511, 4700, 5050, 5515); and
5. Species that meet the definition of rare or endangered under CEQA (14 CCR Section 15380) including CNPS List Rank 1B and 2

A biologist evaluated the proposed Project site for potential to support special-status species and their habitats. The evaluation included a review of aerial imagery and previous site surveys, which included a nesting bird survey in May 2015 and a bird and bat survey completed in April 2011, as well as a thorough

query of available data and literature from local, state, federal, and nongovernmental agencies.

Database searches were performed on the following websites:

- USFWS’s Information, Planning and Conservation (IPaC) System (2016a);
- USFWS’s Critical Habitat Mapper (2016b);
- CDFW’s California Natural Diversity Database (CNDDDB) (2016); and
- CNPS Inventory of Rare, Threatened, and Endangered Plants of California (2016).

Searches of the USFWS IPaC System and Critical Habitat Mapper database were performed for the proposed Project site to identify federally protected species and their habitats that may be affected by the proposed Project. In addition, a query of the CNDDDB was conducted to identify mapped and unprocessed occurrences for special-status species within a 10-mile radius around the proposed Project site. Figure 4 shows these findings within a more focused 1-mile radius. Finally, the CNPS database was queried to identify special-status plant species with the potential to occur in the Eureka, California, U.S. Geological Survey 7.5-minute quadrangle. Raw data from these database queries can be found in Appendix B.

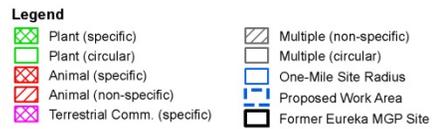
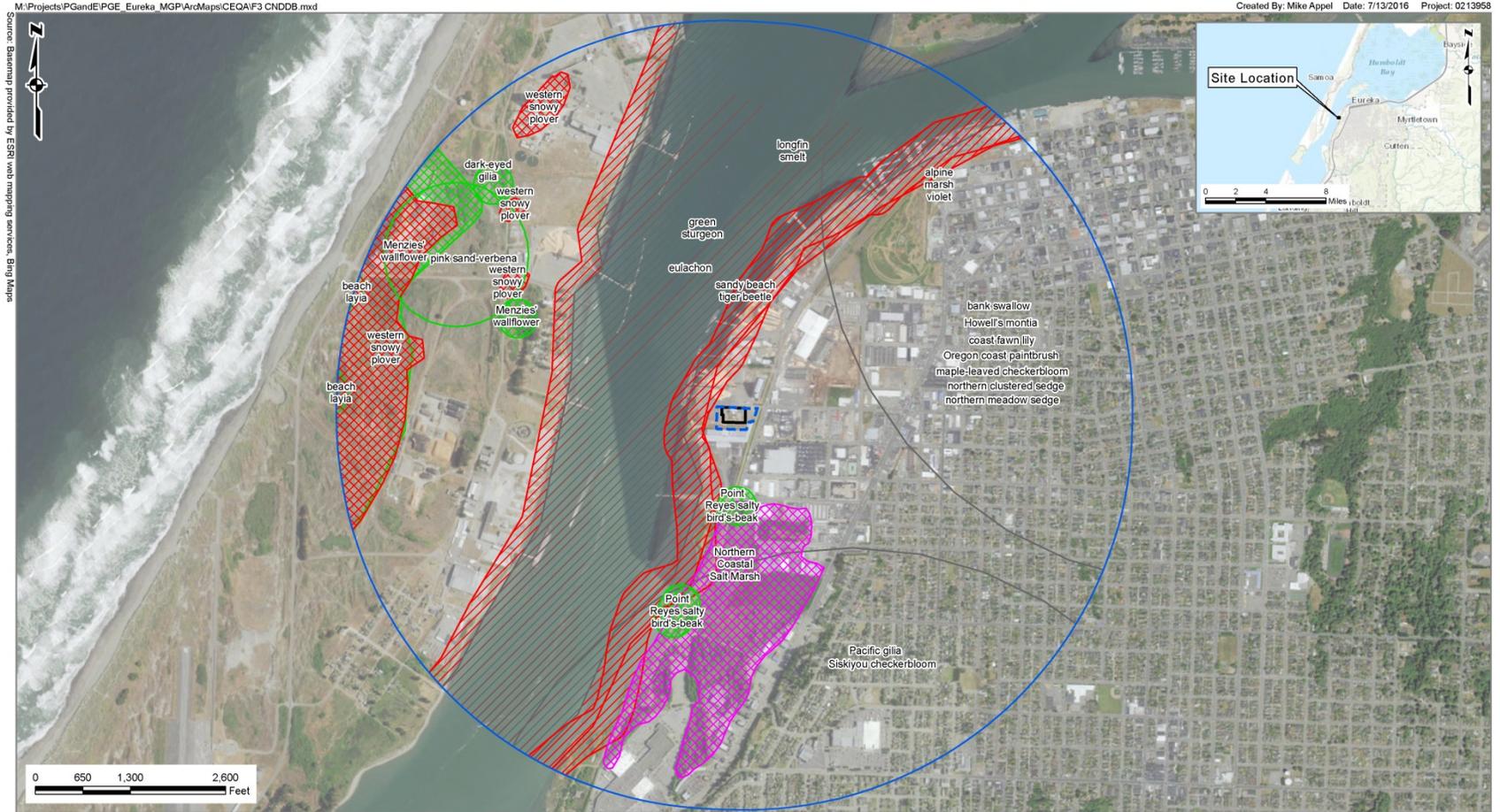


Figure 4
 CNDDB Hits within One Mile
 Initial Study for Proposed Remedial Cleanup
 Eureka Former MGP
 Railroad Avenue and 14th Street
 Eureka, California

Environmental Resources Management
 www.erm.com

A query of the USFWS, CNPS, and CNDDDB databases revealed several special-status species with the potential to occur in the proposed Project vicinity. Table B, provided in Appendix C, summarizes each species identified in the database results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to occur on the proposed Project site.

The entire proposed Project site has been previously degraded by human disturbance. No natural communities are present onsite. The proposed Project site is characterized by a mix of hardscape, bare ground, and ruderal, herbaceous vegetation.

The urban surroundings and highly disturbed nature of the proposed Project site preclude the presence of special-status species. However, habitats on and adjacent to the proposed Project site may provide suitable nesting habitat for birds protected under the Migratory Bird Treaty Act and Section 3503.5 of the California FGC that were not identified in Appendix C. Although trees and shrubs are absent from the proposed Project site, ground nesting birds could still utilize the onsite herbaceous vegetation or trees and shrubs adjacent to the proposed Project site. The removal of vegetation during construction activities could result in noise, dust, human disturbance, and other direct/indirect impacts to nesting birds on or in the vicinity of the proposed Project site. Potential nest abandonment and mortality to eggs, chicks, or individuals would be considered potentially significant impacts if clearing and construction activities would occur during migratory bird nesting season (February 15-August 31). Incorporation of the following mitigation measure would ensure that potential impacts to these species are less than significant with mitigation incorporated.

If clearing and construction activities would occur during migratory bird nesting season, preconstruction surveys for active migratory bird nests would be conducted by a qualified biologist within 14 days of construction initiation. Focused surveys must be performed by a qualified biologist for the purposes of determining the presence/absence of active nest sites within and surrounding the proposed area of impact (if feasible).

If active nest sites are identified within the vicinity of proposed Project activities, PG&E shall establish an exclusion zone (no ingress of personnel or equipment within that area). Alternative exclusion zones may be established by the qualified biologist, as necessary. The exclusion zones shall remain in force until all young have fledged or the nest is deemed inactive by the qualified biologist. Implementation of these mitigation measures would ensure that impacts to protected species are less than significant.

If construction activities or vegetation removal are proposed to occur during the non-breeding season (September 1–February 14), the impact is considered less than significant and a survey is not required. No further studies are necessary and no mitigation is required.

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

Level of Impact No Impact

Sensitive habitats include (1) areas of special concern to resource agencies; (2) areas protected under CEQA; (3) areas designated as sensitive natural communities by the CDFW; (4) areas outlined in FGC Section 1600; (5) areas regulated under Section 404 of the federal Clean Water Act (CWA); and (6) areas protected under local regulations and policies. There are no sensitive habitats within the proposed Project area. Project-related activities are not anticipated to adversely affect riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or by the CDFW or the USFWS.

- c. Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Level of Impact No Impact

No federally protected wetlands or other Waters of the United States occur on or adjacent to the proposed Project site. There would be no impact to federally protected waters as a result of proposed Project-related activities.

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

Level of Impact No Impact

Wildlife corridors refer to established migration routes commonly used by resident and migratory species for passage from one geographic location to another. Movement corridors may provide favorable locations for wildlife to

travel between different habitat areas, such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors, allowing animals to move between various locations within their range.

Implementation of the proposed Project would not interfere substantially with the movement of native resident or migratory fish or wildlife species. The proposed Project site provides very limited opportunities for wildlife movement. Aquatic species utilize nearby Humboldt Bay for movement; however, the Bay is several hundred feet from the proposed Project site and would not be impacted by proposed Project-related activities. Due to the urbanized nature of the proposed Project vicinity, it is unlikely that any significant terrestrial wildlife corridors exist in the Project area. Therefore, no impact would occur.

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

Level of Impact **No Impact**

The City of Eureka General Plan includes goals and policies relating to the protection of natural resources. The proposed Project would not conflict with any local policies or ordinances protecting biological resources, including policies outlined in the General Plan. No impact would occur.

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

Level of Impact **No Impact**

Currently, no adopted or proposed habitat conservation plans, natural community conservation plans, or other approved local, regional, or state habitat conservation plans overlap with the Project site. No impact would occur.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Cause a substantial adverse change in the significance of a tribal cultural resource, as defined in Public Resources Code (PRC) Section 21074 (and included herein)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.5.1

Thresholds of Significance

This IS considers to what degree the proposed Project would cause (1) physical changes in known or designated historical resources, or in their physical surroundings, in a manner that would impair their significance; (2) physical changes in archaeological sites that represent important or unique archaeological or historical information; (3) unique paleontological resource site or unique geologic feature; (4) disturbance of human burial locations; or (5) change to a resource or practice deemed significant by a Native American Tribe.

2.5.2

Discussion and Impacts Evaluation

a.-b. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Level of Impact Less than Significant

PG&E reviewed the proposed Project site characteristics for historical and archaeological resources in two phases. In June 2011, PG&E performed a historical inventory and evaluation for the former Eureka MGP and steam electric plant. The study included archival research and field survey of all unpaved areas to identify any historical or archaeological resources known to exist at the proposed Project site. In January 2013, PG&E also performed a records search for archaeological information at the Northwest Information Center of the California Historical Resources Information System. Additional sources and repositories consulted included:

- PG&E Records Center, San Bruno, California;
- PG&E Archives, San Francisco, California; and
- Files and literature maintained by the PG&E Environmental Remediation Department and PG&E Cultural Resources group.

The records search revealed that no cultural resources have been recorded within the proposed Project area. Two cultural resources have been previously recorded within 0.25 miles of the proposed Project area. These consist of a buried historic trash deposit dating to the late 19th and early 20th centuries, and a shell midden whose location is based on early 20th century ethnographic records. The records search also identified that five previous studies have been conducted adjacent to or within 0.25 mile of the proposed Project area. None of those studies identified cultural resources within or adjacent to the proposed Project site. Several of the studies included subsurface investigations in the vicinity of the reported prehistoric site and did not identify any evidence of the site in the reported location.

Results of the historical inventory and evaluation also did not identify any archaeological resources and showed that only two historical structures remained until recently onsite – the main Gas House and the Turbine Room and Transformer/Switch Room of the electric plant. These structures were evaluated using criteria (A – D) in Section 5024.1 of the California Resources Code in accordance with Section 15064.5 (a) of CEQA (PG&E 2011). Neither facility met the four criteria for evaluation for the following reasons:

- During the time of plant operations there were several other power sources available in California and did not contribute significantly to California’s history and cultural heritage;
- The structures had no direct association with prominent members of the community or members of local lumber and electric companies;
- The structures were not unique in style or construction; and
- The structures are not likely to yield information important to prehistory or history given that most of the original facilities have been removed and the remaining structures are in poor condition (PG&E 2011).

As such, the historical structures do not qualify as eligible for listing on the NHRP or the CRHR and are not historical resources. Since this evaluation, these structures were removed from the site in May/June 2015. No known historic resources remain.

Additionally, no archaeological resources have been identified on the proposed Project site. The proposed Project site was first developed in the first decade of the 20th century and has been greatly affected by the development and operation of the former MGP and steam generating plant (PG&E 2011). While this does not preclude the existence of unknown prehistoric sites, much of the subsurface environment has already been disturbed, thus diminishing the probability of encountering significant intact prehistoric archaeological resources. An examination of Sanborn maps prior to 1920 show the proposed Project site as undeveloped, suggesting that the plant represents the first construction on the proposed Project site, thus negating the potential for historic archaeological sites not associated with the plant. Historic archaeological components of the former MGP and steam generating plant, such as pipes, foundations, and other features, could be encountered during remediation activities, given the lack of integrity of the remaining structures and their ineligibility for NRHP or CRHR, it is unlikely that any historic archaeological components, if present, would meet the significance criteria for eligibility on their own.

While there are no known resources, ground disturbing activities including excavation and well installation could affect unknown buried archaeological resources. If any new archaeological resources are identified during remediation activities, the following actions would be taken:

- All construction activity within a minimum of 50 feet of the find/feature/site would cease immediately.
- All remains or materials are to be left in place unless in jeopardy because of proposed Project activities.
- The area would be secured to prevent any damage or loss of removable objects. If feasible, a fence or other barrier would be erected to demarcate and protect the find.
- A qualified archaeologist would be notified and would visit the discovery site as soon as practicable for identification and evaluation pursuant to PRC Section 21083.2 and 14 CCR Section 15126.4.
- The archeologist would record the find location and delineate the extent of the find relative to planned proposed Project activities. The archeologist would assess, record, and photograph the find. If the archaeologist determines the artifact is not significant, construction may resume. If the archaeologist determines the artifact is significant, the archaeologist would determine if the artifact can be avoided and, if so, would detail avoidance procedures.

- Within 48 hours of the find, the archeologist would develop an Action Plan that would include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC Section 21083.2 and 14 CCR Section 15126.4.
- Also within 48 hours of the find, the archaeologist would notify the appropriate agency officials. If cultural resources or remains have the potential to be culturally significant to a living Native American Tribe, agency officials would notify the California Native American Heritage Commission.
- The archeologist would make a recommendation on the NRHP eligibility of the resources and the effect of proposed Project activity on historic properties, if present. A proposed treatment would be developed, in consultation with the appropriate agency officials and consulting parties, to resolve adverse effects, if applicable.
- Following execution of the prescribed mitigations, construction would be allowed to continue within the affected area.

Given the history of the site and the implementation of these actions if archeological resources were identified during the remedial efforts, impacts to archaeological resources as defined in CEQA Section 15064.5 and PRC Section 21083.2 would be less than significant.

c. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Level of Impact Less than Significant

As discussed above, the proposed Project site has been greatly affected by the development and operation of the former MGP and steam generating plant (PG&E 2011). As such, unique paleontological and geologic features are not likely to exist onsite, and those that may be present are likely to occur at deeper depths within the soil. While unlikely, if any potentially significant paleontological or geologic resources are identified onsite during remediation activities, all work would stop immediately within 50 feet of the resource until a qualified paleontologist assesses the significance of the find. The proposed Project applicant would also conform to all relevant policies set forth by the State of California and City of Eureka to protect such resources. Given the history of the site and the implementation of these measures, impacts to potential paleontological and geologic resources would be less than significant.

-
- d. Would the Project disturb any human remains, including those interred outside of dedicated cemeteries?

Level of Impact **Less than Significant**

As previously discussed, the proposed Project site has been greatly affected by the development and operation of the former MGP and steam generating plant and any human remains that might have been present onsite in the past are most likely no longer present (PG&E 2011). Additionally, no human remains are known to occur in the vicinity of the proposed Project site. The nearest dedicated cemetery to the proposed Project site is Sunset Memorial Park, located more than 2.5 miles south (Google Earth Pro 2016). All proposed Project activities would occur within proposed Project site boundaries and transport of construction vehicles would occur on paved city roads and highways so as not to disturb any offsite historic or cultural remains. In the event that human remains are found onsite or in the vicinity of proposed Project activities, all work would stop immediately within 50 feet of the remains and the County Coroner would be notified to examine the discovery and determine its origin. The proposed Project applicant would comply with all relevant State and City policies and procedures prescribed under CEQA Guidelines, CCR Section 15064.5(e), and Health and Safety Code Section 7050.5 would be implemented. Given the history of the proposed Project site and the implementation of these measures, proposed Project activities are not expected to disturb any human remains and impacts to any such resources would be less than significant.

-
- e. 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:
- 1) 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, that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k), or
 - 2) A resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code Section 5024.1(c), and considering the significance of the resource to a California Native American Tribe.

Level of Impact **Less than Significant**

The Project site has been used for industrial purposes since its development in 1907 and has been designated and zoned for CDI purposes by the City of Eureka.

As such, much of the surface and subsurface environment has been disturbed by former operations at the Eureka MGP and steam generating plant, thereby diminishing the probability of encountering significant historical or tribal resources as defined in PRC Sections 5024.1 (c) and 5020.1 (k). Based on these factors, the proposed Project would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.

Tribal consultation with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and Blue Lake Rancheria has been ongoing since January 2013. Although no Traditional Cultural Resources have been identified, tribal representatives have noted that there are a number of mapped but unconfirmed Wiyot settlements in the vicinity and that the area is generally sensitive for Wiyot sites based on testimony provided by Wiyot informants to early ethnographers of the area. Implementation of the unanticipated discovery measures outlined in Items (a.) and (b.) address the potential discovery of previously unknown resources within the Project area. In addition, PG&E has agreed to perform cultural resources monitoring during earthwork as mitigation for potential impacts to unknown buried resources, where applicable (e.g., in previously undisturbed natural soils in high sensitivity areas as identified by the tribes and professional archaeologists) as determined in consultation with the tribal representatives as part of the Remedial Design and Implementation Plan.

If significant tribal cultural resources are identified onsite, all work would stop immediately within 50 feet of the resource(s) and the Project applicant would comply with all relevant State and City policies and procedures prescribed under PRC Section 21074. Given the history of the proposed Project site and the implementation of these measures, proposed Project activities are not expected to disturb any significant tribal cultural resources and impacts to any such resources would be less than significant.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.6.1

Thresholds of Significance

This IS considers proposed Project-related effects that could involve or result from: (1) damage to proposed Project elements as a direct result of fault movement along a fault identified in the Alquist-Priolo study or other known fault; (2) damage to proposed Project elements as a direct or indirect effect of seismically-derived ground movement; (3) damage to proposed Project elements because of landslides that are not seismically related; (4) proposed Project-derived erosion by water or wind of more than a minimal volume of earth materials; (5) proposed Project-derived or Project-caused secondary instability of earth materials that could subsequently fail, damaging project elements or other

sites or structures; or (6) location of proposed Project elements on expansive soils that are identified by professional geologists, which could result in damage to proposed Project elements or other sites or structures.

2.6.2

Discussion and Impacts Evaluation

a. Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- 1) 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?

Level of Impact Less than Significant

The proposed Project site is not located directly in a fault zone. No active faults traverse the proposed Project site or the City of Eureka; however, the northwest-trending Little Salmon and Yager Faults are located south of the proposed Project site in Fields Landing, and a number of active faults are known to exist in the immediate vicinity of the proposed Project site (California Division of Mines and Geology 1982). Little Salmon Fault, located within 1 mile of the City of Eureka, is the fault nearest the proposed Project site (City of Eureka 2014).

The City of Eureka is positioned near the Gorda, Pacific, and North American crustal plates, and each of these major plates is currently active (City of Eureka 2014). Eureka is also within 35 miles of the southern end of the Cascadia Subduction Zone, an approximately 622-mile fault, landward-dipping that extends from Cape Mendocino, California, to Northern Vancouver Island and has the potential to produce earthquakes of magnitude 9.0 or greater (Pacific Northwestern Seismic Network [PNSN] 2016). The last earthquake associated with the Cascadia Subduction Zone occurred in 1700 and the fault has an approximate return interval of 400 to 600 years (PNSN 2016).

While the proposed Project is located in an area likely to experience strong shaking, because of the nature of the proposed remedial activities, no new structures or operations are proposed. As such, impacts associated with the rupture of a known earthquake fault would be less than significant.

a. Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- 2) Strong seismic ground shaking?
 - 3) Seismic-related ground failure, including liquefaction?
-

Level of Impact Less than Significant

As discussed in Item (a.), the proposed Project is located in a region that is seismically active. The California Department of Conservation (CDC) California Geological Survey (CGS) has noted that Eureka is likely to experience strong and frequent ground shaking that has the potential to damage even strong, modern buildings (CDC CGS 2003). However, land uses would not be changed under the proposed Project and proposed Project activities would not involve the construction of new aboveground structures or buildings.

Intense ground shaking from seismic activity in the region has the potential to result in ground failure and liquefaction, which are more likely to occur on soils composed of backfilled materials (City of Eureka 2014). The proposed Project site is situated on artificial soil created by infilling of tidal marshes. This artificial soil is composed of wood timbers, soil, gravel, cobbles, brick and other debris. As such, there is a potential that ground failure and liquefaction at the proposed Project site would occur. The proposed Project site would be restored through the placement of an engineered cap, consisting of clean fill and possibly geosynthetics, over the extent of impacted areas. As a component of the Operations and Maintenance Plan prepared to support the land use covenant for the property, the engineered cap would be inspected annually to confirm cap integrity. Inspection results would be captured in an annual report submitted to the North Coast RWQCB for approval. The proposed Project site restoration would follow procedures set forth in the excavation and grading plans in the final Remedial Design and Implementation Plan (RDIP). Environmental and engineering controls outlined in the Final RDIP would reduce the potential impacts of seismic ground shaking, ground failure, and liquefaction in excavated areas. As such, potential impacts would be less than significant.

a. Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

4) Landslides?

Level of Impact No Impact

Eureka is characterized by a largely flat topography and is generally not located in close proximity to hillsides or other steep slopes (City of Eureka 2014). According to the CDC, Eureka has a *Very Low Landslide Potential*; this category for landslide potential is reserved for those areas where landslides and slope instability are very low to non-existent due to the fact that the geology, slope inclination and landform are generally not conducive to mass wasting in such areas (CDC CGS 2005). No land use changes are proposed under remediation activities that would result in increased risks from landslides. As such, the Project would result in No Impact.

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

Level of Impact Less than Significant

Project activities would involve well installation, vegetated swale installation, focused excavation, S/S, and the removal of impacted soil, wood debris, and subsurface concrete from the proposed Project site. S/S would be implemented using one or more of the following methods: (1) in situ mixing of the binders with excavator buckets or large-diameter augers, or (2) ex situ mixing by excavating and blending the soils with the binders in a pug mill and then returning the treated soils to the excavation. These proposed Project activities have the potential to impact soil conditions. However, an engineered cap would be installed over the treated soils. The engineered cap would be covered by asphalt pavement layer. The asphalt pavement layer would be constructed to provide adequate drainage for storm water and would be designed to reduce potential for erosion from environmental factors such as wind and rain. The integrity of the engineered cap would be inspected annually under North Coast RWQCB oversight. Well and vegetated swale installation and other focused excavation would be performed using procedures outlined in the Well Installation Work Plan and/or SWPPP, which would reduce potential erosional impacts associated with these activities. Therefore, impacts associated with soil erosion and loss of topsoil would be less than significant.

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

Level of Impact Less than Significant

As discussed in Item (a.), the proposed Project site is in an area likely to experience intense ground shaking from seismic activity (California Division of Mines and Geology 1982). The soils onsite are also fill, containing wood timbers, soil, gravel, cobbles, brick, and other debris, and are potentially susceptible to liquefaction and groundbreaking. However, the proposed Project site topography is relatively flat and landslide potential is low to non-existent (CDC CGS 2005).

Excavations associated with the proposed Project would be implemented in a manner that protects the stability of adjacent soils. Environmental and engineering controls outlined in the Excavation Plan would reduce the potential impacts of landslides, lateral spreading, subsistence, liquefaction, and collapse. Excavations would involve sidewall sloping and shoring, and would be performed to reduce the risks associated with cave-ins. Engineering and environmental controls would be implemented prior to proposed Project

activities, and the site would be restored through the installation of an engineered cap and asphalt pavement layer after excavations. As such, the proposed Project site would likely be more stable than original conditions after proposed Project activities are complete and impacts from landslide lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

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

Level of Impact No Impact

Expansive conditions are typically associated with clayey soils, which shrink or swell based on changes in moisture content. While clays are present in the subsurface beneath the proposed Project site, those clay intervals (Bay Mud) are continuously saturated by groundwater and are therefore unlikely to expand. After excavation and S/S, these areas would be backfilled with native material that has been stabilized with binders as described in Section 1.3. The native material will be screened and debris removed prior to mixing with binders.

Clean imported fill and potentially a geotextile will be used for the engineered cap. As stated in Section 1.3, one requirement of the backfill material is that it be non-expansive. These areas would be further restored with asphalt surface. As such, the engineering controls would not create expansive soil conditions in areas where excavation and S/S activities occurred and the Project would result in No Impact.

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

Level of Impact No Impact

No septic tanks or alternative wastewater disposal systems are included under proposed Project activities. Groundwater removed during dewatering activities would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka. As such, the proposed Project would not result in impacts to septic and wastewater disposal systems.

GREENHOUSE GAS EMISSIONS

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.7.1 Thresholds of Significance

This Initial Study considers to what degree the proposed Project would contribute to greenhouse gas (GHG) emissions and global warming.

2.7.2 Discussion and Impacts Evaluation

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

Level of Impact Less Than Significant

GHGs trap energy that would have otherwise been emitted back into space, thus contributing to global warming, creating what is known as the “greenhouse effect.” The most important GHGs are carbon dioxide (CO₂), methane (CH₄), water vapor (H₂O), and nitrous oxide (N₂O). The majority of the proposed Project’s global warming emissions would be CO₂ from diesel and gasoline fuel combustion. The NCUAQMD does not have a daily or annual threshold for CO₂ emissions. However, the proposed remedial activities would be temporary, occurring over an estimated 6-month period. Impacts would therefore be considered less than significant.

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

Level of Impact Less Than Significant

The Humboldt County Draft Climate Action Plan does not list construction, which, because of the temporary nature and use of heavy construction equipment, conceptually includes the proposed remedial activities, specifically as a GHG-emitting activity. Further, the proposed Project activities would be short-term, occurring over an estimated 6-month period. Thus GHG emissions

from the proposed Project would not interfere with the GHG reduction goals of the applicable GHG reduction plan (County of Humboldt, 2012).

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.8.1

Thresholds of Significance

This IS considers to what degree the proposed Project would involve: (1) potential storage or use, on a regular basis, of chemicals that could be hazardous if released into the environment; (2) operating conditions that would be likely to result in the generation and release of hazardous materials; (3) use of

hazardous materials associated with construction-related activities or operations, within 0.25 mile of an existing or proposed school; (4) proposed Project-related increase in use intensity by people within the boundaries of, or within 2 miles of, the Airport Planning Areas; (5) proposed Project-derived physical changes that would interfere with emergency responses or evacuations; or (6) potential major damage because of wildfire.

2.8.2

Discussion and Impacts Evaluation

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

Level of Impact	Less than Significant
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The former Eureka MGP used fuel oil as the feedstock for producing oil gas. As such, the MGP produced several process residuals, including lampblack (a fine sooty material) and oil tar. Remediation would involve the focused excavation/removal, stockpiling, and offsite disposal of wood debris, concrete, and soil possibly containing such constituents of potential concern as BTEX, TPH, PAHs, and various metals associated with the artificial fill underlying the site. These materials could constitute hazardous materials in concentrations in excess of regulatory criteria as defined in 40 CFR Part 261 and 22 CCR, and removed material would be managed and disposed of as hazardous waste according to federal, state and local requirements.

Dewatering using trash pumps or skid-mounted dewatering pumps would be performed to remove standing water from excavations as needed. Groundwater removed during dewatering activities would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka.

A site-specific HASP would be developed for the proposed Project and standard environmental controls would be applied as needed during implementation of remedial action activities to reduce the potential for impacts to worker health. Site controls, such as the erection of a tent over work areas, would reduce potential impacts from odors or emissions. The controls would comply with federal, state, and local hazardous waste regulations, and all proper permitting would be obtained. Site controls would also conform to BMPs to minimize potential impacts. A Hazardous Materials Business Plan would also be developed prior to introduction of hazardous materials to the proposed Project site and would include the location, type, quantity, and health risks of the various materials. Hazardous materials brought onsite are described in Section 1.0.

Excavated materials and sludge potentially containing constituents of concern that are not treated in situ would be stockpiled and chemically analyzed to determine proper treatment using procedures outlined in the Project Waste Management Plan. After S/S activities, excavated material that could not be successfully treated would then be removed from the proposed Project site via end-dump trucks and roll-off bins for recycling, or disposal and treatment at a licensed landfill or disposal facility. Dump trucks carrying excavated materials would be covered and would follow a designated route to reduce potential impacts to nearby residents and businesses.

In the event that excavated wastes meet the classification standards of hazardous waste, they would be transported under hazardous waste manifests by registered hazardous waste haulers to an appropriately certified disposal facility. Hazardous waste haulers would be required to hold a valid registration issued by the Department of Toxic Substances Control and would also comply with all transport and waste management regulations established under the Department of Transportation and USEPA Resource Conservation and Recovery Act (RCRA).

The proposed Project would include placement of an engineered cap over the extent of the impacted areas to reduce the potential for exposures to the underlying impacted materials. With implementation of the above BMPs and environmental controls, hazards to the environment through the transport, use and disposal of hazardous materials would be less than significant.

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

Level of Impact Less than Significant

Prior to initiating proposed Project activities, a Spill Response Plan would be developed that would specify the engineering (e.g., secondary containment) and administrative controls that would be used to mitigate the risk of spills on the proposed Project site. Administrative controls detailed in the Spill Response Plan would include placement of spill kits, compliance audits, vehicle inspections, and vehicle staging.

In addition, a site-specific HASP would be developed prior to any proposed Project site mobilization or activity and updated as appropriate to account for any changes in the proposed Project or new conditions. Field activities would be governed by the site-specific HASP specifying practices to be employed by workers to avoid physical and chemical exposures during cleanup activities, including the accidental release of hazardous materials to the environment. The HASP would include an Emergency Contingency Plan, which would establish procedures to minimize the potential for adverse impacts with proper

implementation. Furthermore, all haulers transporting hazardous waste would be trained, registered, and licensed by the State of California.

Hazards that have the potential to occur during remediation include fires, fuel spills, hydraulic fluid leaks, and accidents associated with the operation of construction vehicles and equipment. These potential hazards, however, would be reduced through enforcement of safe work practices and the incorporation of principles and management procedures outlined in the HASP and Spill Response Plan, as described in Section 1.3. Other BMPs that would reduce potential impacts include proper operation of machinery, proper storage of fuels, shoring and sloping deep excavations, and marking underground utilities.

While spills are not anticipated, the potential risk of accidental release of hazardous waste into the environment would be less than significant.

c., e. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? 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 for people residing or working in the Project area?

Level of Impact	Less than Significant
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The school nearest the proposed Project site is Winzler Children’s Center, a preschool located approximately 0.75 mile southeast of the proposed Project site and construction vehicles and haul trucks would not pass by the school. Other schools such as Eureka High School, Redwood Christian School, St. Bernard’s Academy, Alder Grove Charter School, and Lincoln Elementary School are all located within a 1.5-mile radius of the proposed site. The proposed Project site is also located within 2 miles of the Eureka Municipal Airport (Samoa Field Airport).

As discussed in Items (a.) and (b.), potential hazardous emissions would be controlled and hazardous materials would be excavated, stored, collected, treated, transported, and disposed of in a manner that conforms to federal, state, and local hazardous waste regulations. A tent would also be erected over the work area to mask odors and emissions. Additionally, various health and safety and emergency response plans would be developed prior to the beginning of proposed Project activities, and BMPs associated with the management of hazardous waste would be incorporated. Transport of hazardous waste would be conducted by registered and licensed hazardous waste haulers. These haulers would be required to follow a designated route that would minimize impacts to residents and businesses, including schools and airports. As such, emissions from or release of hazardous waste, and the handling of hazardous waste and

materials, would have a less than significant impact on schools and airports if proper protocols are followed.

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

Level of Impact Less than Significant

The proposed Project is listed as an open remediation hazardous waste site by the North Coast RWQCB (SWRCB 2016). Potential impacts at the site include toxic constituents found in waste oil, lubricating oil and motor oil such as BTEX, TPH, PAHs, and various metals (SWRCB 2016). The proposed Project site is located within the Eureka Plain Watershed, which serves as a drinking water supply for Humboldt County residents. Therefore, constituents of concern onsite have the potential to adversely affect Humboldt County drinking water supply. However, activities associated with the proposed Project are intended to reduce hazards to the public and environment through the removal of impacted and potentially hazardous materials from the proposed Project site. As such, impacts to the public and environment would be less than significant.

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- f. For a project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

Level of Impact No Impact

The proposed Project is not located within a vicinity of a private airstrip; therefore, there would be no impact.

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- g. Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Level of Impact Less than Significant

The proposed Project site is not located along a major roadway (Google Earth Pro 2016). PG&E would conduct proposed Project activities in a manner that would not impair implementation of or physically interfere with City of Eureka emergency response plans or emergency evacuation plans. Furthermore, the projected increase in vehicle trips associated with the proposed Project would be phased and scheduled to minimize the potential impact on traffic volumes along evacuation routes. As such, impacts would be less than significant.

h. Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Level of Impact

No Impact

The proposed Project site is located in an industrial zone; no residences or wildlands are in the vicinity. As such, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. While proposed Project-related accidents have the potential to result in fires, these would most likely occur onsite, would be contained by procedures outlined in the proposed Project HASP, which will include an Emergency Contingency Plan, and would be prevented through the incorporation of safe work practices and BMPs. Therefore, there would be no impact.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there will be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.9.1 *Thresholds of Significance*

This IS considers to what degree the proposed Project would involve: (1) improvements that would violate standards set for water quality and for discharge of wastewater; (2) use of, or interference with, groundwater such that the amount of flow of groundwater is adversely impacted; (3) drainage improvements that would alter or cause an increase in amount or flow of drainage, or that would affect the free-flow of a stream or river or cause an increase in silt runoff as to cause adverse impact; (4) added runoff from the site that would exceed the capacity of drainage facilities; (5) the creation of polluted runoff or other general adverse water quality impacts; (6) the placement of housing or other structures within the 100-year flood plain, or other area subject to flooding; or (7) development in such a manner or location that it would be adversely affected by seiche, tsunami or mudflow.

2.9.2 *Discussion and Impacts Evaluation*

a., f. Would the Project violate any water quality standards or waste discharge requirements? Would the Project otherwise substantially degrade water quality?

Level of Impact **Less than Significant**

The proposed Project is located in the Eureka Plain Groundwater Basin, which serves Humboldt County residents. Total dissolved solids in this basin as a whole average 177 milligrams per liter and constituents found in groundwater sources include localized high boron, iron, manganese and phosphorus (Freshwater Environmental Services 2016). Groundwater at the proposed Project site is also currently contaminated due to past activities at the former Eureka MGP. Proposed Project activities involve the natural attenuation of residual groundwater impacts, which would improve groundwater quality at the proposed Project site over time. In addition, treatment/removal of impacted soils would reduce the potential for impacts to groundwater from overlying soils. However, water quality levels might not reach drinking quality standards after remediation. As such, the land use covenant would restrict use of groundwater beneath the proposed Project site. State and Humboldt County groundwater regulations would prohibit the installation of water supply wells in impacted parts of the aquifer.

Groundwater generated during excavation and dewatering activities would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka. Additionally, groundwater beneath the proposed Project site would be observed using a network of monitoring wells, from which groundwater samples would be collected semiannually over an estimated period of 10 years or until closure is approved by the North Coast RWQCB. This monitoring program would identify changes in groundwater quality over time. Therefore, Project activities would have a less than significant impact on water quality and would not exceed waste discharge requirements. Groundwater quality would improve as a result of proposed Project activities.

No surface water bodies are present on the proposed Project site; however, Humboldt Bay is located less than 500 feet west of the site. Humboldt Bay is listed on the CWA Section 303 (d) List of Water Quality Limited Segments for dioxin toxics and polychlorinated biphenyls (SWRCB 2012). As a part of proposed Project activities, standard environmental controls including implementation of a SWPPP would be applied as needed during implementation of remedial action activities to reduce the potential for impacts to the environment, including groundwater and surface water. The proposed Project would also comply with all water quality standards and waste discharge requirements established by the RWQCB, which has direct oversight of the proposed cleanup activities. As such, impacts to surface water quality would be less than significant.

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- b. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level

which would not support existing land uses or planned uses for which permits have been granted)?

Level of Impact **Less than Significant**

The proposed Project area is located in the Eureka Plain Groundwater Basin, which has a surface area of approximately 58 square miles (City of Eureka 2015a). The proposed remedial actions involve soil treatment and/or excavation, and do not involve groundwater extraction other than for (1) removal of groundwater during dewatering activities, which would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka; or (2) groundwater samples collected as part of the monitoring program.

A substantial portion (approximately 60 percent) of the proposed Project site is currently unpaved. Cleanup activities would result in the placement of approximately 90,000 square feet of pavement over areas that are not currently paved and would result in a reduced potential for recharge due to precipitation in those areas. However, storm water runoff would be directed away from the capped areas to a vegetated swale that would be constructed in the immediate vicinity [as noted in Items (c.) and (d.) below], where some infiltration and evapotranspiration would occur.

Additionally, implementation of the land use covenants associated with the proposed Project would restrict use of groundwater beneath the proposed Project site. State and Humboldt County groundwater regulations would prohibit the installation of water supply wells in impacted parts of the aquifer.

Based on the above considerations, the proposed Project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge and impacts would be less than significant.

c.-d. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or offsite? Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?

Level of Impact **Less than Significant**

There are no surface water bodies on the proposed Project site; therefore, none would be altered as a result of proposed Project activities. Groundwater in the shallowest water-bearing zone beneath the proposed Project site flows radially

toward the northwest and northeast, with some flow toward Humboldt Bay. This zone is not tidally-influenced; however, groundwater in deeper intervals is tidally influenced, with flow directions varying from the northwest (toward Humboldt Bay) to the northeast, depending on the tidal stage. Groundwater monitoring at the site has given no evidence that chemical migration to Humboldt Bay has taken place (ERM 2015).

Approximately 60 percent of the proposed Project site is currently unpaved and being used for industrial purposes. Post-remedial restoration would include placement of an engineered cap overlaid by asphalt pavement surface over the extent of impacted areas. The grade of the cap would be designed to shed storm water to a vegetative swale, which would capture the storm water runoff and reduce the potential for infiltration through the cap. The vegetated swale would also direct storm water toward the southwest toward Humboldt Bay. Therefore, although drainage patterns and infiltration would be altered, the proposed Project would be designed to minimize or avoid undesirable changes in offsite drainage.

Proposed Project activities would also include the preparation of a SWPPP and implementation of BMPs to eliminate or reduce the movement of silt or sediment from excavation areas into storm water runoff through the use of silt fences, sandbag berms, hay bales, and grading. Soil stockpiles built during construction would also be managed to prevent the movement of silt into storm water runoff through diversion of drainage from the stockpile areas, placement of sandbags and straw wattles around stockpiles, sloping of stockpiles to encourage sheet flow, and covering of stockpiles.

Based on these factors, there would be no significant impacts to drainage patterns and the potential of erosion, siltation or flooding on- or offsite would be less than significant.

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- e. Would the Project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Level of Impact	Less than Significant
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The Storm Water Division of the Eureka Department of Public Works manages all storm water-related issues in the City of Eureka. The storm water system in Eureka is made up of a system of curbside drains, culverts, and 8- to 42-inch-diameter reinforced concrete pipes located underground. Storm water that is discharged into the receiving waters is untreated.

The proposed Project would not connect with the City's storm water system; however, it would include the construction of a vegetated swale along the

southern and eastern boundaries with the neighboring property (Figure 1). The vegetated swale would be approximately 20 feet wide and cover an area approximately 10,000 square feet. Approximately 113,000 square feet of existing or new asphalt would drain to this area. Riprap would be installed and native vegetation planted in the vegetated swale for erosion control. An overflow device would also be installed at the western end.

The proposed Project would comply with all water quality standards and waste discharge requirements established by the North Coast RWQCB. The City of Eureka is a small municipal separate storm sewer system (MS4) and is subject to the SWRCBs Water Quality Order 2013-0001-DWQ; NPDES General Permit CAS000004 (Small MS4 General Permit). Because more than 5,000 square feet of impervious surface will be replaced or created, the project will be considered a Regulated Project.

A pre-application meeting has been conducted and a draft Storm Water Control Plan (SCP) was prepared and submitted to the City for review. The draft SCP identified opportunities and constraints for implementing storm water runoff reduction measures based on low impact development (LID) design standards, described the site design characteristics, and presented a conceptual design and calculations for a vegetated swale. In a letter dated 5 August 2016, the City concurred with the conceptual design. Prior to remedial construction, the final SCP will be submitted to the City for review and approval.

Additionally, a SWPPP would be developed prior to proposed Project activities that substantially affect the ground surface over a large portion of the proposed Project site. As previously discussed, BMPs would be implemented to eliminate or reduce the movement of silt or sediment from excavation areas into storm water runoff through the use of silt fences, sandbag berms, straw wattles, and grading. Soil stockpiles built during construction would also be managed to prevent the movement of silt into storm water runoff through diversion of drainage from the stockpile areas, placement of sandbags and straw wattles around stockpiles, sloping of stockpiles to encourage sheet flow, and covering of stockpiles.

Based on these factors, impacts to surface water runoff and Eureka storm drainage systems would be less than significant.

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- g. Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Level of Impact **No Impact**

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.10.1

Thresholds of Significance

This IS considers to what degree the proposed Project would (1) divide an established community or conflict with existing land uses within the proposed Project’s vicinity, such as agriculture resources; (2) conflict with the Eureka General/Coastal Plans designation, policies, and zoning ordinances regarding commercial, public, and quasipublic facilities; or (3) conflict with applicable environmental plans and protection measures enforced by regulatory agencies that have jurisdiction over the proposed Project, such as habitat conservation plans or a natural community conservation plan.

2.10.2

Discussion and Impacts Evaluation

a. Would the Project physically divide an established community?

Level of Impact **No Impact**

The proposed Project site is in a highly industrialized area, outside of established residential communities. It is immediately bounded by the heavy industrial Unocal Bulk Terminal site, which is highly impacted with petroleum hydrocarbons and chlorinated solvents and currently undergoing remediation and groundwater monitoring under North Coast RWQCB oversight. An inactive north-south railroad alignment, Railroad Avenue, and a PG&E substation maintenance yard are located immediately east of the proposed Project site. The Renner Petroleum Products facility is northeast of the site across Railroad Avenue and Simpson Timber Company, formerly M&W Woodworking, is immediately south of the proposed Project site (ERM 2015). The closest residential neighborhood is located approximately 0.4 mile southeast of the

proposed Project site. As such, the proposed Project would have no impact on established communities.

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- b. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect?

Level of Impact No Impact

The proposed Project site is designated as CDI the Eureka General Plan (City of Eureka 1997). This zoning is intended to encourage coastal-dependent and coastal-related industrial land uses along Humboldt Bay particularly to support the fishing and shipping industries (City of Eureka 2015a). Although the proposed Project is not coastal-dependent or -related, the proposed Project activities are industrial in nature and will allow the site to be used according to its zoning and land use designations in the future. Additionally, remediation of the proposed Project site would improve environmental conditions near Humboldt Bay. As such, there would be no adverse impact.

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- c. Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

Level of Impact No Impact

Proposed Project activities would be as near as 500 feet to Humboldt Bay, which is within the Coastal Zone. The California Coastal Commission has jurisdiction over the Coastal Zone; therefore, based on the nature of the work proposed, the proposed Project would require a CDP pursuant to the California Coastal Act of 1976. According to the Eureka General Plan Community Background Report, “The Coastal Act requires that local jurisdictions within the Coastal Zone prepare a Local Coastal Program which prioritizes the use of land within the coastal zone for dependent uses” (City of Eureka 2015a). As such, the City of Eureka has designated the proposed Project site and surrounding areas as CDI for Coastal-Dependent Industrial land uses, in alignment with California Coastal Commission regulations. The proposed Project site is also located within Humboldt Harbor, Recreation and Conservation District, a district formed to manage the navigable waters of Humboldt Bay, promote commerce, and protect natural resources in the area (City of Eureka 2015a). Proposed Project activities would be consistent with all requirements established by the Humboldt Bay Harbor, Recreation and Conservation District. Based on these factors, there would be no impact to any applicable habitat conservation plan or natural community conservation plan.

Would the Project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.11.1 *Thresholds of Significance*

This IS considers to what degree the proposed Project would interfere with the extraction of commodity materials or otherwise cause any short-term or long-term decrease in the availability of mineral resources that would otherwise be available for construction or other consumptive uses.

2.11.2 *Discussion and Impacts Evaluation*

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

Level of Impact **No Impact**

The proposed Project is located in a highly industrial area where no known mineral resources exist (CDC CGS 2015). All proposed Project activities would occur within the proposed Project site boundaries or along paved city roads and highways and would not affect the discovery or recovery of mineral resources at offsite locations. Consequently, there would be no impact to known mineral resources or locally important mineral resource recovery sites.

Would the Project result in:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to, or generation of, excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.12.1

Thresholds of Significance

This IS considers whether the proposed Project would produce: (1) sound-pressure levels contrary to the City of Eureka noise standards; (2) long-term ground vibrations and low-frequency sound that would interfere with normal activities and that is not currently present in the proposed Project area; (3) a substantial increase in ambient short-term or long-term sound-pressure levels; or (4) changes in noise levels that are related to operations, not construction-related, which will be perceived as increased ambient or background noise in the proposed Project area.

2.12.2

Discussion and Impacts Evaluation

- a. Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise

ordinance, or applicable standards of other agencies?

Level of Impact **Less than Significant**

The proposed Project is located in a CDI zone and the current noise levels are indicative of a typical industrial zone. The closest residential area is approximately 0.4 mile southeast of the proposed Project site along W. Wabash Avenue.

Proposed Project activities would involve the use of blowers, drilling equipment, excavators, backhoes, skid steer, hydraulic hammers, and other similar equipment. Project remediation and monitoring activities would generally be performed on standard work days (Monday through Friday) during daylight hours, and the daily work period would be 7:00 a.m. to 7:00 p.m.

Eureka Municipal Code Section 155.097 stipulates noise limits in industrial districts. The ordinance states that these levels may be exceeded on a temporary basis during construction, which, because of the temporary nature and common types of equipment used, conceptually includes activities like those of the proposed remedial efforts. Furthermore, construction activities outside these hours and days may be allowed with prior approval from the City.

The City of Eureka General Plan requires that noise created by new proposed non-transportation sources be mitigated as to not exceed the noise levels specified in Table 2-2 below (City of Eureka 1997). Given the noise level exemptions associated with temporary construction, these thresholds are generally applied to post-remedial activities such as cap inspections and groundwater monitoring.

Table 2-2 City of Eureka Noise Level Performance Standards

Noise Level Descriptor	Daytime (7 a.m. to 10 p.m.)	Nighttime (10 p.m. to 7 a.m.)
Hourly L_{eq} dB	50	45
Maximum level, dB	70	65

L_{eq} = Equivalent sound level

dB = Decibels

Source: City of Eureka 1997

The primary noise generating source after completion of construction activities would be from additional vehicle trips associated with annual cap inspections and semiannual groundwater monitoring. Vehicle trips would occur during daytime hours, would generate noise similar to current noise levels along surrounding roadways and highways, and would not be expected to exceed the General Plan limits identified in Table 2-2 above.

Additionally, standard environmental controls, as defined in Section 1.3, would be applied as needed during implementation of remedial action activities to reduce the potential for impacts to nearby tenants and residents due to noise. While the proposed Project would not expose persons to noise levels in excess of applicable standards, implementation of these BMPs could be incorporated to further reduce noise levels during the remedial action.

Based on these factors, the proposed Project would not result in exposure of persons to or generation of levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies, and impacts during construction and operation would be less than significant.

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- b. Would the Project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?

Level of Impact **Less than Significant**

Temporary operation of heavy construction equipment such as conventional backhoes and excavators, large-diameter augers, asphalt trucks, hydraulic hammers, and similar equipment would be used during the remedial action. Operation of this equipment has the potential to generate groundborne vibration and groundborne noise that would occur on a short-term intermittent basis and would return to pre-construction conditions post-remediation. Environmental controls and BMPs, as defined in Section 1.3 and Item (a.), would be implemented to minimize impacts to nearby tenants from groundborne vibrations. As such, temporary impacts related to exposure to excessive groundborne vibration or groundborne noise levels would be less than significant.

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- c.-d. Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?
Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Level of Impact **Less than Significant**

Noise levels surrounding the proposed Project site are characteristic of an industrial area. Surrounding industrial and commercial properties include the Unocal Bulk Terminal to north; Schmidbauer Lumber Inc., Renner Petroleum, PG&E Maintenance Yard, Bien Padre Foods, and Costco to the east; and the former Simpson Plywood Mill to the south. The closest residential area is approximately 0.4 mile southeast of the proposed Project site along W. Wabash Avenue (Google Earth Pro 2016). Current noise levels along Wabash Avenue east

of the Westside Community average 65 decibels during the day and 59 decibels at night (City of Eureka 2015).

The most typical noises in the vicinity of the proposed Project site are from vehicular traffic along nearby city streets and US 101, traffic from boats and vessels that traverse Humboldt Bay, and industrial noise from surrounding properties.

Noise levels at the proposed Project site during remediation would be consistent with current noise in the area and the permanent installation of noise-generating equipment is not proposed. Construction activities and additional vehicle trips associated with proposed Project activities may cause temporary increases in ambient noise levels. However, remedial activities would be temporary and only occur during work days and during daylight hours, consistent with the Eureka Municipal Code, and would terminate after approximately 6 months. As such, temporary increases in ambient noise levels in the proposed Project vicinity would be less than significant. After remediation, vehicle trips would be associated with annual cap inspections and semiannual groundwater monitoring during operations. Vehicle trips would occur infrequently on a permanent (30 years or more) basis. However, noise from these limited and infrequent vehicle trips would be similar in nature to current noise levels along surrounding roads and highways and would have a minimal effect on ambient noise levels in the area. No noise impact is anticipated in the long-term.

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- 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 expose people residing or working in the Project area to excessive noise levels?

Level of Impact Less than Significant

The proposed Project is within 2 miles of the Eureka Municipal Airport, also known as the Samoa Field Airport, located on the northern peninsula of Humboldt Bay. However, the proposed Project would not expose people working onsite to excessive aircraft noise for a variety of reasons. First, noise level increases generated by the Eureka Municipal Airport would occur intermittently given the extremely low aircraft traffic volumes at this airport. Second, the types of aircraft typically served by Eureka Municipal Airport are small private planes; no commercial aircraft are utilized at this airport (Planwest Partners, Inc. 2011). As such, noise levels would not differ substantially from noise from construction-related proposed Project activities. Third, the proposed Project site would not be located within the airport’s immediate takeoff or landing approaches. Finally, the proposed Project would not introduce new receptors that might be at risk with such exposure. The proposed Project would introduce a construction crew that is accustomed to working around and

protecting themselves against elevated noise levels. Given these factors, impacts from nearby airports to people residing or working in the proposed Project area would be less than significant.

f. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

Level of Impact **No Impact**

There are no private airstrips in the vicinity of the proposed Project; therefore, there would be no impact.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.13.1

Thresholds of Significance

This IS considers to what degree the proposed Project would result in, or contribute to, (1) population growth; (2) displacement of housing units; (3) demolition or removal of existing housing units; or (4) any proposed Project-related displacement of people.

2.13.2

Discussion and Impacts Evaluation

- a. Would the Project 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)?

Level of Impact	No Impact
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Although the proposed remedial cleanup activities would allow better utilization of the proposed Project site in the future, no new businesses are proposed after remediation. The proposed Project site would continue under the operation of EFP. The proposed Project would require a small construction crew for approximately 6 months. PG&E has a Local Hire Program to prioritize local staffing where possible on these types of projects. Staffing for construction could be filled in part by local Humboldt County residents. No new homes, roads, or extensions of existing roads are planned as a part of proposed Project activities. As such, the proposed Project would neither directly nor indirectly induce substantial population growth in the area and there would be no impact.

b.-c. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Level of Impact **No Impact**

The proposed Project site is located within a highly industrialized district in Eureka. The closest residential neighborhood is approximately 0.4 mile from the proposed Project site. All proposed Project activities would occur within the boundaries of the proposed Project parcel. Transportation of construction vehicles and the transport of excavated impacted soils for disposal at a permitted hazardous waste facility would occur along paved city roads and highways so as to not disturb surrounding properties. No people or existing housing would be disturbed or displaced as a result of proposed Project activities; therefore, there would be no impact.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1. Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2.14.1 Thresholds of Significance

This IS considers to what degree the proposed Project would result in changes in existing fire or police protection service levels, or a perceived need for such changes, as well as any substantial changes in the need for, or use of, schools, parks, or other public facilities.

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

- Fire Protection
- Police Protection
- Schools
- Other Public Facilities
- Parks

Level of Impact **Less than Significant**

Fire and Police Services

Humboldt Bay Fire (HBF) is the primary provider of fire and emergency medical services for the City of Eureka. California Department of Forestry and Fire Protection (CAL FIRE) and the Samoa Fire District also provide fire services for the Greater Eureka area. HBF consists of 65 full-time employees and 15 volunteer firefighters. The ratio of firefighters to Eureka citizens is approximately 1 to 883, which exceeds the national standard of 1 to 2,000. There are five fire stations located throughout Eureka including the headquarters at 533 C Street, approximately 1.3 miles from the proposed Project site (Google Earth Pro 2016). Average response times in 2012 for emergency medical response and fire response were 5.23 minutes and 6.46 minutes, respectively. Based on the City of Eureka General Plan Policies, HBF is required to maintain an average response time of 3 minutes (City of Eureka 2015a).

Eureka Police Department (EPD) provides police services for the City of Eureka. The department is made up of 54 sworn officers and 31 civilian officers and professional staff. EPD headquarters at 604 C Street is approximately 1.3 miles northeast of the proposed Project site. Eureka General Plan policies call for an average response time of 3 minutes and a staffing ratio of 2.8 officers to every 1,000 residents.

The proposed Project would require a small crew over an estimated 9-month remediation schedule. While fire and police response times are currently below the recommended level of service, proposed Project activities are not expected to independently stress police and fire resources. As such, impacts to police and fire services associated with the implementation of the proposed Project would be less than significant.

Schools, Parks, and Other Public Facilities

The Eureka City School District is made up of four elementary schools (K through grade 5), two middle schools (grade 6 through grade 8), and two high schools (grade 9 through grade 12). Based on the nature and short duration of the proposed remedial activities, there would be no anticipated increased demand on schools, parks, or other public facilities. Impacts to parks are discussed further in Item (b.) below.

-
- b. 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?

Level of Impact **No Impact**

The City of Eureka maintains seven neighborhood parks and six community park facilities (City of Eureka 2015a). There are no parks within a 0.75-mile radius of the proposed Project site; however, a planned pedestrian path, referred to as the Eureka Waterfront Trail, is proposed by the City that would run adjacent to the proposed Project site along Railroad Avenue. The trail would connect to the parks and presumably add recreational uses near the proposed Project site (Humboldt County 2014). Signs and barriers would be erected during construction times to minimize safety risks. Community and neighborhood parks nearest the proposed Project site include Carson Park and Playground, Hammond Park and Playground, and Ross Park and Playground (Google Earth Pro 2016). There are no anticipated direct or indirect increases in population associated with the proposed Project that would lead to an increase in use at existing parks and recreational facilities. Therefore, there would be no impact.

-
- c. Does the Project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Level of Impact **No Impact**

Implementation of additional recreational facilities is not planned as a part of proposed Project activities. There would be no anticipated increase in population associated with the proposed Project, as discussed in Section 3.13. As such, there would be no additional demand on existing recreational facilities and existing recreational facilities would not require expansion.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.15.1

Thresholds of Significance

This IS considers whether and to what degree, if any, the proposed Project would be associated with: (1) temporary or permanent changes in the patterns, volumes, or other characteristics of all modes of travel that might be perceived as adverse; Changes in levels of service (LOS) on county or state highways, particularly if those changes conflict with specific traffic programs, plans, goals, or policies; (2) new or worsened transportation or safety hazards and/or risks; or (3) reduced accessibility for emergency vehicles or services.

- a. Would the Project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?
- b. Would the Project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Level of Impact	Less than Significant
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The proposed Project site is at West 14th Street and Railroad Avenue in a primarily industrial portion of Eureka, California. US 101, the major arterial roadway through Eureka, provides the proposed Project site's only access to the regional road network.

US 101 in this vicinity has four travel lanes (two in each direction) plus a center left-turn lane (outside of Eureka, US 101 is a limited-access freeway). Other roads in the vicinity of the proposed Project site, including 14th Street and Railroad Avenue, have one lane of traffic in each direction, plus turn lanes at larger intersections. The intersection of 14th Street and US 101 is signal-controlled, while all other intersections in the area have two- or four-way stop signs.

Table 2-3 shows the Annual Average Daily Traffic and peak hour traffic on US 101 in the vicinity of the Project site in 2014 (the most recent year for which the California Department of Transportation [Caltrans] provides data). Readily available Caltrans reports do not specify when the peak hour occurs on US 101 near the proposed Project site, although available data do suggest that it occurs at noon (Caltrans 2015a).³

Additional Caltrans data suggest that truck volumes on US 101 in Eureka comprise approximately 5 percent of total traffic (Caltrans 2015b). This would equate to approximately 200 existing truck trips per peak hour.

³ See Report OTM3240 at the end of Caltrans 2015a.

No data were available for 14th Street or Railroad Avenue; however, given the predominantly industrial character of the area, this IS assumes that traffic volume on these streets is generally low.

Table 2-3 **2014 Traffic Volumes**

Highway Location	AADT ¹	Peak Hour ¹
US 101 at Wabash Avenue	32,500	3,550
US 101 at 7 th Street	39,750	4,275

AADT = Average Annual Daily Traffic

1. Caltrans reports “back” and “ahead” traffic data – indicating the traffic volumes south or west, and north or east (respectively) of the count location. The data in this table are an average of the “back” and “ahead” volumes.

Source: Caltrans 2015a.

During the proposed remedial efforts, the proposed Project would generate up to 840 heavy truck round trips over an estimated 4 months, plus up to 20 employee round trips per day. Peak traffic activity would occur during the site restoration phase, when the proposed Project would generate approximately 30 truck round trips per day over a 1- to 2-week period.

In general, truck arrivals would be staggered over the course of the day, with an estimated four truck round trips during the peak hour for the surrounding road system. Furthermore, PG&E would coordinate closely with the City for traffic control and planning, and specifically truck deliveries, so as to limit trips during peak commuting periods (before 9:00 a.m. and after 3:00 p.m.). Trucking would be staged onsite to avoid the potential for backing up or associated congestion along Railroad Avenue or West 14th Street. At least two dedicated flaggers would be used as necessary to direct truck traffic entering and exiting the EFP property and the proposed Project site.

Truck safety inspections would not occur along public roadways. For trucks involved with the transportation and disposal of impacted soil, truck safety inspections would be conducted at an offsite location prior to the trucks arriving onsite. Trucks not passing inspection would not be allowed to proceed to the site.

The Humboldt County Association of Governments (HCAOG) 2014 Regional Transportation Plan (RTP) establishes policies, goals, and spending priorities for the County’s road system. The RTP evaluates road congestion according to LOS, a standard system that measures the traffic density and/or intersection delay experienced by typical commuters on a scale from LOS A (free-flow, minimal delay) to LOS F (complete gridlock, “failure” of the road or intersection).

The RTP’s target threshold is LOS C (HCAOG 2014), which represents somewhat congested but otherwise unobstructed conditions. Existing LOS for US 101, 14th

Street, and Railroad Avenue in the vicinity of the proposed Project area are not known. The latter two streets generally have low traffic volumes and are thus expected to meet or exceed the LOS C standard.

Given its status as a major artery, and the highest-capacity non-freeway road in Eureka, US 101 likely fails to meet LOS C during some, if not all, peak hours.

Project-related increases in traffic volumes would be minimal compared to the existing traffic volumes described above, and it is unlikely that this added traffic would degrade existing LOS at the US 101/14th Street intersection or at other points along US 101.

All proposed remedial activities would employ standard traffic control measures in accordance with the Caltrans Manual of Traffic Controls for Construction and Maintenance Work Zones (Caltrans 2016). To minimize potential traffic impacts, a Traffic Control Plan would be developed for the proposed Project. The Traffic Control Plan would be prepared in consultation with the City of Eureka and Caltrans District 1 and would describe anticipated traffic volumes, coordination and notification plans, measures such as signage and flagging to route vehicles, and alternative routes for truck travel.

With the presence of the above-described Traffic Control Plan, proposed Project-related traffic would not conflict with existing transportation plans and congestion management programs.

Accordingly, the proposed Project would have less than significant transportation impacts related to local plans, ordinances, policies, and congestion management programs.

-
- c. Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Level of Impact	No Impact
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There are three public use airports in the vicinity of Eureka. The largest and only commercial airport is the Eureka-Arcata airport, which is approximately 17 miles north of the proposed Project site and served approximately 159,000 passengers in 2013 (the latest year for which data were readily available). Smaller non-commercial airports include the Eureka Municipal Airport, approximately 2 miles west of the proposed Project site (on the Samoa Peninsula) and Murray Field Airport, approximately 4 miles northeast of the proposed Project site.

The proposed Project includes no equipment or structures that would affect air traffic patterns. The proposed Project therefore would not affect the operation of any nearby airports operations. Accordingly, the proposed Project would have no impact on air traffic.

- d. Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?

Level of Impact **No Impact**

The proposed Project would only use existing roadways, and would not result in any changes in road geometries. In addition, the proposed Project would not regularly employ unusually large or wide trucks or other vehicles. Accordingly, the proposed Project would have no impact on traffic hazards.

- e. Would the Project result in inadequate emergency access?

Level of Impact **No Impact**

In coordination with the City of Eureka and Humboldt County, a Traffic Control Plan would be prepared prior to the start of proposed Project work. This plan would identify roadways used for emergency access, as well as procedures for maintaining this access during the proposed Project. Lane closures are not anticipated; however, in the event that proposed Project activities require a lane closure, flaggers would be employed to ensure priority access and movement of emergency vehicles, as well as overall safe traffic flow. Accordingly, the proposed Project would have no impact on emergency access.

- f. Would the Project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Level of Impact **Less than Significant**

Alternatives to private vehicle travel are limited in the vicinity of the proposed Project site. There are no bicycle lanes on 14th Street, Railroad Avenue, or US 101, and sidewalks in the area are not contiguous. Phase B of the planned Eureka Waterfront Trail would run adjacent to the proposed Project site, along Railroad Avenue. The Eureka Waterfront Trail, part of the Humboldt Bay Trail, which would run from the Elk River to Arcata, would provide “a continuous 6.3-mile

trail along the [Humboldt] Bay that provides an alternative route from Highway 101 for non-motorized travel through the city” while linking existing trail segments and the city’s Old Town promenade boardwalk (Humboldt County 2014).

It is possible that construction of the trail might coincide with proposed remedial efforts. As such, PG&E would coordinate with the City regarding project phasing, staging, traffic patterns, and general processes to avoid added congestion and safety issues. Routine monitoring and inspection activities would occur on private property and would not involve heavy vehicles or equipment. Therefore, post-remediation monitoring activities would not affect trail operation or safety for trail users.

The nearest public transit route is the Eureka Transit Service (ETS) Red Route, which runs along a single block of 14th Street between Short Street and Koster Street, approximately two blocks east of the proposed Project site. The Red Route operates hourly from 7:00 a.m. to 7:00 p.m. (ETS 2016).

The overall traffic control and traffic safety measures described above would include provisions for protecting bicycle and pedestrian traffic including signs, barriers, and/or flaggers depending on the activity on site. Transit service could experience delays if proposed Project-related traffic or closures occur during the Red Route’s hourly use of 14th Street. No lane closures are anticipated, however. Because the Red Route does not travel adjacent to the proposed Project site itself, where road closures are more likely, transit delays are expected to be of short duration. With the safety measures laid out in the Traffic Control Plan, the proposed Project would have a less than significant impact on public transit, bicycle, or pedestrian facilities or the safety of those modes of travel.

Would the Project:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.16.1

Thresholds of Significance

This IS considers to what degree the proposed Project would be related to: (1) a substantial demand for water supplies or wastewater treatment; (2) an increase in runoff intensity that exacerbates drainage conditions and changes; or (3) insufficient provision for solid waste disposal.

-
- a. Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Level of Impact **Less than Significant**

PG&E would comply with all regulations under the CWA and would obtain all necessary permits through the North Coast RWQCB. For all groundwater generated during excavation and dewatering activities, wastes would be properly profiled, manifested, treated, and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka and all other applicable local, state, and federal regulations. As such, the proposed Project would not exceed North Coast RWQCB wastewater treatment requirements and impacts would be less than significant.

- b. Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Level of Impact **No Impact**

Groundwater generated during excavation and dewatering activities would be treated and discharged to the sanitary sewer system in accordance with an existing wastewater discharge permit issued by the City of Eureka. No other wastewater would be generated requiring offsite disposal. No new water or wastewater treatment facilities would be required and expansion of existing treatment facilities would not be necessary. As such there would be no impact to these facilities.

- c. Would the Project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Level of Impact **Less than Significant**

The Storm Water Division of the Eureka Department of Public Works manages all storm water-related issues in the City of Eureka. Compliance with a project-specific SWPPP would address activities during the remedial efforts. Water removed from the excavation site would be treated and discharged pursuant to an existing wastewater discharge permit. Once the engineered cap is in place

after remedial activities are complete, the proposed Project site would be managed to comply with the Small MS4 General Permit, which is regulated and enforced by RWQCB.

The Eureka storm drain piping system is made up of curbside drains, culverts, and 8- to 42-inch-diameter reinforced concrete pipes located underground. The system uses gravity flow and discharges into receiving waters from 17 different outlets, some of which do not have tide gates (Humboldt County 2005). Receiving waters in the city include Elk River and Freshwater Creek, Eureka Slough, Freshwater Slough, Ryan Slough, Fay Slough, Martin Slough, and Humboldt Bay (City of Eureka 2013). Because the storm water system in Eureka is old and undersized, it is considered inadequate (Humboldt County 2005).

While the storm water drainage system in Eureka is considered inadequate, proposed Project activities would not independently stress the current system. A SWPPP would be developed prior to work activities that substantially affect the ground surface over a large portion of the proposed Project site. BMPs would be implemented to eliminate or reduce the movement of silt or sediment from excavation areas into storm water runoff through the use of silt fences, sandbag berms, hay bales, and grading. Soil stockpiles built during construction would also be managed to prevent the movement of silt into storm water runoff through diversion of drainage from the stockpile areas, placement of sandbags and silt fencing, sloping of stockpiles to encourage sheet flow, and covering of stockpiles. The City of Eureka is subject to the SWRCB's Small MS4 General Permit. Because more than 5,000 square feet of impervious surface will be replaced or created, the project will be considered a Regulated Project. The City is currently reviewing the draft SCP. The SCP will be finalized and approved prior to issuance of the building and grading permits required for construction.

Proposed Project site restoration would include placement of an engineered cap and an asphalt pavement layer over the extent of impacted areas. The grade of the asphalt pavement layer would be designed to shed storm water to a vegetated swale, which would be installed during the proposed Project site restoration. The vegetated swale would be constructed along the southern and eastern boundaries with the neighboring property (Figure 1). The vegetated swale would be constructed in accordance with City requirements to minimize runoff and allow for capture, infiltration, and evapotranspiration of storm water. The vegetated swale would also direct storm water toward the southwest during high flows. Therefore, although drainage patterns and infiltration would be altered, the proposed Project would be designed to minimize or avoid changes in offsite drainage by incorporating LID design measures.

With the implementation of BMPs developed in the SWPPP and installation of a vegetated swale the proposed Project impacts to Eureka's storm water system would be less than significant.

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- d. Would the Project have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Level of Impact **Less than Significant**

The contractor would be responsible for securing the water supply. This water would be supplied in a water truck and likely sourced locally from the Humboldt Bay Municipal Water District, which has adequate supply to provide for the limited needs of the proposed Project (Winzler & Kelley 2007). Impacts to water supply would be short-term, less than significant and no new entitlements would be required.

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

Level of Impact **Less than Significant**

As with Item (d.), the contractor would use a porta-toilet and be responsible for associated disposal during remedial activities. No onsite facilities would be used.

Groundwater removed from the excavation during dewatering activities would be treated and discharged pursuant to an existing wastewater discharge permit issued by the City of Eureka. The impact to local wastewater systems would be short-term and less than significant.

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- f.-g. Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs? Would the Project comply with federal, state and local statutes and regulations related to solid waste?

Level of Impact **Less than Significant**

Excavation and offsite disposal is a secondary response to S/S activities in the proposed remedial design. The amount of soil for disposal offsite would depend on the effectiveness of S/S in treating highly impacted soil. Waste at the proposed Project site would include such materials as concrete debris, wood

waste, and highly impacted soil. PG&E projects that the following wastes could potentially be trucked away for offsite disposal:

- Up to 1,000 cubic yards (650 truckloads) of wood debris;
- Up to 4,000 tons (180 truckloads) of impacted soil; and
- Approximately 1,500 cubic yards (100 truckloads) of subsurface concrete.

Waste streams would be transported to facilities permitted for disposal pursuant to appropriate federal, state, and local regulations as follows:

- Possible landfills for disposal of wood waste would be Anderson Class III Landfill in Redding, California, or Altamont Landfill in Livermore, California, each of which are operated by Waste Management;
- Concrete would be recycled onsite or disposed at landfill such as Kern Construction in Blue Lake; and
- Possible landfills for disposal of hazardous waste include Clean Harbors Buttonwillow Landfill or Waste Management's Kettleman Hills landfill, each of which are located in Central California.

No local offsite disposal facilities are present near the proposed Project site. Anderson Landfill had a remaining capacity of 11,914,025 cubic yards and a maximum permitted capacity of 16,840,000 cubic yards as of March 2008 (California Department of Resources Recycling and Recovery [CalRecycle] 2016). Waste from the proposed Project may also be transported to Clean Harbors Buttonwillow Landfill located in Central California. Buttonwillow Landfill is a fully permitted RCRA hazardous waste facility that has a capacity in excess of 10 million cubic yards (Clean Harbors Environmental Services 2016). The Kern facility is not a landfill but rather a recycling facility. The limited volume of concrete anticipated for recycling is well within the capacity of the facility. As such, current landfills considered for the proposed Project have enough capacity to accommodate proposed Project waste and impacts to landfills would be less than significant.

MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the Project have the potential to 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

2.17.1 Thresholds of Significance

This IS considers to what degree the proposed Project would have the potential to: (1) degrade the natural environment, (2) result in cumulatively considerable impacts even if the proposed Project impacts were found to independently contribute at a less considerable level, or (3) contribute a significant adverse effect on human beings.

2.17.2 Discussion and Impacts Evaluation

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?

The proposed Project involves the remediation of impacts associated with the operations of the former Eureka MGP. The proposed Project would require the S/S of impacted media from portions of the proposed Project site that contain wastes from historical MGP operations, excavation and offsite disposal of impacted soil, groundwater monitoring, and the installation of an engineered cap and asphalt pavement layer over affected areas. As such, the proposed Project would not degrade the quality of the environment, but rather would improve current environmental conditions at the proposed Project site.

While a query of the USFWS, CNPS, and CNDDDB databases revealed that several special status species have the potential to occur in the proposed Project vicinity, the proposed Project site has been previously degraded by human disturbance and no natural communities are present onsite. Additionally, no sensitive habitats are located within the proposed Project area. Herbaceous vegetation onsite and trees and shrubs adjacent to the proposed Project site, however, do provide suitable nesting habitat for birds protected under the Migratory Bird Treaty Act and Section 3503.5 of the California FGC.

The implementation of the proposed Project would not interfere substantially with the movement of native resident or migratory fish or wildlife species and, given the urbanized nature of the proposed Project vicinity, it is unlikely that any significant terrestrial wildlife corridors exist in the proposed Project area. The proposed activities would not degrade the quality of the environment, substantially reduce critical habitat or population levels, or threaten to eliminate a biological community.

The proposed Project site has been greatly affected by the development and operation of the former MGP. As such, no archaeological resources or unique paleontological or geologic features have been identified onsite, and two historical structures were found to not qualify as eligible for listing on the NHRP or CRHR and have since been razed. While this does not preclude the existence of unknown prehistoric sites or resources, much of the subsurface has already been disturbed, thus diminishing the probability of encountering significant intact prehistoric archaeological resources. Tribal consultation with the Wiyot Tribe, Bear River Band of Rohnerville Rancheria, and Blue Lake Rancheria has been ongoing since January 2013. Although no Traditional Cultural Resources have been identified, tribal representatives have noted that there are a number of mapped but unconfirmed Wiyot settlements in the vicinity and that the area is generally sensitive for Wiyot sites based on testimony provided by Wiyot informants to early ethnographers of the area. Implementation of the unanticipated discovery measures outlined in Section 2.5 Items (a.) and (b.) address the potential discovery of previously unknown resources within the Project area. In addition, as a result of tribal consultation, PG&E has agreed to

perform cultural resources monitoring during earthwork as mitigation for potential impacts to unknown buried resources, where applicable (e.g. in previously undisturbed natural soils in high sensitivity areas as identified by the tribes and professional archaeologists) as determined in consultation with the tribal representatives prior to construction..

Based on these factors, impacts to the quality of the environment would be beneficial, while impacts to plant and animal communities and prehistoric resources would be less than significant.

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

Level of Impact **Less than Significant**

The City of Eureka is planning to develop the Eureka Waterfront Trail, a segment of the Humboldt Bay Trail, which would run from the Elk River to Arcata. The Eureka Waterfront Trail would be a continuous 6.3-mile-long trail providing an “alternative route from Highway 101 for non-motorized travel through the city,” while linking existing trail segments and the city’s Old Town promenade boardwalk (Humboldt County 2014). Phase B of the Eureka Waterfront Trail is the portion of the trail nearest the proposed Project and would run along Railroad Avenue. It is possible that construction of the trail might coincide with proposed remedial efforts. To avoid potential conflicts or safety risks, PG&E would coordinate phasing, staging, traffic patterns, and general planning with the City. In addition to this planned development, ongoing industrial activities in the immediate area as well as surrounding commercial and residential activities would continue. The proposed Project would contribute to such environmental factors as traffic, noise, air, and GHG emissions. Specifically, impacts associated with the proposed remediation activities, such as short-term noise level increase, increases in traffic, and air emissions would be less than significant and limited in extent and duration so as to avoid adding substantially to any ongoing setting or probable future activities. There would be no measurable impact associated with post-remediation activities such as semiannual groundwater monitoring and annual cap inspections. Based on these factors, this impact would be less than significant.

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

Level of Impact **Less than Significant**

No significant impacts associated with biological resources, agricultural/forestry resources or other land use, air emissions, geologic or other hazards, population/housing, public services, recreation, noise, transportation, or utilities are anticipated. Furthermore, the proposed Project activities would not result in growth-inducing effects. As discussed in Item (a.), remediation activities would improve current environmental conditions at the proposed Project site through the treatment and removal of impacted media from portions of the site, natural attenuation of residual groundwater impacts, and the installation of an engineered cap over affected areas. As such, although the proposed Project would contribute incrementally to several of these environmental resources as noted in this IS, the proposed Project would not have environmental effects that would cause substantial direct or indirect adverse effects on human beings. This impact would be less than significant.

3.0 SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

Table 3-1 lists impacts, identified in Section 2 of this IS as requiring mitigation, and lists the associated mitigation measures required to assure identified impacts are reduced to a less than significant level. Measures presented in Table 3-1 would be implemented during the proposed Project.

Table 3-1 Summary of Project Impacts and Mitigation Measures

Impact	CEQA Checklist Item Requiring Mitigation	Level of Significance before Mitigation	Mitigation	Level of Significance after Mitigation
<i>Biological Resources</i>				
Potential impacts to nesting bird habitat as well as nesting birds protected under the Migratory Bird Treaty Act and Section 3503.5 of the California FGC.	2.4 (a)	Potentially Significant	<p>If proposed clearing and construction activities were to occur during migratory bird nesting season (February 15-August 31), preconstruction surveys for active migratory bird nests would be conducted by a qualified biologist within 14 days of construction initiation to determine the presence of active nests within and surrounding the proposed area of impact.</p> <p>Active nests identified within the vicinity of the proposed Project shall be established as an exclusion zone (no ingress of personnel or equipment). Alternative exclusion zones may be established by the qualified biologist, as necessary. The exclusion zones shall remain in force until all young have fledged or the nest is deemed inactive by the qualified biologist.</p>	Less than Significant

Impact	CEQA Checklist Item Requiring Mitigation	Level of Significance before Mitigation	Mitigation	Level of Significance after Mitigation
<i>Cultural Resources</i>				
Potential adverse impacts to archaeological and historical resources pursuant to §15064.5.	2.5 (a) and (b)	Less than Significant	<p>Although not required to offset potentially significant impacts, as a result of tribal consultation, PG&E has agreed to perform cultural resources monitoring during earthwork as mitigation for potential impacts to unknown buried resources, where applicable (e.g. in previously undisturbed natural soils in high sensitivity areas as identified by the tribes and professional archaeologists) as determined in consultation with the tribal representatives prior to construction.</p> <p><i>The following actions would be taken in the event that any new archeological or historical resources are identified during remediation activities:</i></p> <p>All construction activity within a minimum of 50 feet of the find/feature/site would cease immediately.</p> <p>All remains or materials are to be left in place unless in jeopardy because of proposed Project activities.</p> <p>The area would be secured to prevent any damage or loss of removable objects. If feasible, a fence or other barrier would be erected to demarcate and protect the find.</p> <p>The area would be secured to prevent any damage or loss of removable objects. If feasible, a fence or other barrier would be erected to demarcate and protect the find.</p> <p>A qualified archaeologist would be notified and would visit the discovery site as soon as practicable for identification and evaluation pursuant to PRC Section 21083.2 and 14 CCR Section 15126.4.</p> <p>The archeologist would be notified and once on scene would record the find location and delineate the extent of the find relative to planned proposed Project activities. The consulting archeologist would assess, record, and photograph the find. If the archaeologist determines the artifact is not</p>	<p>Less than Significant</p> <p>[Mitigation measures are not required to reduce impacts to a Less than Significant level. These measures have been developed in coordination with consulting tribes.]</p>

			<p>significant, construction may resume. If the archaeologist determines the artifact is significant, the archaeologist would determine if the artifact can be avoided and, if so, would detail avoidance procedures.</p> <p>Within 48 hours of the find, the archeologist would develop an Action Plan that would include provisions to minimize impacts and, if required, a Data Recovery Plan for recovery of artifacts in accordance with PRC Section 21083.2 and 14 CCR Section 15126.4.</p> <p>Also within 48 hours of the find, the archaeologist would notify the appropriate agency officials. If cultural resources or remains have the potential to be culturally significant to a living Native American Tribe, agency officials would notify the California Native American Heritage Commission.</p> <p>The archeologist would make a recommendation on the NRHP eligibility of the resources and the effect of proposed Project activity on historic properties, if present. A proposed treatment would be developed, in consultation with the appropriate agency officials and consulting parties, to resolve adverse effects, if applicable.</p> <p>Following execution of the prescribed mitigations, construction would be allowed to continue within the affected area.</p>	
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PERSONS CONSULTED

The City of Eureka has consulted with the following entities in the development of this environmental review and related remedial design and studies:

PG&E

Contact: Seng Sam

Interest: Project applicant

Kris Vardas

Interest: Principal Land Planner

ERM

Contact: Heather Balfour

Interest: Project applicant's environmental consultant

North Coast Regional Water Quality Control Board

Contact: Beth Lamb

Interest: Oversight of remedial design and cleanup efforts

City of Eureka Development Services Department

Contact: Kristen M. Goetz

Interest: Issuance of a Coastal Development Permit

North Coast Unified Air Quality Management District

Contact: Winslow Condon

Interest: Issuance of air permits and development of related mitigation measures

Wiyot Tribe

Contact: Tom Torma

Interest: AB52 consultation; Development of acceptable monitoring and communication during proposed remedial cleanup efforts

Activity: The Tribe has provided input with regard to Tribal Cultural Resources (TCR) and suggested mitigations. Consultation is ongoing.

Bear River Band of Rohnerville Rancheria

Contact: Erika Cooper

Interest: AB52 consultation; Development of acceptable monitoring and communication during proposed remedial cleanup efforts

Activity: The Tribe has provided input with regard to TCR and suggested mitigations. Consultation is ongoing.

Blue Lake Rancheria

Contact: Janet Eidsness

Interest: AB52 consultation; Development of acceptable monitoring and communication during proposed remedial cleanup efforts

Activity: The Tribe has provided input with regard to TCR and suggested mitigations. Consultation is ongoing.

Humboldt County Department of Health and Human Services Division of Environmental Health

Contact: Norm Crawford

Interest: Issuance of monitoring well installation permits

City of Eureka Public Works Department

Contact: Justin Boyes, Source Control Supervisor

Interest: Issuance of sewer discharge permit

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*Appendix A
Exhaust Emissions from
Off-Road Heavy Equipment
and Haul Trucks, and
EMFAC On-Road Emission
Factors*

Description	CalEEMod Category	Total # Devices	HP from CalEEMod (User's Guide App. D)	Load Factor from CalEEMod (User's Guide App. D)	Hours of Operation per Device (Total for Project)	Emission Factors ²						Total Project Emissions ⁴												
						CO (g/bhp-hr)	NOx (g/bhp-hr)	PM10 (g/bhp-hr)	PM2.5 (g/bhp-hr)	ROG (g/bhp-hr)	CO2 (g/bhp-hr)	CO (tons)	NOx (tons)	PM10 (tons)	PM2.5 (tons)	ROG (tons)	CO2 (tons)	CO (lb/day)	NOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	CO2 (lb/day)	
Low-Bed Transport ¹	EMFAC T7 HHDT	1			30	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	0.00023	0.00034	0.00005	0.00003	0.00004	0.56	0.00	0.01	0.00	0.00	0.00	9.35	
Asphalt Paver	Pavers	1	126	0.42	80	3.08023	4.87397	0.2422	0.2228	0.4332	506.5401	0.01437	0.02275	0.00113	0.00104	0.00202	2.36	0.24	0.38	0.02	0.02	0.03	39.40	
Vibratory Drum Compactor (Roller)	Rollers	1	81	0.38	160	3.75537	5.80563	0.4275	0.3933	0.6282	508.1987	0.02039	0.03152	0.00232	0.00214	0.00341	2.76	0.34	0.53	0.04	0.04	0.06	45.98	
Dewater Pumps	Pumps	1	84	0.74	480	3.523	4.478	0.325	0.325	0.61	568.299	0.11587	0.14728	0.01069	0.01069	0.02006	18.69	1.93	2.45	0.18	0.18	0.33	311.51	
Man Lift/Extension-Fork	Forklifts	4	89	0.20	240	4.02311	6.22192	0.5203	0.4786	0.7229	505.5833	0.07578	0.11720	0.00980	0.00901	0.01362	9.52	1.26	1.95	0.16	0.15	0.23	158.72	
Concrete pump ³	Pumps	1	84	0.74	480	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³	N/A ³	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Side Booms	Cranes	0	226	0.29	0	2.5822	7.38068	0.3349	0.3081	0.6229	507.1552	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	
Excavators	Excavators	2	163	0.38	720	3.15771	4.08095	0.2008	0.1847	0.3575	506.495	0.31046	0.40123	0.01974	0.01816	0.03515	49.80	5.17	6.69	0.33	0.30	0.59	829.96	
Drilling Machine	Bore/drill rigs	1	206	0.50	80	1.13299	2.9021	0.0852	0.0784	0.1925	502.128	0.01029	0.02636	0.00077	0.00071	0.00175	4.56	0.17	0.44	0.01	0.01	0.03	76.01	
P.U. Trucks ¹	EMFAC LDT	2			192	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	0.00018	0.00072	0.00020	0.00009	0.00002	1.46	0.00	0.01	0.00	0.00	0.00	24.35	
Graders	Graders	1	175	0.41	80	3.91624	8.24966	0.4635	0.4264	0.8097	516.1305	0.02478	0.05220	0.00293	0.00270	0.00512	3.27	0.41	0.87	0.05	0.04	0.09	54.43	
Cranes	Cranes	1	226	0.29	30	2.5822	7.38068	0.3349	0.3081	0.6229	507.1552	0.00560	0.01600	0.00073	0.00067	0.00135	1.10	0.09	0.27	0.01	0.01	0.02	18.32	
Front End Loaders	Tractor/Loader/Backhoe	4	98	0.37	480	3.81146	5.14235	0.3959	0.3643	0.538	511.3456	0.29249	0.39463	0.03038	0.02796	0.04129	39.24	4.87	6.58	0.51	0.47	0.69	654.02	
Mechanic Truck ¹	EMFAC MDT	1			192	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹	0.00008	0.00030	0.00010	0.00004	0.00001	0.73	0.00	0.01	0.00	0.00	0.00	12.15	
												Subtotal	0.87	1.21	0.08	0.07	0.12	134.05	14.51	20.18	1.31	1.22	2.06	2234.19

¹ Assume on-road vehicles travel on site at 10 mph. Emission factors for these vehicles are referenced in the table below.

² Factors obtained from the OFFROAD model, with factors based on the statewide inventory of construction equipment.

³ This equipment is electric, so emissions are 0.

⁴ Pounds per day assumes a basis of 24 weeks, 5 days a week, or 120 days

Haul Trucks	Round Trip Distance Traveled - Paved Road	Distance on Unpaved Road	No. of Round Trips	CO (lb/VMT)	NOx (lb/VMT)	PM10 (lb/VMT)	PM2.5 (lb/VMT)	ROG (lb/VMT)	CO2 (lb/VMT)	CO (tons)	NOx (tons)	PM10 (tons)	PM2.5 (tons)	ROG (tons)	CO2 (tons)	CO (lb/day)	NOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)	ROG (lb/day)	CO2 (lb/day)		
<i>Import</i>																							
Class II/V Cement	320		31	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.00747	0.01137	0.00157	0.00086	0.00147	18.56	0.12	0.19	0.03	0.01	0.02	309.29		
GGBFS	650		31	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01517	0.02310	0.00320	0.00174	0.00300	37.69	0.25	0.39	0.05	0.03	0.05	628.25		
Class N Pozzolan	590		0	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Hot Mix Asphalt	36		426	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01155	0.01758	0.00243	0.00133	0.00228	28.69	0.19	0.29	0.04	0.02	0.04	478.15		
Clean Fill and AB	36		776	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.02104	0.03203	0.00443	0.00242	0.00415	52.26	0.35	0.53	0.07	0.04	0.07	871.00		
<i>Export</i>																							
Recycled Concrete/AC/AB/Rubble	32		88	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.00212	0.00323	0.00045	0.00024	0.00042	5.27	0.04	0.05	0.01	0.00	0.01	87.80		
Highly Impacted Waste (Class I)	1046		192	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.15124	0.23025	0.03186	0.01738	0.02986	375.70	2.52	3.84	0.53	0.29	0.50	6261.65		
Impacted Waste (Class II)	568		0	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.00000	0.00000	0.00000	0.00000	0.00000	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Wood Waste	632		35	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01666	0.02536	0.00351	0.00191	0.00329	41.38	0.28	0.42	0.06	0.03	0.05	689.67		
<i>Mobilization/Demobilization</i>																							
Equipment Delivery	630		30	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01423	0.02167	0.00300	0.00164	0.00281	35.36	0.24	0.36	0.05	0.03	0.05	589.27		
Fabric Structure Delivery/Removal	4,734		4	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01426	0.02171	0.00300	0.00164	0.00282	35.42	0.24	0.36	0.05	0.03	0.05	590.40		
Equipment Removal	630		30	0.001506	0.002293	0.000317	0.000173	0.000297	3.741426	0.01423	0.02167	0.00300	0.00164	0.00281	35.36	0.24	0.36	0.05	0.03	0.05	589.27		
<i>EMFAC Data</i>																							
LDT				0.000093	0.000374	0.000105	0.000045	0.000012	0.76098														
MDT				0.000080	0.000313	0.000105	0.000045	0.000010	0.75913														
T7				0.001506	0.002293	0.000317	0.000173	0.000297	3.74143														
											Subtotal	0.27	0.41	0.06	0.03	0.05	665.69	4.47	6.80	0.94	0.51	0.88	11094.76
											TOTAL	1.14	1.62	0.14	0.10	0.18	799.74	18.97	26.97	2.26	1.73	2.95	13328.95
											North Coast Unified AQMD CEQA Thresholds	100	40	15	10	40	N/A	500	50	80	50	50	N/A

Appendix B
Biological Database
Results

SCIENTIFIC_COMMON_ELEMENT	OCC_NUM	MAMPNDX	EONDX	KEY_QUAD	KEY_QUAD	KEY_COUN	ACCURACY	PRESENCE	OCC_RANK	SENSITIVE	SITE_DATE	ELM_DATE	OWNER_M	Federal	St:State	Stat:GLOBAL	R:STATE	RAN	RARE	PLA	Other	Stat	AVL	CODE
Abrobia on pink sand-vPDNYC010	36	36525	31522	4012482	Tyee City	HUM	non-specific	Presumed IU	N		19820923	19820923	USFWS-HU	None	None	G4G5T2	S1	1B.1				BLM_5		10301
Abrobia on pink sand-vPDNYC010	15	6815	20879	4012472	Eureka	HUM	non-specific	Presumed IB	N		20041010	20041010	PVT; MANI	None	None	G4G5T2	S1	1B.1				BLM_5		10301
Abrobia on pink sand-vPDNYC010	34	6790	20860	4012472	Eureka	HUM	1/5 mile	Presumed IU	N		1983XXXX	1983XXXX	UNKNOW	None	None	G4G5T2	S1	1B.1				BLM_5		10501
Abrobia on pink sand-vPDNYC010	24	6785	14147	4012472	Eureka	HUM	specific are	Presumed IB	N		20070907	20070907	PVT; CITY C	None	None	G4G5T2	S1	1B.1				BLM_5		10201
Abrobia on pink sand-vPDNYC010	28	41383	41383	4012472	Eureka	HUM	non-specific	Presumed IB	N		2004XXXX	2004XXXX	PVT	None	None	G4G5T2	S1	1B.1				BLM_5		10301
Abrobia on pink sand-vPDNYC010	16	6775	20878	4012462	Fields Land	HUM	specific are	Presumed IB	N		19870715	19870715	HUMBOLDT	None	None	G4G5T2	S1	1B.1				BLM_5		10201
Abrobia on pink sand-vPDNYC010	25	6827	20866	4012472	Eureka	HUM	specific are	Presumed IC	N		19990728	19990728	PVT; BLM	None	None	G4G5T2	S1	1B.1				BLM_5		10201
Abrobia on pink sand-vPDNYC010	33	37990	20862	4012482	Tyee City	HUM	80 meters	Presumed IB	N		20010625	20010625	USFWS-HU	None	None	G4G5T2	S1	1B.1				BLM_5		10101
Abrobia on pink sand-vPDNYC010	39	41385	41385	4012482	Tyee City	HUM	80 meters	Possibly ExtX	N		19990715	19990905	USFWS-HU	None	None	G4G5T2	S1	1B.1				BLM_5		10101
Abrobia on pink sand-vPDNYC010	40	41384	41384	4012472	Eureka	HUM	80 meters	Presumed ID	N		20110923	20110923	DHS-COAST	None	None	G4G5T2	S1	1B.1				BLM_5		10101
Abrobia on pink sand-vPDNYC010	38	41382	41382	4012462	Fields Land	HUM	specific are	Presumed IB	N		20140512	20140512	DFG; PVT-P	None	None	G4G5T2	S1	1B.1				BLM_5		10201
Abrobia on pink sand-vPDNYC010	26	6823	20864	4012472	Eureka	HUM	specific are	Presumed IB	N		19940524	19940524	BLM	None	None	G4G5T2	S1	1B.1				BLM_5		10201
Accipiter st sharp-shinr ABNKC120	18	70062	70919	4012462	Fields Land	HUM	80 meters	Presumed IC	N		2003XXXX	2003XXXX	PVT-PACIFI	None	None	G5	S4					CDFW_WL		20101
Accipiter st sharp-shinr ABNKC120	19	70063	70920	4012462	Fields Land	HUM	80 meters	Presumed IC	N		20050826	20050826	PVT-PACIFI	None	None	G5	S4					CDFW_WL		20101
Acipenser r green sturg AFCAA010	1	72341	73304	4012472	Eureka	HUM	non-specific	Presumed IU	N		2007XXXX	2007XXXX	UNKNOW	Threatene	None	G3	S1S2					AFS_VU; CT		20302
Arbormus white-foots AMAFF230	3	24823	6386	4012482	Tyee City	HUM	80 meters	Presumed IU	N		19831213	19831213	USFWS-HU	None	None	G3G4	S2S3					CDFW_SSC		20101
Arbormus Sonoma tre AMAFF230	61	41080	41080	4012462	Fields Land	HUM	4/5 mile	Presumed IU	N		19880101	19880101	UNKNOW	None	None	G3	S3					CDFW_SSC		20801
Arbormus Sonoma tre AMAFF230	63	41082	41082	4012461	McWhinnie	HUM	non-specific	Presumed IU	N		19920203	19920203	UNKNOW	None	None	G3	S3					CDFW_SSC		20301
Arbormus Sonoma tre AMAFF230	58	41077	41077	4012471	Arcata South	HUM	non-specific	Presumed IU	N		19810510	19810510	UNKNOW	None	None	G3	S3					CDFW_SSC		20301
Arbormus Sonoma tre AMAFF230	59	41078	41078	4012471	Arcata South	HUM	non-specific	Presumed IU	N		19690213	19690213	UNKNOW	None	None	G3	S3					CDFW_SSC		20301
Arbormus Sonoma tre AMAFF230	60	41079	41079	4012471	Arcata South	HUM	non-specific	Presumed IU	N		19691217	19691217	UNKNOW	None	None	G3	S3					CDFW_SSC		20301
Ardea alba great egret ABNGA040	21	26359	4113	4012462	Fields Land	HUM	1/5 mile	Presumed IU	N		1993XXXX	1993XXXX	PVT	None	None	G5	S4					CD F; IUC		20502
Ardea alba great egret ABNGA040	24	40583	35588	4012472	Eureka	HUM	non-specific	Presumed IU	N		19980529	19970616	PVT	None	None	G5	S4					CD F; IUC		20304
Ardea alba great egret ABNGA040	8	6817	25941	4012472	Eureka	HUM	1/10 mile	Presumed IU	N		19980525	19980525	CITY OF EU	None	None	G5	S4					CD F; IUC		20404
Ardea alba great egret ABNGA040	22	26358	4118	4012462	Fields Land	HUM	80 meters	Presumed IA	N		19980430	19980430	PVT	None	None	G5	S4					CD F; IUC		20104
Ardea hero great blue IABNGA040	52	26359	4114	4012462	Fields Land	HUM	1/5 mile	Presumed IU	N		1993XXXX	1993XXXX	PVT	None	None	G5	S4					CD F; IUC		20502
Ardea hero great blue IABNGA040	59	40583	35587	4012472	Eureka	HUM	non-specific	Presumed IU	N		19980529	19960710	PVT	None	None	G5	S4					CD F; IUC		20304
Ardea hero great blue IABNGA040	81	64218	64313	4012481	Arcata North	HUM	1/10 mile	Presumed IA	N		2005XXXX	2003XXXX	PVT	None	None	G5	S4					CD F; IUC		20402
Ardea hero great blue IABNGA040	15	6817	25962	4012472	Eureka	HUM	1/10 mile	Presumed IU	N		19980525	19980525	CITY OF EU	None	None	G5	S4					CD F; IUC		20104
Ardea hero great blue IABNGA040	84	64230	64325	4012471	Arcata South	HUM	80 meters	Presumed IA	N		2005XXXX	2003XXXX	PVT; NRM	None	None	G5	S4					CD F; IUC		20404
Ardea hero great blue IABNGA040	53	26358	4115	4012462	Fields Land	HUM	80 meters	Presumed IA	N		19980430	19980430	PVT	None	None	G5	S4					CD F; IUC		20104
Ascapus t Pacific taile AAABA010	204	79728	80721	4012471	Arcata South	HUM	non-specific	Presumed IU	N		19620401	19620401	UNKNOW	None	None	G4	S3S4					CDFW_SSC		20301
Ascapus t Pacific taile AAABA010	2	21636	14115	4012378	Korbel	HUM	non-specific	Presumed IU	N		19910217	19910217	PVT-GREEN	None	None	G4	S3S4					CDFW_SSC		20301
Ascapus t Pacific taile AAABA010	6	83707	84731	4012462	Fields Land	HUM	non-specific	Presumed IU	N		19910520	19910520	PVT-SIMPS	None	None	G4	S3S4					CDFW_SSC		20301
Astragalus coastal mar PDFAB07F	23	45003	49680	4012472	Eureka	HUM	3/5 mile	Presumed IU	N		20030912	XXXXXXX	UNKNOW	None	None	G2T2	S2	1B.2				BLM_5; SB		10703
Bombus ca obscure bu IHYM2438	26	96139	97295	4012471	Arcata South	HUM	1 mile	Presumed IU	N		19820614	19820614	UNKNOW	None	None	G4?	S1S2					IUCN_VU		20902
Bombus ca obscure bu IHYM2438	30	96166	97327	4012378	Korbel	HUM	1 mile	Presumed IU	N		19600619	19600619	UNKNOW	None	None	G4?	S1S2					IUCN_VU		20902
Bombus ca obscure bu IHYM2438	44	6844	97370	4012482	Tyee City	HUM	1 mile	Presumed IU	N		1978XXXX	1978XXXX	USFWS-HU	None	None	G4?	S1S2					IUCN_VU		20904
Bombus ca obscure bu IHYM2438	27	32648	97297	4012472	Eureka	HUM	1 mile	Presumed IU	N		19620405	19620405	UNKNOW	None	None	G4?	S1S2					IUCN_VU		20909
Bombus ca obscure bu IHYM2438	25	96098	97253	4012482	Tyee City	HUM	4/5 mile	Presumed IU	N		19760627	19760627	HUM COU	None	None	G4?	S1S2					IUCN_VU		20802
Bombus ca obscure bu IHYM2438	28	96164	97321	4012462	Fields Land	HUM	3/5 mile	Presumed IU	N		19750824	19750824	DFG-SOUTH	None	None	G4?	S1S2					IUCN_VU		20701
Bombus ca obscure bu IHYM2438	29	96165	97325	4012462	Fields Land	HUM	3/5 mile	Presumed IU	N		19680610	19680610	UNKNOW	None	None	G4?	S1S2					IUCN_VU		20701
Bombus oc western bu IHYM2425	39	98086	99491	4012472	Eureka	HUM	non-specific	Presumed IU	N		19930805	19930805	PVT; MANI	None	None	G2G3	S1					USFS_S; XE		20301
Bombus oc western bu IHYM2425	38	96139	99460	4012471	Arcata South	HUM	1 mile	Presumed IU	N		19760624	19760624	UNKNOW	None	None	G2G3	S1					USFS_S; XE		20902
Bombus oc western bu IHYM2425	43	96166	99496	4012378	Korbel	HUM	1 mile	Presumed IU	N		19600619	19600619	UNKNOW	None	None	G2G3	S1					USFS_S; XE		20902
Bombus oc western bu IHYM2425	37	6844	99452	4012482	Tyee City	HUM	1 mile	Presumed IU	N		19800812	19800812	USFWS-HU	None	None	G2G3	S1					USFS_S; XE		20904
Bombus oc western bu IHYM2425	44	98091	99497	4012462	Fields Land	HUM	1 mile	Presumed IU	N		19930806	19930806	UNKNOW	None	None	G2G3	S1					USFS_S; XE		20909
Bombus oc western bu IHYM2425	41	3648	99494	4012472	Eureka	HUM	1 mile	Presumed IU	N		19710531	19710531	UNKNOW	None	None	G2G3	S1					USFS_S; XE		20909
Bombus oc western bu IHYM2425	36	96098	99449	4012482	Tyee City	HUM	4/5 mile	Presumed IU	N		19820617	19820617	HUM COU	None	None	G2G3	S1					USFS_S; XE		20802
Bombus oc western bu IHYM2425	40	98088	99492	4012472	Eureka	HUM	4/5 mile	Presumed IU	N		19760730	19760730	UNKNOW	None	None	G2G3	S1					USFS_S; XE		20801
Bryoria spir twisted hor NLTST546	5	92757	93915	4012472	Eureka	HUM	4/5 mile	Presumed IU	N		19740627	19740627	UNKNOW	None	None	G3	S1S2	1B.1						10801
Bryoria spir twisted hor NLTST546	7	92759	93917	4012482	Tyee City	HUM	1/10 mile	Presumed IU	N		20010324	20010324	USFWS-HU	None	None	G3	S1S2	1B.1						10401
Bryoria spir twisted hor NLTST546	6	92758	93916	4012472	Eureka	HUM	80 meters	Presumed IU	N		20021121	20021121	BLM	None	None	G3	S1S2	1B.1						10101
Cardamine seaside bitt PDBRA0K0	2	85693	86920	4012471	Arcata South	HUM	1 mile	Presumed IU	N		19640508	19640508	UNKNOW	None	None	G5	S1	2B.1				</		

SCIENTIFIC_COMMON_ELEMENT	OCC_NUMIMPANDX	EONDX	KEY_QUAD	KEY_QUAD	KEY_COUN	ACCURACY	PRESENCE	OCC_RANK	SENSITIVE	SITE_DATE	ELM_DATE	OWNER_M	Federal	St:State	Stat:GLOBAL	Ru:STATE	RAN	RARE	PLA	Other	Stat	AVL	CODE
Castilleja ai Humboldt fPDS	15	6893	17669	4012471	Arcata	South	HUM	non	specific	Presumed	IB	N	20030717	20030717	PVT	None	None	G4T2	S2	1B.2	BLM_5		10301
Castilleja ai Humboldt fPDS	23	23051	7799	4012463	Cannibal	Isl	HUM	specific	are	Presumed	IA	N	19910730	19910730	PVT-PACIFI	None	None	G4T2	S2	1B.2	BLM_5		10202
Castilleja ai Humboldt fPDS	33	61449	61485	4012471	Arcata	South	HUM	80	meters	Presumed	IC	N	20040519	20040519	UNKNOWNN	None	None	G4T2	S2	1B.2	BLM_5		10103
Castilleja lli Oregon coaPDS	18	32648	44722	4012472	Eureka		HUM	1	mile	Presumed	IU	N	19180428	19180428	UNKNOWNN	None	None	G4G5T4	S3	2B.2			10909
Castilleja lli Oregon coaPDS	17	6787	44721	4012462	Fields	Land	HUM	1	mile	Presumed	IU	N	19260618	19260618	UNKNOWNN	None	None	G4G5T4	S3	2B.2			10903
Castilleja lli Oregon coaPDS	16	44720	44720	4012463	Cannibal	Isl	HUM	80	meters	Presumed	IU	N	20140512	20140512	UNKNOWNN	None	None	G4G5T4	S3	2B.2			10101
Charadrius western sn	81	6844	25734	4012482	Tyee	City	HUM	1	mile	Presumed	IU	N	1978XXXX	1978XXXX	USFWS-HU	Threatenec	None	G3T3	S2			CDFW_SSC	20904
Charadrius western sn	78	6770	25739	4012462	Fields	Land	HUM	non	specific	Presumed	IU	N	1977XXXX	1977XXXX	PVT; OTHEI	Threatenec	None	G3T3	S2			CDFW_SSC	20902
Charadrius western sn	80	6786	5678	4012472	Eureka		HUM	specific	are	Presumed	IU	N	1978XXXX	1978XXXX	PVT; OTHEI	Threatenec	None	G3T3	S2			CDFW_SSC	20201
Charadrius western sn	79	6788	25736	4012472	Eureka		HUM	non	specific	Presumed	IU	N	1977XXXX	1977XXXX	UNKNOWNN	Threatenec	None	G3T3	S2			CDFW_SSC	20301
Chloropyro Point	16	6774	17540	4012462	Fields	Land	HUM	1	mile	Presumed	IU	N	19120616	19120616	UNKNOWNN	None	None	G4T7T2	S2	1B.2	BLM_5		10901
Chloropyro Point	37	6850	26952	4012482	Tyee	City	HUM	specific	are	Presumed	IB	N	20100630	20100630	TNC; PVT; I	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Chloropyro Point	32	6919	7797	4012471	Arcata	South	HUM	specific	are	Presumed	IB	N	20020719	20020719	CITY OF AR	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Chloropyro Point	27	6838	22467	4012472	Eureka		HUM	specific	are	Presumed	IA	N	20140612	20140612	USFWS-HU	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Chloropyro Point	80	94060	95184	4012472	Eureka		POS	non	specific	Presumed	IU	N	19760616	19760616	UNKNOWNN	None	None	G4T7T2	S2	1B.2	BLM_5		10301
Chloropyro Point	82	94062	95186	4012482	Tyee	City	HUM	1/5	mile	Presumed	IB	N	20020627	20020627	HUM COUN	None	None	G4T7T2	S2	1B.2	BLM_5		10501
Chloropyro Point	38	23572	8193	4012472	Eureka		POS	specific	are	Presumed	IB	N	20140816	20140816	CITY OF EU	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Chloropyro Point	81	94061	95185	4012472	Eureka		HUM	specific	are	Presumed	IC	N	20020620	20020620	CITY OF EU	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Chloropyro Point	40	23051	21609	4012463	Cannibal	Isl	HUM	specific	are	Presumed	IA	N	20140512	20140512	PVT-PACIFI	None	None	G4T7T2	S2	1B.2	BLM_5		10202
Chloropyro Point	39	23041	22462	4012472	Eureka		HUM	specific	are	Presumed	IB	N	19870715	19870715	CITY OF EU	None	None	G4T7T2	S2	1B.2	BLM_5		10202
Chloropyro Point	31	6824	22468	4012472	Eureka		HUM	80	meters	Presumed	ID	N	19870618	19870618	UNKNOWNN	None	None	G4T7T2	S2	1B.2	BLM_5		10101
Chloropyro Point	79	94059	95183	4012471	Arcata	South	HUM	80	meters	Presumed	IB	N	20000707	20000707	PVT	None	None	G4T7T2	S2	1B.2	BLM_5		10101
Chloropyro Point	15	6776	17543	4012462	Fields	Land	HUM	80	meters	Presumed	IB	N	20060821	20060821	PVT	None	None	G4T7T2	S2	1B.2	BLM_5		10101
Chloropyro Point	29	6811	24268	4012472	Eureka		HUM	specific	are	Presumed	IU	N	20010708	20010708	PVT	None	None	G4T7T2	S2	1B.2	BLM_5		10201
Cicidela h sandy beac	28	60045	60081	4012472	Eureka		HUM	non	specific	Extirpated	X	N	1905XXXX	1905XXXX	UNKNOWNN	None	None	G5T2	S1				20301
Coastal Ter Coastal Ter	8	30257	2272	4012463	Cannibal	Isl	HUM	non	specific	Presumed	IB	N	19930702	19930702	DFG-TABLE	None	None	G2	S2.1				30201
Corynorhin Townsend	568	93151	94298	4012461	McWhinne		HUM	1	mile	Presumed	IU	N	19490902	19490902	UNKNOWNN	None	Candidate	G3G4	S2			BLM_5; CD	20901
Corynorhin Townsend	571	93153	94301	4012471	Arcata	South	HUM	1/5	mile	Presumed	IU	N	19981002	19981002	UNKNOWNN	None	Candidate	G3G4	S2			BLM_5; CD	20501
Egretta thusnowy egre	9	40583	35590	4012472	Eureka		HUM	non	specific	Presumed	IU	N	19980529	19970616	PVT	None	None	G5	S4			IUCN_LC	20304
Egretta thusnowy egre	5	6817	3635	4012472	Eureka		HUM	1/10	mile	Presumed	IB	N	19980525	19980525	CITY OF EU	None	None	G5	S4			IUCN_LC	20404
Egretta thusnowy egre	6	26358	4116	4012462	Fields	Land	HUM	80	meters	Presumed	IA	N	19980430	19930521	PVT	None	None	G5	S4			IUCN_LC	20104
Emys marn western po	1238	83795	84817	4012471	Arcata	South	HUM	80	meters	Presumed	IC	N	20080508	20080508	UNKNOWNN	None	None	G3G4	S3			BLM_5; CD	20104
Emys marn western po	743	70683	71592	4012462	Fields	Land	HUM	80	meters	Presumed	IU	N	20060601	20060601	PVT-PACIFI	None	None	G3G4	S3			BLM_5; CD	20101
Emys marn western po	742	70682	71591	4012461	McWhinne		HUM	80	meters	Presumed	IU	N	20060601	20060601	PVT-PACIFI	None	None	G3G4	S3			BLM_5; CD	20101
Erysimum i Menzies	13	88348	5679	4012472	Eureka		HUM	specific	are	Presumed	IB	N	20100511	20100511	PVT; BLM; E	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10201
Erysimum i Menzies	10	6841	7256	4012482	Tyee	City	HUM	specific	are	Presumed	IA	N	19980614	19980614	USFWS-HU	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10201
Erysimum i Menzies	11	23680	7254	4012472	Eureka		HUM	specific	are	Presumed	IA	N	200405XX	200405XX	USFWS-HU	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10201
Erysimum i Menzies	12	6821	7255	4012472	Eureka		HUM	specific	are	Presumed	IB	N	2009XXXX	2009XXXX	PVT; MANI	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10201
Erysimum i Menzies	15	23041	72450	4012472	Eureka		HUM	specific	are	Presumed	IC	N	20040408	20040408	CITY OF EU	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10201
Erysimum i Menzies	14	23571	7938	4012463	Cannibal	Isl	HUM	80	meters	Presumed	ID	N	2006XXXX	2006XXXX	PVT-TEXAC	Endangerer	Endangerer	G1	S1	1B.1		SB_RSABG	10102
Erythronium coast faw	13	32648	47185	4012472	Eureka		HUM	1	mile	Presumed	IU	N	19180504	19180504	UNKNOWNN	None	None	G4	S3	2B.2			10909
Erythronium coast faw	143	98331	99740	4012378	Korbel		HUM	80	meters	Presumed	IB	N	20140403	20140403	PVT-GREEN	None	None	G4	S3	2B.2			10101
Eucyclogob tidewater	6	6914	28575	4012471	Arcata	South	HUM	non	specific	Presumed	IU	N	2006XXXX	2006XXXX	CITY OF EU	Endangerer	None	G3	S3			AFS_EN; CC	20301
Eucyclogob tidewater	119	81225	82215	4012472	Eureka		HUM	2/5	mile	Presumed	IU	N	20060828	20060828	UNKNOWNN	Endangerer	None	G3	S3			AFS_EN; CC	20601
Eucyclogob tidewater	120	81226	82216	4012471	Arcata	South	HUM	non	specific	Presumed	IU	N	2006XXXX	2006XXXX	UNKNOWNN	Endangerer	None	G3	S3			AFS_EN; CC	20301
Fissidens p minute	18	92900	94049	4012471	Arcata	South	HUM	3/5	mile	Presumed	IU	N	19670923	19670923	UNKNOWNN	None	None	G3T	S2	1B.2		USFS	5
Fissidens p minute	3	45403	45403	4012471	Arcata	South	HUM	non	specific	Presumed	IU	N	19830501	19830501	CITY OF AR	None	None	G3T	S2	1B.2		USFS	5
Fissidens p minute	8	70721	71634	4012481	Arcata	Nori	HUM	non	specific	Presumed	IU	N	19950208	19950208	CITY OF AR	None	None	G3T	S2	1B.2		USFS	5
Gilia capita Pacific	13	35011	52133	4012472	Eureka		HUM	1	mile	Presumed	IU	N	19050611	19050611	UNKNOWNN	None	None	G5T3T4	S2	1B.2			10902
Gilia millef dark-eyed	24	54365	54365	4012472	Eureka		HUM	2/5	mile	Presumed	IU	N	19970605	19970605	UNKNOWNN	None	None	G2	S2	1B.2		BLM_5	10601
Gilia millef dark-eyed	25	54366	54366	4012472	Eureka		HUM	specific	are	Presumed	IC	N	19980610	19980610	CITY OF EU	None	None	G2	S2	1B.2		BLM_5	10202
Gilia millef dark-eyed	26	54368	54368	4012482	Tyee	City	HUM	specific	are	Presumed	IA	N	19980614	19980614	USFWS-HU	None	None	G2	S2	1B.2		BLM_5	10201
Gilia millef dark-eyed	23	54364	54364	4012472	Eureka		HUM	specific	are	Presumed	IB	N	200304XX	200304XX	PVT-PGE; U	None	None	G2	S2	1B.2		BLM_5	10201
Gilia millef dark-eyed	32	71739	72635	4012472	Eureka		HUM	specific	are	Presumed	IB	N	200304XX	200304XX	PVT-PGE; U	None	None	G2	S2	1B.2		BLM_5	10201
Gilia millef dark-eyed	22	71737	54363	4012472	Eureka		HUM	specific	are	Presumed	IB	N	200304XX	200304XX	PVT-PGE; U	None	None	G2	S2	1B.2		BLM_5	10201
Haliaeetus bald eagle	250	64209	64304	4012462	Fields	Land	HUM	80	meters	Presumed	IA	N	20050										

SCIENTIFIC_COMMON_ELEMENT	OCC_NUMIMAPNDX	EONDX	KEY_QUAD	KEY_QUAD_KEY	COUN	ACCURACY	PRESENCE	OCC_RANK	SENSITIVE	SITE_DATE	ELM_DATE	OWNER_M	Federal	St:State	Stat:GLOBAL	Ru:STATE	RARARE_PLA	Other	Stat	AVLCODE	
Pandion ha osprey	ABNKC010	290	39598	34600	4012461	McWhinnie HUM	80 meters	Presumed IU	N	19970722	XXXXXXX	PVT-PACIF	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	252	39408	34410	4012462	Fields Land HUM	80 meters	Presumed IA	N	19980625	XXXXXXX	PVT-WESTE	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	261	39444	34446	4012461	McWhinnie HUM	80 meters	Presumed IU	N	19970722	XXXXXXX	PVT-PACIF	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	260	39443	34445	4012461	McWhinnie HUM	80 meters	Presumed IU	N	19970722	19970722	PVT-PACIF	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	321	41545	41545	4012461	McWhinnie HUM	80 meters	Presumed IA	N	19980812	19980812	PVT-PACIF	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	264	39470	34472	4012471	Arcata South HUM	80 meters	Presumed IB	N	1998XXXX	1998XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	248	39396	34398	4012462	Fields Land HUM	80 meters	Presumed ID	N	19970730	XXXXXXX	PVT-WESTE	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	249	39397	34399	4012462	Fields Land HUM	80 meters	Presumed IB	N	19980625	XXXXXXX	PVT-WESTE	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	177	33386	29340	4012471	Arcata South HUM	80 meters	Presumed IB	N	19960328	19960328	PVT-GREEN	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	101	25265	17840	4012471	Arcata South HUM	80 meters	Presumed IU	N	19930407	19930407	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	102	25266	24356	4012471	Arcata South HUM	80 meters	Presumed IU	N	19930625	1983XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	104	25268	12571	4012471	Arcata South HUM	80 meters	Presumed IU	N	19950501	19950501	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	103	25267	12930	4012471	Arcata South HUM	80 meters	Presumed IB	N	19980521	19980521	UNKNOW	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	237	39366	34368	4012462	Fields Land HUM	80 meters	Presumed IC	N	19970805	19970324	PVT-GREEN	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	107	25269	6918	4012471	Arcata South HUM	80 meters	Presumed IU	N	1998XXXX	1998XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	108	25264	5960	4012472	Eureka HUM	80 meters	Presumed IA	N	1998XXXX	1998XXXX	UNKNOW	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	105	25271	12569	4012471	Arcata South HUM	80 meters	Presumed IB	N	19980730	1998XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	109	25263	5959	4012472	Eureka HUM	80 meters	Presumed IA	N	19980604	19980604	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	106	25270	17649	4012471	Arcata South HUM	80 meters	Presumed IU	N	19930407	19930407	UNKNOW	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	175	33266	2609	4012472	Eureka HUM	80 meters	Presumed IB	N	19950609	19950609	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	110	25262	5958	4012472	Eureka HUM	80 meters	Presumed IU	N	19950609	19950609	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	174	33265	2610	4012472	Eureka HUM	80 meters	Presumed IB	N	19950622	19950622	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	352	53525	53525	4012462	Fields Land HUM	80 meters	Presumed IU	N	1998XXXX	1998XXXX	UNKNOW	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	86	25164	591	4012462	Fields Land HUM	80 meters	Presumed IU	N	1995XXXX	1995XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	90	25167	12992	4012462	Fields Land HUM	80 meters	Presumed IU	N	1998XXXX	1998XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	87	25165	12993	4012462	Fields Land HUM	80 meters	Presumed IA	N	19980429	19980429	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	85	25163	26160	4012462	Fields Land HUM	80 meters	Presumed IB	N	19980430	19980430	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	89	25171	7885	4012462	Fields Land HUM	80 meters	Presumed IB	N	19980625	19930514	PVT-WESTE	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	88	25166	12995	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	91	25168	24412	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	93	25169	24407	4012462	Fields Land HUM	80 meters	Presumed IU	N	1997XXXX	1983XXXX	PVT-PACIF	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	92	25170	7884	4012462	Fields Land HUM	80 meters	Presumed IA	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	94	25172	17007	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	95	25173	17009	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	96	25174	25488	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	19930514	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	97	25175	25956	4012462	Fields Land HUM	80 meters	Presumed IU	N	19930514	1989XXXX	PVT	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	185	33486	19122	4012461	McWhinnie HUM	80 meters	Presumed IU	N	1996XXXX	1996XXXX	PVT-GREEN	None	None	G5	S4			CDF_S	20101	
Pandion ha osprey	ABNKC010	178	33387	29260	4012462	Fields Land HUM	80 meters	Presumed IC	N	19970805	19970805	PVT-GREEN	None	None	G5	S4			CDF_S	20101	
Phalacrocorax auritus	ABNFD010	9	6872	27378	4012471	Arcata South HUM	1/5 mile	Presumed IU	N	19980619	19880619	UNKNOW	None	None	G5	S4			CDFW_WL	20501	
Rallus longicaudus	ABNME05C	56	6814	25838	4012472	Eureka HUM	non-specific	Extirpated X	N	1932XXXX	1932XXXX	CITY OF EU	Endangerer	Endangerer	G5T1	S1			CDFW_FP	20301	
Rallus longicaudus	ABNME05C	55	6861	25840	4012482	Tye City HUM	1/5 mile	Extirpated X	N	1932XXXX	1932XXXX	UNKNOW	Endangerer	Endangerer	G5T1	S1			CDFW_FP	20301	
Rana aurora	northern reAAABH010	28	36593	31590	4012461	McWhinnie HUM	4/5 mile	Presumed IU	N	1994XXXX	1994XXXX	PVT-SCOTI	None	None	G4	S3			CDFW_SSC	20801	
Rana aurora	northern reAAABH010	27	36589	31586	4012461	McWhinnie HUM	non-specific	Presumed IU	N	1994XXXX	1994XXXX	PVT	None	None	G4	S3			CDFW_SSC	20301	
Rana aurora	northern reAAABH010	15	30163	22873	4012481	Arcata North HUM	1/5 mile	Presumed IU	N	19900422	19900422	PVT-GREEN	None	None	G4	S3			CDFW_SSC	20501	
Rana aurora	northern reAAABH010	14	30189	18843	4012462	Fields Land HUM	1/5 mile	Presumed IU	N	19900608	19900608	PVT-GREEN	None	None	G4	S3			CDFW_SSC	20501	
Rana aurora	northern reAAABH010	30	36664	31661	4012482	Tye City HUM	1/10 mile	Presumed IU	N	1988XXXX	1988XXXX	USFWS-HU	None	None	G4	S3			CDFW_SSC	20401	
Rana aurora	northern reAAABH010	2	24554	6499	4012462	Fields Land HUM	non-specific	Presumed IA	N	19910328	19910328	PVT	None	None	G4	S3			CDFW_SSC	20301	
Rana aurora	northern reAAABH010	83	74494	75505	4012471	Arcata South HUM	80 meters	Presumed IU	N	19981007	19981007	UNKNOW	None	None	G4	S3			CDFW_SSC	20101	
Rana aurora	northern reAAABH010	40	74088	75080	4012462	Fields Land HUM	80 meters	Presumed ID	N	20060428	20060428	PVT-PGE	None	None	G4	S3			CDFW_SSC	20101	
Rana boylei	foothill yellAAABH010	600	74345	75367	4012471	Arcata South HUM	80 meters	Presumed IB	N	20071009	20071009	CITY OF AR	None	None	G3	S3			BLM_S	CD	20101
Rhyacotriton	southern tcAAA0102	85	24055	7097	4012481	Arcata North HUM	2/5 mile	Presumed IU	N	XXXXXXX	XXXXXXX	CITY OF AR	None	None	G3G4	S2S3			CDFW_SSC	20601	
Rhyacotriton	southern tcAAA0102	164	47880	47880	4012471	Arcata South HUM	80 meters	Presumed IC	N	20020314	20020314	PVT-PACIF	None	None	G3G4	S2S3			CDFW_SSC	20101	
Riparia ripa	bank swall ABPAU080	298	84459	85487	4012481	Arcata North HUM	1 mile	Presumed IU	N	19460620	19460620	UNKNOW	None	Threatenec	G5	S2			BLM_S	IUC	20901
Riparia ripa	bank swall ABPAU080	108	32648	85385	4012472	Eureka HUM	1 mile	Presumed IU	N	19406116	19406116	UNKNOW	None	Threatenec	G5	S2			BLM_S	IUC	20909
Sidalcea m:maple-leav	PDMAL110	29	32648	9831	4012472	Eureka HUM	1 mile	Presumed IU	N	19210522	19210522	UNKNOW	None	None	G3	S3	4.2			10909	
Sidalcea m:maple-leav	PDMAL110	105	46326	46326	4012472	Eureka HUM	non-specific	Presumed IA	N	20010618	20010618	PVT	None	None	G3	S3	4.2			10301	
Sidalcea m:maple-leav	PDMAL110	89	45292	45292	4012471	Arcata South HUM	specific are	Presumed IC	N	19990608	19990608	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	85	45281	45281	4012471	Arcata South HUM	non-specific	Presumed ID	N	20000618	20000618	PVT-PACIF	None	None	G3	S3	4.2			10301	
Sidalcea m:maple-leav	PDMAL110	104	46324	46324	4012471	Arcata South HUM	non-specific	Presumed IA	N	20010618	20010618	PVT-GREEN	None	None	G3	S3	4.2			10301	
Sidalcea m:maple-leav	PDMAL110	91	45294	45294	4012471	Arcata South HUM	specific are	Presumed ID	N	20010529	20010529	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	103	46321	46321	4012462	Fields Land HUM	specific are	Presumed IB	N	20010518	20010518	PVT-GREEN	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	81	45278	45278	4012461	McWhinnie HUM	specific are	Presumed IC	N	20010116	20010116	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	144	49904	49904	4012462	Fields Land HUM	80 meters	Presumed ID	N	20020603	20020603	PVT-GREEN	None	None	G3	S3	4.2			10101	
Sidalcea m:maple-leav	PDMAL110	83	45275	45275	4012471	Arcata South HUM	specific are	Presumed IC	N	20000809	20000809	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	102	46322	46322	4012461	McWhinnie HUM	specific are	Presumed IB	N	20010814	20010814	PVT-GREEN	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	28	35185	29022	4012471	Arcata South HUM	specific are	Presumed IU	N	20010529	20010529	UNKNOW	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	79	45276	45276	4012461	McWhinnie HUM	specific are	Presumed IB	N	20001116	20001116	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	77	45273	45273	4012461	McWhinnie HUM	specific are	Presumed ID	N	20000404	20000404	PVT-PACIF	None	None	G3	S3	4.2			10201	
Sidalcea m:maple-leav	PDMAL110	84	45280	45280	4012471																

SCIENTIFIC_COMMON_ELEMENT	OCC_NUM	MAPNDX	EONDX	KEY_QUAD	KEY_QUAD	KEY_COUN	ACCURACY	PRESENCE	OCC_RANK	SENSITIVE	SITE_DATE	ELM_DATE	OWNER_M	Federal_St	State_Stat	GLOBAL_R	STATE_R	RARE_PLA	Other_Stat	AVLCODE	
Spergularia western sari	PDCAROWC	3	6770	45005	4012462	Fields Land	HUM	nonspecific	Presumed	IU	N	19770706	19770706	PVT; OTHER	None	None	G5T4?	S1	2B.1	10302	
Spergularia western sari	PDCAROWC	2	6814	45004	4012472	Eureka	HUM	nonspecific	Presumed	IU	N	XXXXXXXX	XXXXXXXX	CITY OF EU	None	None	G5T4?	S1	2B.1	10303	
Spergularia western sari	PDCAROWC	4	61449	74262	4012471	Arcata South	HUM	80 meters	Presumed	IC	N	20040709	20040709	UNKNOWN	None	None	G5T4?	S1	2B.1	10103	
Spirinchus longifolius	smcAFCHB030	2	72341	86739	4012472	Eureka	HUM	nonspecific	Presumed	IU	N	200508XX	200508XX	UNKNOWN	Candidate	Threatened	G5	S1		CDFW_SSC	20302
Spirinchus longifolius	smcAFCHB030	9	85762	86792	4012462	Fields Land	POS	1 mile	Presumed	IU	N	19690510	19690510	UNKNOWN	Candidate	Threatened	G5	S1		CDFW_SSC	20901
Spirinchus longifolius	smcAFCHB030	8	85760	86790	4012472	Eureka	POS	2/5 mile	Presumed	IU	N	19620111	19620111	UNKNOWN	Candidate	Threatened	G5	S1		CDFW_SSC	20601
Spirinchus longifolius	smcAFCHB030	1	85708	86738	4012472	Eureka	HUM	specific are	Presumed	IU	N	19850416	19850416	UNKNOWN	Candidate	Threatened	G5	S1		CDFW_SSC	20201
Spirinchus longifolius	smcAFCHB030	7	85758	86788	4012472	Eureka	POS	nonspecific	Presumed	IU	N	19680612	19680612	UNKNOWN	Candidate	Threatened	G5	S1		CDFW_SSC	20301
Thaleichthys pacificus	AFCHB040	4	90887	91925	4012471	Arcata South	POS	nonspecific	Presumed	IU	N	19770514	19770514	DFG; USFW	Threatened	None	G5	S3			20301
Thaleichthys pacificus	AFCHB040	2	90882	91921	4012481	Arcata North	HUM	nonspecific	Possibly Ext	X	N	20110331	197604XX	UNKNOWN	Threatened	None	G5	S3			20301
Trichodon cylindricus	tNB MUS7N	12	73466	74437	4012481	Arcata North	HUM	nonspecific	Presumed	IU	N	19830512	19830512	UNKNOWN	None	None	G4	S2	2B.2		10301
Usnea long Methuselah	NLLECS P42	199	54425	54425	4012461	McWhinnie	HUM	specific are	Presumed	ID	N	20030711	20030711	PVT-PACIFI	None	None	G4	S4		4.2 BLM_S	10201
Usnea long Methuselah	NLLECS P42	100	46887	46887	4012471	Arcata South	HUM	specific are	Presumed	ID	N	20010413	20010413	PVT-PACIFI	None	None	G4	S4		4.2 BLM_S	10201
Viola palustris	alpine mar:PDVIO041C	6	73534	74504	4012471	Arcata South	HUM	1 mile	Presumed	IU	N	19230823	19230823	UNKNOWN	None	None	G5	S1S2	2B.2		10901
Viola palustris	alpine mar:PDVIO041C	3	32648	9720	4012472	Eureka	HUM	1 mile	Presumed	IU	N	19230531	19230531	UNKNOWN	None	None	G5	S1S2	2B.2		10909

CNPS *California Native Plant* Rare and Endangered Plant Inventory

Plant List

30 matches found. *Click on scientific name for details*

Search Criteria

Found in Quad 40124G2

Scientific Name	Common Name	Family	Lifeform	Rare Plant Rank	State Rank	Global Rank
Abronia umbellata var. breviflora	pink sand-verbena	Nyctaginaceae	perennial herb	1B.1	S1	G4G5T2
Angelica lucida	sea-watch	Apiaceae	perennial herb	4.2	S3	G5
Astragalus pycnostachyus var. pycnostachyus	coastal marsh milk-vetch	Fabaceae	perennial herb	1B.2	S2	G2T2
Bryoria pseudocapillaris	false gray horsehair lichen	Parmeliaceae	fruticose lichen (epiphytic)	3.2	S2	G3
Bryoria spiralifera	twisted horsehair lichen	Parmeliaceae	fruticose lichen (epiphytic)	1B.1	S1S2	G3
Carex arcta	northern clustered sedge	Cyperaceae	perennial herb	2B.2	S2	G5
Carex lyngbyei	Lyngbye's sedge	Cyperaceae	perennial rhizomatous herb	2B.2	S2	G5
Carex praticola	northern meadow sedge	Cyperaceae	perennial herb	2B.2	S2	G5
Castilleja ambigua var. humboldtensis	Humboldt Bay owl's-clover	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S2	G4T2
Castilleja littoralis	Oregon coast paintbrush	Orobanchaceae	perennial herb (hemiparasitic)	2B.2	S3	G4G5T4
Chloropyron maritimum ssp. palustre	Point Reyes bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	1B.2	S2	G4?T2
Chrysosplenium glechomifolium	Pacific golden saxifrage	Saxifragaceae	perennial herb	4.3	S3	G5
Erysimum menziesii	Menzies' wallflower	Brassicaceae	perennial herb	1B.1	S1	G1
Erythronium revolutum	coast fawn lily	Liliaceae	perennial bulbiferous herb	2B.2	S3	G4
Gilia capitata ssp. pacifica	Pacific gilia	Polemoniaceae	annual herb	1B.2	S2	G5T3T4
Gilia millefoliata	dark-eyed gilia	Polemoniaceae	annual herb	1B.2	S2	G2
Glehnia littoralis ssp. leiocarpa	American glehnia	Apiaceae	perennial herb	4.2	S3	G5T5
Hesperavax sparsiflora var. brevifolia	short-leaved evax	Asteraceae	annual herb	1B.2	S2	G4T3
Lathyrus japonicus	seaside pea	Fabaceae	perennial rhizomatous herb	2B.1	S2	G5

Lathyrus palustris	marsh pea	Fabaceae	perennial herb	2B.2	S2	G5
Layia carnosa	beach layia	Asteraceae	annual herb	1B.1	S2	G2
Lilium occidentale	western lily	Liliaceae	perennial bulbiferous herb	1B.1	S1	G1
Lycopodium clavatum	running-pine	Lycopodiaceae	perennial rhizomatous herb	4.1	S3	G5
Monotropa uniflora	ghost-pipe	Ericaceae	perennial herb (achlorophyllous)	2B.2	S2	G5
Montia howellii	Howell's montia	Montiaceae	annual herb	2B.2	S3	G3G4
Oenothera wolfii	Wolf's evening-primrose	Onagraceae	perennial herb	1B.1	S1	G2
Sidalcea malachroides	maple-leaved checkerbloom	Malvaceae	perennial herb	4.2	S3	G3
Sidalcea malviflora ssp. patula	Siskiyou checkerbloom	Malvaceae	perennial rhizomatous herb	1B.2	S2	G5T2
Spergularia canadensis var. occidentalis	western sand-spurrey	Caryophyllaceae	annual herb	2B.1	S1	G5T4?
Viola palustris	alpine marsh violet	Violaceae	perennial rhizomatous herb	2B.2	S1S2	G5

Suggested Citation

CNPS, Rare Plant Program. 2016. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org> [accessed 18 January 2016].

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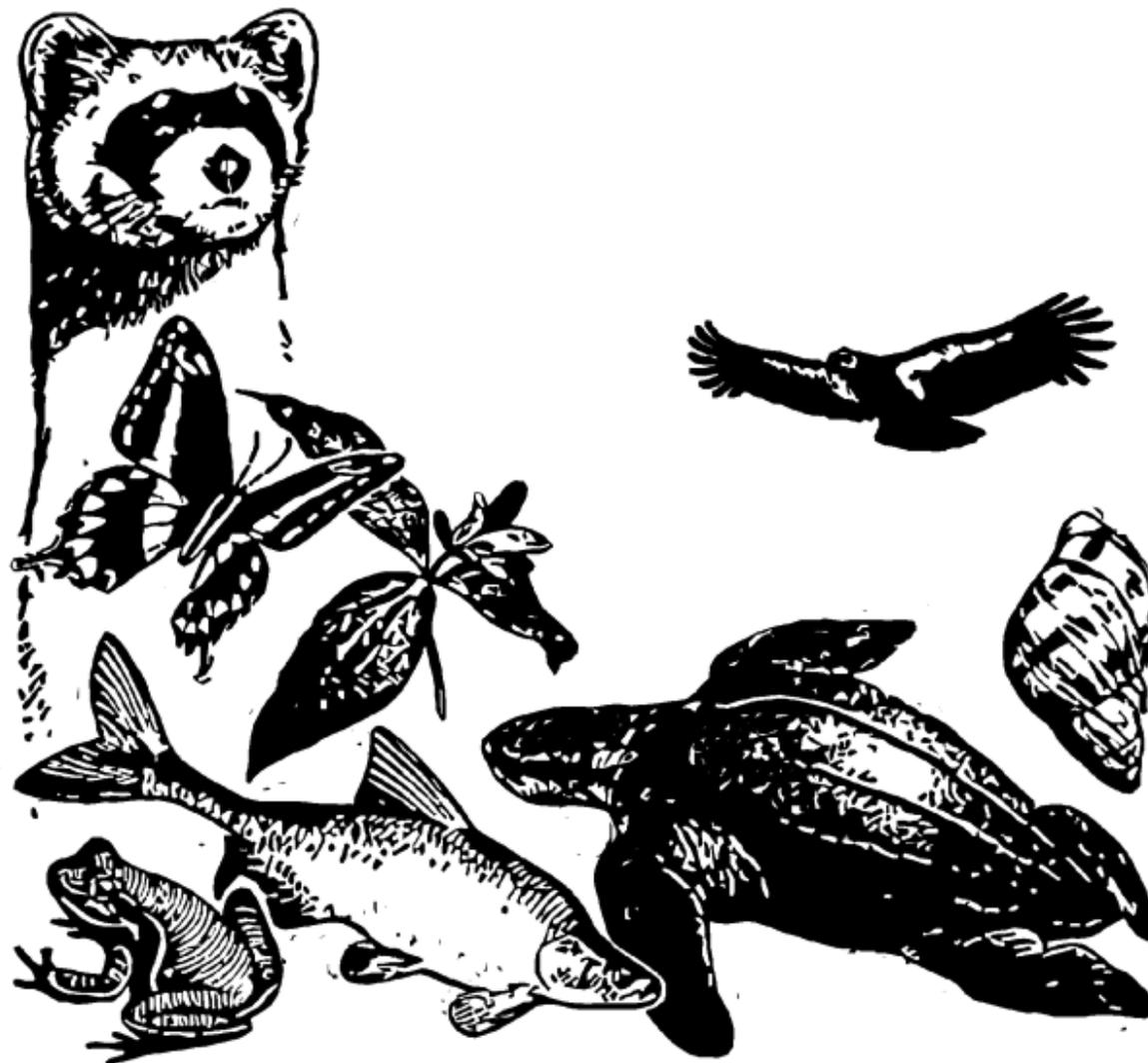
[The California Lichen Society](#)

Eureka MGP

IPaC Trust Resource Report

Generated January 18, 2016 03:55 PM MST, IPaC v2.3.2

This report is for informational purposes only and should not be used for planning or analyzing project level impacts. For project reviews that require U.S. Fish & Wildlife Service review or concurrence, please return to the IPaC website and request an official species list from the Regulatory Documents page.



US Fish & Wildlife Service

IPaC Trust Resource Report



NAME

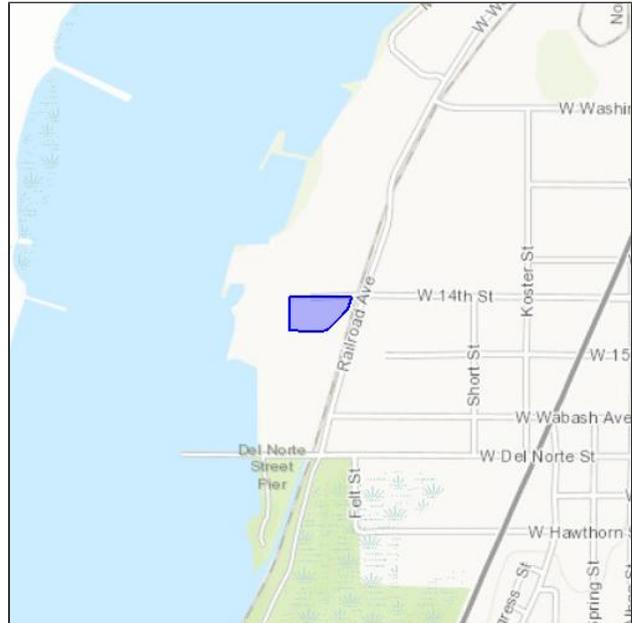
Eureka MGP

LOCATION

Humboldt County, California

IPAC LINK

<https://ecos.fws.gov/ipac/project/O6CUA-NIFGB-EK3AY-PR7NF-V6KHGE>



U.S. Fish & Wildlife Contact Information

Trust resources in this location are managed by:

Arcata Fish And Wildlife Office

1655 Heindon Road

Arcata, CA 95521-4573

(707) 822-7201

Endangered Species

Proposed, candidate, threatened, and endangered species are managed by the [Endangered Species Program](#) of the U.S. Fish & Wildlife Service.

This USFWS trust resource report is for informational purposes only and should not be used for planning or analyzing project level impacts.

For project evaluations that require FWS concurrence/review, please return to the IPaC website and request an official species list from the Regulatory Documents section.

[Section 7](#) of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency.

A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from the Regulatory Documents section in IPaC.

The list of species below are those that may occur or could potentially be affected by activities in this location:

Birds

<p>Marbled Murrelet <i>Brachyramphus marmoratus</i></p> <p>CRITICAL HABITAT There is final critical habitat designated for this species.</p> <p>https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08C</p>	Threatened
<p>Northern Spotted Owl <i>Strix occidentalis caurina</i></p> <p>CRITICAL HABITAT There is final critical habitat designated for this species.</p> <p>https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B08B</p>	Threatened
<p>Western Snowy Plover <i>Charadrius alexandrinus nivosus</i></p> <p>CRITICAL HABITAT There is final critical habitat designated for this species.</p> <p>https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B07C</p>	Threatened
<p>Yellow-billed Cuckoo <i>Coccyzus americanus</i></p> <p>CRITICAL HABITAT There is proposed critical habitat designated for this species.</p> <p>https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06R</p>	Threatened

Fishes

Tidewater Goby *Eucyclogobius newberryi* Endangered

CRITICAL HABITAT

There is **final** critical habitat designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=E071

Flowering Plants

Beach Layia *Layia carnosa* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q34T

Menzies' Wallflower *Erysimum menziesii* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q29W

Western Lily *Lilium occidentale* Endangered

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=Q1Y0

Mammals

Fisher *Martes pennanti* Proposed Threatened

CRITICAL HABITAT

No critical habitat has been designated for this species.

https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=A0HS

Critical Habitats

There are no critical habitats in this location

Migratory Birds

Birds are protected by the [Migratory Bird Treaty Act](#) and the [Bald and Golden Eagle Protection Act](#).

Any activity which results in the take of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service (1). There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured.

Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures.

Additional information can be found using the following links:

- Birds of Conservation Concern
<http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Conservation measures for birds
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Year-round bird occurrence data
<http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/akn-histogram-tools.php>

The following species of migratory birds could potentially be affected by activities in this location:

Allen's Hummingbird <i>Selasphorus sasin</i>	Bird of conservation concern
Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0LI	
Bald Eagle <i>Haliaeetus leucocephalus</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B008	
Black Oystercatcher <i>Haematopus bachmani</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0KJ	
Burrowing Owl <i>Athene cunicularia</i>	Bird of conservation concern
Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0NC	
Fox Sparrow <i>Passerella iliaca</i>	Bird of conservation concern
Season: Wintering	
Lewis's Woodpecker <i>Melanerpes lewis</i>	Bird of conservation concern
Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?sPCODE=B0HQ	

Long-billed Curlew <i>Numenius americanus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B06S	Bird of conservation concern
Marbled Godwit <i>Limosa fedoa</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JL	Bird of conservation concern
Olive-sided Flycatcher <i>Contopus cooperi</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0AN	Bird of conservation concern
Peregrine Falcon <i>Falco peregrinus</i> Year-round https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0FU	Bird of conservation concern
Purple Finch <i>Carpodacus purpureus</i> Year-round	Bird of conservation concern
Short-billed Dowitcher <i>Limnodromus griseus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JK	Bird of conservation concern
Short-eared Owl <i>Asio flammeus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0HD	Bird of conservation concern
Snowy Plover <i>Charadrius alexandrinus</i> Season: Breeding	Bird of conservation concern
Whimbrel <i>Numenius phaeopus</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0JN	Bird of conservation concern
Willow Flycatcher <i>Empidonax traillii</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0F6	Bird of conservation concern
Yellow Warbler <i>dendroica petechia</i> ssp. <i>brewsteri</i> Season: Breeding https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0EN	Bird of conservation concern
Red Knot <i>Calidris canutus</i> ssp. <i>roselaari</i> Season: Wintering https://ecos.fws.gov/tess_public/profile/speciesProfile.action?spcode=B0G6	Bird of conservation concern

Refuges

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

Refuge data is unavailable at this time.

Wetlands in the National Wetlands Inventory

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

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

DATA LIMITATIONS

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

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

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

DATA EXCLUSIONS

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

DATA PRECAUTIONS

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

There are no wetlands in this location

Appendix C
Summary of Special Status
Species with Potential to
Occur in Proposed Project
Vicinity

Scientific Name	Common Name	Federal Status	State Status	CNPS Rare Plant Rank	General Habitat Characteristics	Habitat Present?	Rationale
Plants							
<i>Abronia umbellata</i> var. <i>breviflora</i>	pink sand-verbena	-	-	1B.1	Coastal dunes. Elev: 0-33 ft. (0-10 m.) Blooms: June-October (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Astragalus pycnostachyus</i> var. <i>pycnostachyus</i>	coastal marsh milk-vetch	-	-	1B.2	Mesic coastal dunes, coastal scrub, streamsides, and coastal salt marshes and swamps. Elev: 0-100 ft. (0-30 m.) Blooms: April-October (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Bryoria spiralifera</i>	twisted horsehair lichen	-	-	1B.1	Usually on conifers in North Coast coniferous forests along the immediate coast. Largest known population on the Samoa Peninsula. Elev: 0-100 ft. (0-30 m.) Blooms: N/A (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Cardamine angulata</i>	seaside bittercress	-	-	2B.1	Wet areas and stream banks in lower montane coniferous forest and North Coast coniferous forest. Elev: 215-3,000 ft. (65-915 m.) Blooms: January-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Carex arcta</i>	northern clustered sedge	-	-	2B.2	Bogs and fens, and mesic North Coast coniferous forest. Elev: 200-4,600 ft. (60-1,400 m.) Blooms: June-September (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Carex leptalea</i>	bristle-stalked sedge	-	-	2B.2	Bogs and fens, mesic meadows and seeps, marshes and swamps. Elev: 0-2,300 ft. (0-700 m.) Blooms: March-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Carex lyngbyei</i>	Lyngbye's sedge	-	-	2B.2	Brackish or freshwater marshes and swamps. Elev: 0-33 ft. (0-10 m.) Blooms: April-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Carex praticola</i>	northern meadow sedge	-	-	2B.2	Mesic meadows and seeps. Elev: 0-10,500 ft. (0-3,200 m.) Blooms: May-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Castilleja ambigua</i> var. <i>humboldtiensis</i>	Humboldt Bay owl's-clover	-	-	1B.2	Coastal salt marshes and swamps. Elev: 0-10 ft. (0-3 m.) Blooms: April-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Castilleja littoralis</i>	Oregon coast paintbrush	-	-	2B.2	Sandy coastal cliff scrub, coastal dunes, and coastal scrub. Elev: 50-330 ft. (15-100 m.) Blooms: June (CNPS 2016).	N	Entire site is disturbed. Habitat not present.

<i>Chloropyron maritimum</i> ssp. <i>palustre</i>	Point Reyes bird's-beak	-	-	1B.2	Coastal salt marshes & swamps. Elev: 0-33 ft. (0-10 m.) Blooms: June-October (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Erysimum menziesii</i>	Menzies' wallflower	FE	SE	1B.1	Coastal dunes. Elev: 0-115 ft. (0-35 m.) Blooms: March-September (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Erythronium revolutum</i>	coast fawn lily	-	-	2B.2	Bogs and fens, mesic areas and streambanks in broadleaved upland forest and North Coast coniferous forest. Elev: 0-5,250 ft. (0-1,600 m.) Blooms: March-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Fissidens pauperculus</i>	minute pocket moss	-	-	1B.2	Damp soils in stream beds and banks in North Coast coniferous forest. Has also been found inland in the Sierra Nevada foothills. Elev: 30-3,380 ft. (10-1,024 m.) Blooms: N/A (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Gilia capitata</i> ssp. <i>pacifica</i>	Pacific gilia	-	-	1B.2	Coastal bluff scrub, coastal prairie, valley and foothill grassland, and openings in chaparral. Elev: 15-4,365 ft. (5-1,330 m.) Blooms: April-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Gilia millefoliata</i>	dark-eyed gilia	-	-	1B.2	Coastal dunes. Elev: 5-100 ft. (2-30 m.) Blooms: April-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Hesperervax sparsifolia</i> var. <i>brevifolia</i>	short-leaved evax	-	-	1B.2	Sandy coastal cliff scrub, coastal dunes, and coastal prairie. Elev:0-705 ft. (0-215 m.) Blooms: March-June (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Lathyrus japonicus</i>	seaside pea	-	-	2B.1	Coastal dunes. Elev: 3-100 ft. (1-30 m.) Blooms: May-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Lathyrus palustris</i>	marsh pea	-	-	2B.2	Mesic areas in bogs and fens, coastal prairie, coastal scrub, marshes and swamps, lower montane coniferous forest, and North Coast coniferous forest. Elev: 3-330 ft. (1-100 m.) Blooms: March-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Layia carnosa</i>	beach layia	FE	SE	1B.1	Coastal dunes and sandy coastal scrub. Elev: 0-200 ft. (0-60 m.) Blooms: March-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Lilium occidentale</i>	western lily	FE	SE	1B.1	Bogs and fens, coastal bluff scrub, coastal prairie, coastal scrub, freshwater marshes and swamps, openings in North Coast coniferous forest. Elev: 5-610 ft. (2-185 m.) Blooms: June-July (CNPS 2016).	N	Entire site is disturbed. Habitat not present.

<i>Monotropa uniflora</i>	ghost-pipe	-	-	2B.2	Broadleafed upland forest and North Coast coniferous forest. Elev: 33-1,805 ft. (10-550 m.) Blooms: June-September (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Montia howellii</i>	Howell's montia	-	-	2B.2	Vernally mesic sites, sometimes roadsides. Meadows and seeps, vernal pools, North Coast coniferous forest. Elev: 0-2,740 ft. (0-835 m.) Blooms: February-May (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Oenothera wolfii</i>	Wolf's evening-primrose	-	-	1B.1	Sandy, usually mesic sites, in coastal bluff scrub, coastal dunes, coastal prairie, and lower montane coniferous forest. Elev: 10-2,625 ft. (3-800 m.) Blooms: May-October (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Sidalcea malviflora</i> ssp. <i>patula</i>	Siskiyou checkerbloom	-	-	1B.2	Often roadcuts in coastal bluff scrub, coastal prairie, and North Coast coniferous forest. Elev: 50-2890 ft. (15-880 m.) Blooms: May-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Sidalcea oregana</i> ssp. <i>eximia</i>	coast checkerbloom	-	-	1B.2	Meadows and seeps, lower montane coniferous forest and North Coast coniferous forest. Elev: 15-4,400 ft. (5-1,340 m.) Blooms: June-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Spergularia canadensis</i> var. <i>occidentalis</i>	western sand-spurrey	-	-	2B.1	Coastal salt marshes and swamps. Elev: 0-10 ft. (0-3 m.) Blooms: June-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Trichodon cylindricus</i>	cylindrical trichodon	-	-	2B.2	Sandy, exposed soil and roadbanks, in broadleafed upland forest, meadows and seeps, and upper montane coniferous forest. Elev: 165-6,570 ft. (50-2,002 m.) Blooms: N/A (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
<i>Viola palustris</i>	alpine marsh violet	-	-	2B.1	Coastal bogs and fens, and mesic coastal scrub. Elev: 0-495 ft. (0-150 m.) Blooms: March-August (CNPS 2016).	N	Entire site is disturbed. Habitat not present.
Fish							
<i>Acispenser medirostris</i>	green sturgeon	FT	SSC		Oceanic waters, bays, and estuaries during non-spawning season. Spawning habitat = deep pools in large, turbulent, freshwater mainstems (NMFS 2005).	N	Aquatic habitat not present.
<i>Eucycloglobius newberryi</i>	tidewater goby	FE	SSC		Brackish water, shallow lagoons & lower stream reaches, still water (USFWS 2005).	N	Aquatic habitat not present.

<i>Oncorhynchus clarkii clarkii</i>	coastal cutthroat trout	-	SSC	Require cool, clean water with ample cover and deep pools for holding in summer. Prefer small, low gradient coastal streams and estuarine habitats, including lagoons. Occur mainly in Northern California streams. Preferred temperature <18 °C and high dissolved oxygen levels (Moyle et al. 2015).	N	Aquatic habitat not present.
<i>Spirinchus thaleichthys</i>	longfin smelt	FC	ST SSC	Found close to shore, in bays and estuaries and ascend coastal streams to spawn (Page et al. 1991).	N	Aquatic habitat not present.
<i>Thaleichthys pacificus</i>	eulachon	FT	-	Nearshore ocean waters and to 1,000 ft. (300 m.) in depth, except for the brief spawning runs into their natal (birth) streams. Spawning grounds are typically in the lower reaches of larger snowmelt-fed rivers with water temperatures ranging from 39 to 50°F (4 to 10°C). Spawning occurs over sand or coarse gravel substrates (NOAA 2016).	N	Aquatic habitat not present.
Amphibians						
<i>Ascaphus truei</i>	Pacific tailed frog	-	SSC	Inhabits cold, clear, rocky streams in wet forests. They do not inhabit ponds or lakes. A rocky streambed is necessary for cover for adults, eggs, and larvae. After heavy rains, adults may be found in the woods away from the stream (Nafis 2016).	N	Habitat not present.
<i>Rana aurora</i>	northern red-legged frog	-	SSC	Found in humid forests, woodland, grasslands, and streamsides with plant cover. Most common in lowlands or foothills. Breeding habitat is permanent water sources such as lakes, ponds, slow streams, marshes, bogs, and swamps (Nafis 2016).	N	Habitat not present.
<i>Rana boylei</i>	foothill yellow-legged frog	-	SSC	Frequents rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes found in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools. From sea level to 6,700 ft. (2,030 m.) (Nafis 2016).	N	Habitat not present.

<i>Rhyacotriton variegatus</i>	southern torrent salamander	-	SSC		Found in shallow, cold, clear, well-shaded streams, waterfalls and seepages, particularly those running through talus and under rocks all year, in mature to old-growth forests. Occurs from sea level to from 4,500-5,000 ft. (1,390-1,500 m).	N	Habitat not present.
Reptiles							
<i>Emys marmorata</i>	western pond turtle	-	SSC		Found in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches, with abundant vegetation, and either rocky or muddy bottoms, in woodland, forest, and grassland. In streams, prefers pools to shallower areas. Logs, rocks, cattail mats, and exposed banks are required for basking. May enter brackish water and even seawater. Found at elevations from sea level to over 5,900 ft. (1,787 m.) (Nafis 2016).	N	Habitat not present. Site several hundred feet from any aquatic habitat.
Birds							
<i>Asio flammeus</i>	short-eared owl	-	SSC		Requires open country that supports populations of rodents for food and herbaceous cover sufficient to conceal their ground nests from predators. Suitable habitats may include salt- and freshwater marshes, irrigated alfalfa and hay fields, ungrazed grasslands and old pastures (Shuford and Gardali 2008).	N	Open habitat not present. High level of human disturbance and dense urban surroundings.
<i>Athene cunicularia</i>	burrowing owl	-	SSC		Nesting habitat includes open areas with mammal burrows, including rolling hills, grasslands, fallow fields, sparsely vegetated desert scrub, vacant lots and human disturbed lands. Soils must be friable for burrows (Bates 2006).	N	Known to utilize heavily disturbed habitats; however, project site is outside species range.
<i>Brachyramphus marmoratus</i>	marbled murrelet	FT	SE		Marine/pelagic bird. Nests and roosts in large trees in coastal mature redwood and Douglas-fir forests up to 5 miles inland (CDFW 2016).	N	Suitable habitat not present.

<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	SSC		Coastal populations nest on dune-backed beaches, sand spits, beaches at creeks and river mouths, and salt pans at lagoons and estuaries (USFWS 2007). Inland populations nest along barren to sparsely vegetated flats and along shores of alkaline and saline lakes, reservoirs, ponds, braided river channels, agricultural wastewater ponds, and salt evaporation ponds (Shuford and Gardali 2008).	N	Suitable habitat not present.
<i>Coccyzus americanus</i>	yellow-billed cuckoo	FT	SE		Valley foothill and desert riparian habitats. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage, abutting slow-moving watercourses, backwaters, or seeps. Willow almost always present (CDFW 2016).	N	Suitable habitat not present.
<i>Contopus cooperi</i>	olive-sided flycatcher	-	SSC		Preferred habitat is forest and woodland, with adjacent meadows, lakes or open terrain for foraging (CDFW 2016).	N	Suitable habitat not present.
<i>Dendroica petechia</i> ssp. <i>brewsteri</i>	yellow warbler	-	SSC		Riparian vegetation in close proximity to water along streams and in wet meadows (Shuford and Gardali 2008).	N	Suitable habitat not present.
<i>Empidonax traillii</i>	willow flycatcher	-	SE		Obligate riparian breeders. Nest in willow or alder habitats associated with moist meadows, perennial streams, and smaller spring-fed or boggy areas (Craig and Williams 1998).	N	Suitable habitat not present.
<i>Falco peregrinus</i>	peregrine falcon	FD	SD FP		Breeds near wetlands lakes, rivers, or other waters on cliffs, banks, dunes or mounds, mostly in woodland, forest and coastal habitats. Nest is a scrape on a depression or ledge in an open site. May use man-made structures, snags, or trees for nesting (CDFW 2016).	N	Suitable habitat not present.
<i>Haliaeetus leucocephalus</i>	bald eagle	FD	SE FP		Requires large bodies of water, or free flowing rivers with abundant fish, and adjacent snags or other perches. Nests in large, old-growth, or dominant live tree with open branch work, especially ponderosa pine (CDFW 2016).	N	Suitable habitat not present.
<i>Rallus longirostris</i> <i>obsoletus</i>	California clapper rail	FE	SE FP		Require intricate network of sloughs with small natural berms along tidal channels with relatively tall vegetation (USFWS 2010)	N	Suitable habitat not present.

<i>Riparia riparia</i>	bank swallow	-	ST		Riparian areas with sandy, vertical bluffs or riverbanks. Also nest in earthen banks and bluffs, as well as sand and gravel pits (CDFW 2016).	N	Suitable habitat not present.
<i>Strix occidentalis caurina</i>	northern spotted owl	FT	SCT SSC		Forests and woodlands with large mature trees and snags containing a high basal area, dense canopy (>70%) cover, multiple canopy layers, and downed woody debris (CDFW 2016).	N	Suitable habitat not present.
Mammals							
<i>Arborimus albipes</i>	white-footed vole	-	SSC		Humid coastal forests in redwood, Douglas-fir, and riparian forests Found from sea level to 3,500 ft. (1,100 m.). Builds nest on ground, under stumps, logs, or rocks. Known only from Humboldt and Del Norte counties (CDFW 2016).	N	Suitable habitat not present.
<i>Arborimus pomo</i>	Sonoma tree vole	-	SSC		Old-growth and other forests in the fog belt, including Douglas-fir, redwood and montane hardwood-conifer habitats. Nests constructed in trees (CDFW 2016).	N	Suitable habitat not present.
<i>Corynorhinus townsendii</i>	Townsend's big-eared bat	-	SCT SSC		Cave-dwelling, also roosts in old mine-workings, occasionally found in buildings. Population concentrations in areas with cavity-forming rock and in old mining districts (Bolster 1998).	N	Suitable habitat not present.
<i>Martes pennanti</i>	fisher	FC	SSC		Large areas of mature, dense forest stands with snags and greater than 50% canopy closure. Uncommon permanent resident of the Sierra Nevada, Cascades, and Klamath Mts.; also found in a few areas in the North Coast Ranges (CDFW 2016).	N	Suitable habitat not present.

Key
Federal & State Status
(FE) Federal Endangered
(FT) Federal Threatened
(FC) Federal Candidate
(FD) Federally Delisted
(FD) Federally Delisted
(SE) State Endangered
(ST) State Threatened
(SR) State Rare
(SSC) State Species of Special Concern
(SCE) State Candidate Endangered
(SCT) State Candidate Threatened
CNPS Rare Plant Rank
<i>Rareness Ranks</i>
(1A) Presumed Extinct in California
(1B) Rare, Threatened, or Endangered in California and Elsewhere
(2) Rare, Threatened, or Endangered in California, But More Common Elsewhere
<i>Threat Ranks</i>
(0.1) Seriously threatened in California
(0.2) Fairly threatened in California
(0.3) Not very threatened in California

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