REHAB MULTIPLE TRANSPORTATION-RELATED FACILITIES PROJECT

INITIAL STUDY

with Proposed Negative Declaration

MENDOCINO COUNTY, CALIFORNIA

DISTRICT 1–MEN–101 Post Mile 27.40

and

DISTRICT 1–MEN–128 Post Mile R28.00

EA 01-0K010 / EFIS 0119000131

Prepared by the
State of California Department of Transportation

April 2024

General Information About This Document

What is in this document?

The California Department of Transportation (Caltrans) has prepared this Initial Study with proposed Negative Declaration (IS/ND) which examines the potential environmental effects of the proposed Rehab Multiple Transportation-Related Facilities Project on United States Highway 101 in Ukiah and on State Route 128 in Boonville, California. Caltrans is the lead agency under the California Environmental Quality Act (CEQA). This document tells you why the project is being proposed, how the existing environment could be affected by the project, the potential impacts of the project, and proposed avoidance, minimization, and/or mitigation measures.

What should you do?

- Please read this document.
- Additional copies of this document are available for review on request at:
    - Caltrans District 1 Office, 1656 Union Street, Eureka, CA
- This document may be downloaded at the following website: https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs/d3-mendocino-county
- We would like to hear what you think. If you have any comments about the proposed project, please send your written comments to Caltrans by the deadline (June 21, 2024).
- Please send comments via U.S. mail to:

    California Department of Transportation
    Attention: Breeanna Kalson
    North Region Environmental–District 1
    1656 Union Street
    Eureka, CA 95501

- Send comments via e-mail to: breeanna.kalson@dot.ca.gov
- Be sure to send comments by the deadline: June 21, 2024

What happens after this?

After comments are received from the public and reviewing agencies, Caltrans may (1) give environmental approval to the proposed project, (2) do additional environmental studies, or (3) abandon the project. If the project is given environmental approval and funding is obtained, Caltrans could complete the design and construct all or part of the project.

For individuals with sensory disabilities, this document can be made available in Braille, in large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please write to or call Caltrans, Attention: Manny Machado, North Region Environmental-District 1, 1656 Union Street, Eureka, CA 95501; (707) 496-6879 Voice, or use the California Relay Service 1 (800) 735-2929 (TTY to Voice), 1 (800) 735-2922 (Voice to TTY), 1 (800) 855-3000 (Spanish TTY to Voice and Voice to TTY), 1-800-854-7784 (Spanish and English Speech-to-Speech) or 711.

REHAB MULTIPLE TRANSPORTATION RELATED FACILITIES PROJECT

The project would improve the existing Maintenance Station in Ukiah and the existing Maintenance Station in Boonville by replacing and upgrading existing substandard facilities and by adding electric vehicle charging stations.

INITIAL STUDY
with Proposed Negative Declaration

MENDOCINO COUNTY, CALIFORNIA
DISTRICT 1–MEN–101 Post Mile 27.40
and
DISTRICT 1–MEN–128 Post Mile R28.00

Submitted Pursuant to: Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

4/15/2024
Date of Approval

Liza Walker
Liza Walker, Eureka Office Chief
North Region Environmental–District 1
California Department of Transportation
CEQA Lead Agency

The following person may be contacted for more information about this document:

Breeanna Kalson, North Region Environmental–District 1
1656 Union Street
Eureka, CA 95501
(707) 672-3593

or use the California Relay Service TTY number, 711 or 1-800-735-2922.

PROPOSED NEGATIVE DECLARATION

Pursuant to: Division 13, California Public Resources Code

SCH Number: Pending

Project Description

The California Department of Transportation (Caltrans) proposes to improve the existing Maintenance Station in Ukiah on U.S. Highway 101 at Post Mile 27.40 in Mendocino County by installing a permanent bulk fueling station with canopy, removing and replacing the existing temporary records/fuel log building with a larger, permanent records/storage building, and by installing a Level 2 and a Level 3 electric vehicle charging station.

Improvements to the existing Maintenance Station in Boonville on State Route 128 at Post Mile R28.00 would include removing the failing materials storage structure and replacing it with a larger materials storage structure with lighting, and by installing a Level 2 and a Level 3 electric vehicle charging station.

Determination

This proposed Negative Declaration (ND) is included to give notice to interested agencies and the public that it is Caltrans' intent to adopt an ND for this project. This does not mean that Caltrans' decision regarding the project is final. This ND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project and, pending public review, expects to determine from this study that the proposed project would not have a significant impact on the environment for the following reasons:

The project would have *No Effect* on:

- Aesthetics
- Agricultural and Forest Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hydrology and Water Quality
- Land Use and Planning
- Public Services
- Mineral Resources Noise
- Population and Housing
- Recreation
- Transportation
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

The project would have *Less than Significant Impacts* on:

- Hazards and Hazardous Materials and
- Greenhouse Gas Emissions

_____ _____

Liza Walker, Office Chief
North Region Environmental–District 1
California Department of Transportation

Date

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List of Acronyms and Abbreviated Terms

Acronym/Abbreviation	Description
AB	Assembly Bill
AC	Alternating Current
ACM	Asbestos Containing Materials
BMPs	Best Management Practices
BSA	Biological Study Area
CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CAL-CET	Caltrans Construction Emissions Tool
CAL EPA	California Environmental Protection Agency
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAPTI	Climate Action Plan for Transportation Infrastructure
CARB	California Air Resources Board
CCC	California Coastal Commission
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQ	(White House) Council on Environmental Quality
CEQA	California Environmental Quality Act
CGS	California Geologic Survey
CFR	Code of Federal Regulations
CH_4	methane
CIA	Cumulative Impact Analysis
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CTP	California Transportation Plan
CUPA	Certified Unified Program Agencies
DC	Direct Current
DE	Development Element
Department	Caltrans
DOC	Department of Conservation
DOT	Department of Transportation
DP	Director's Policy
ECL	Environmental Construction Liaison
EIR	Environmental Impact Report
EO(s)	Executive Order(s)
EPA	Environmental Protection Agency
ESA	Endangered Species Act

Acronym/Abbreviation	Description
EV	Electric Vehicle
ºF	degrees Fahrenheit
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FERS	Floodplain Evaluation Report Summary
FHSZ	Fire Hazard Severity Zone
FHWA	Federal Highway Administration
GHG	greenhouse gas
GWP	Global Warming Potential
FHSZ	Fire Hazard Severity Zone
H&SC	Health & Safety Code
HFCs	hydrofluorocarbons
IS	Initial Study
IS/ND	Initial Study / Negative Declaration
LCP	Lead Containing Paint
LRA	Local Responsibility Area
LUSTS	Leaking Underground Storage Tanks
MCOG	Mendocino Council of Governments
MLD	Most Likely Descendent
MMT	million metric tons
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
MS	Maintenance Station
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act of 1990
NAHC	Native American Heritage Commission
NCRWQCB	North Coast Regional Water Quality Control Board
ND	Negative Declaration
NEPA	National Environmental Policy Act
NHTSA	National Highway Traffic and Safety Administration
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OPR	Governor's Office of Planning and Research
PDT	Project Development Team
PIR	Project Initiation Report
PM(s)	Post Mile(s)
Porter-Cologne Act	Porter-Cologne Water Quality Control Act
Project	Rehab Multiple Transportation-Related Facilities Project

Acronym/Abbreviation	Description
PRC	(California) Public Resources Code
PSI	Preliminary Site Investigation
RM	Resource Management Element
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCS	Sustainable Communities Strategy
SF_6	sulfur hexafluoride
SHPO	State Historic Preservation Officer
SHS	State Highway System
SLR	Sea Level Rise
SPCC Plan	Spill Prevention Control and Countermeasures Plan
sq.ft.	square feet
SR	State Route
SRA	State Responsibility Area
SSPs	Standard Special Provisions
SWMP	Storm Water Management Plan
TWW	Treated Wood Waste
U.S. or US	United States
USACE	United States Army Corps of Engineers
USC	United States Code
U.S. DOT	U.S. Department of Transportation
U.S. EPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UVAP	Ukiah Valley Area Plan
VMT	Vehicle Miles Traveled
WPCP	Water Pollution Control Program

Chapter 1. Proposed Project

1.1 Project History

Both the Ukiah and Boonville Maintenance Stations (MSs) were identified by Caltrans Maintenance Engineering, Asset Management Division, as containing substandard structures or services. Due to their specific geographic positions on routes that connect and serve rural communities, and because they are in areas that are subject to heavy rains, landslides, and the potential for damaging earthquakes, the Ukiah Maintenance Station and Boonville Maintenance Station were identified as priorities for asset improvement. The Ukiah MS is of special concern, because the Ukiah station is designated as a secondary (backup) Emergency Operations Center for District 1.

As an additional component of the station upgrades, both locations were identified as requiring new infrastructure in the form of electric vehicle (EV) charging options to facilitate compliance with Governor's Executive Order B16-14 and Department of General Services (DGS) Management Memo 13-04 regarding the purchase of zero emission vehicles.

The Department of Transportation (Caltrans) is the lead agency under the California Environmental Quality Act (CEQA).

1.2 Project Description

The proposed Rehab Multiple Transportation-Related Facilities Project consists of proposed improvements and upgrades at two Caltrans maintenance stations: the Ukiah Maintenance Station on U.S. Highway 101 (U.S. 101) at Post Mile 27.40 in Mendocino County and the Boonville Maintenance Station on State Route (SR) 128 in Mendocino County at Post Mile R28.00 (Figure 1).

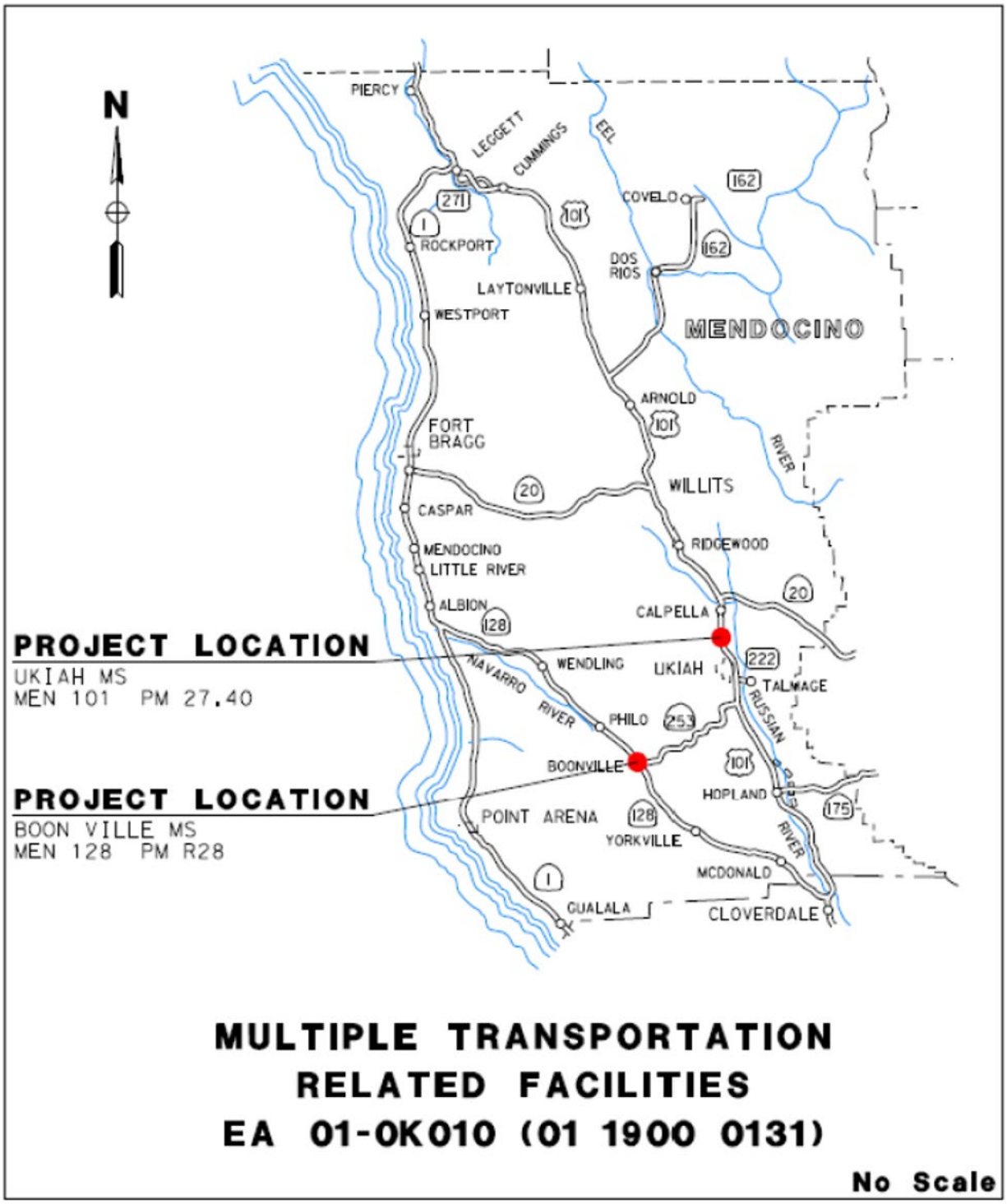

Figure 1. Project Vicinity

Project Objective

Purpose and Need

The purpose of the proposed Rehab Multiple Transportation-Related Facilities Project is to bring substandard maintenance station (MS) facilities up to current standards and to provide safe and reliable access to fuels for existing internal combustion engines and for existing and future acquisition of electric vehicles per Governor's Executive Order B16-14 and DGS Management Memo 13-04.

The Ukiah MS lacks a permanent gas and diesel fuel station. This station has Level 2 EV chargers; however, lacks the quick charging (Level 3) option. The Boonville MS materials storage structure has a failing concrete wall and lacks lighting in material bays; the station does not have an EV charging station. For context, there are currently three levels of EV charging options: Level 1 and Level 2, which utilize an Alternating Current (AC) power source, and Level 3, which utilizes Direct Current (DC) and is generally the most efficient charging option.

The project is needed to maintain safe and reliable access to fuel (gasoline, diesel, and EV chargers), and materials on vital public transportation routes in northern California. Caltrans maintenance stations are key components in a statewide transportation system that provides for public safety and preserves California’s highways by performing maintenance and repairs. MS personnel and equipment are often among the first responders to secure and open roads after weather-related events (landslides, washouts, windfall, sink holes, etc.). Therefore, it is critical that crews have immediate access to fuel and materials to keep roads safe and clear.

Proposed Project

The California Department of Transportation (Caltrans) proposes to improve the existing maintenance station in Ukiah on U.S. 101 at Post Mile 27.40 in Mendocino County by installing a permanent bulk fuel island with canopy, removing and replacing the existing temporary records/fuel log building with a larger, permanent storage building, and by installing a Level 2 and Level 3 electric vehicle charging station.

Improvements to the existing maintenance station in Boonville on SR 128 at Post Mile R28.00 would include removing the failing materials storage structure and replacing it with a larger materials storage structure with lighting, and by installing a Level 2 and Level 3 electric vehicle charging station.

Locations

The Ukiah MS (MS) is located adjacent to U.S. 101 in Mendocino County, approximately 1.6 miles north of the Ukiah city limits at 90 Lake Mendocino Drive. From U.S. 101 northbound, the Ukiah MS access is via Exit 552, right onto Lake Mendocino Drive and an immediate left into the maintenance yard.

The Boonville MS is located toward the northwestern end of the unincorporated community of Boonville at 13428-13598 Anderson Valley Way. From the State Route 128 and State Route 253 intersection, the Boonville MS access is westbound for approximately 1.5 miles on SR 128, left on Schoenahi Road (250 feet), and left on Anderson Valley Way (900 feet) into the maintenance yard.

See Figures 1 through 3 for vicinity and location maps.

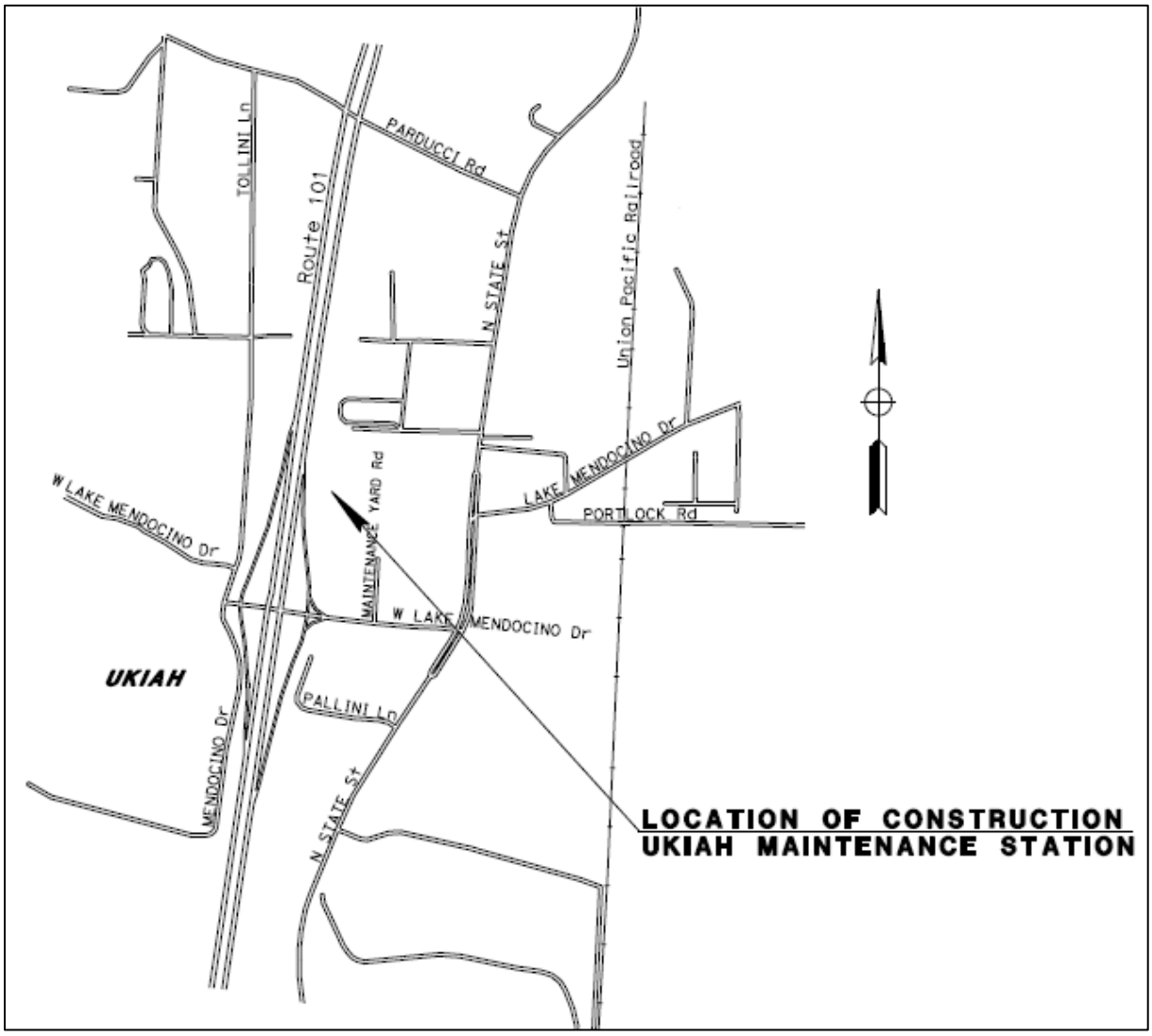

Figure 2. Project Location Map Ukiah Maintenance Station

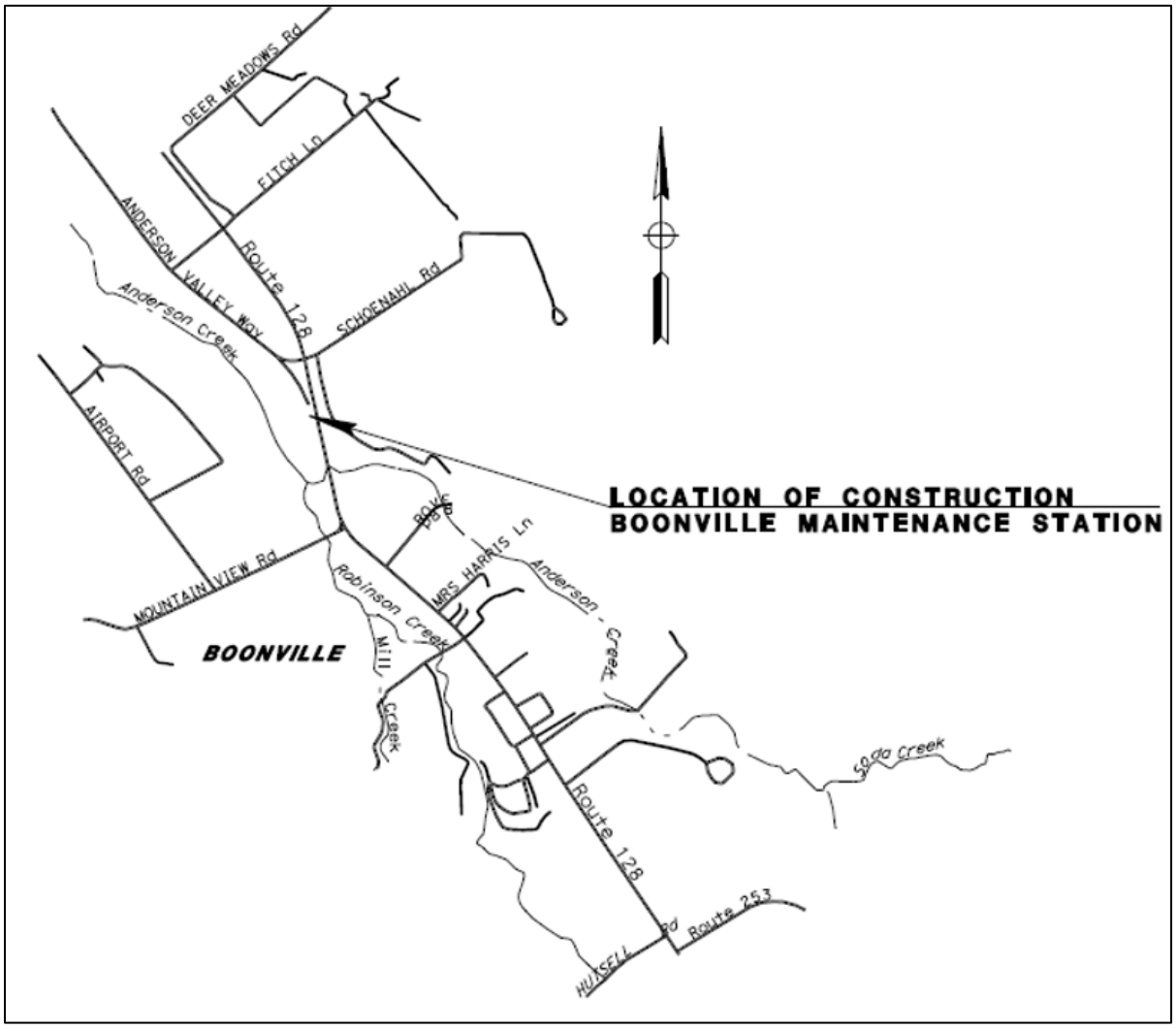

Figure 3. Project Location Map Boonville Maintenance Station

Existing Facilities

The Ukiah MS occupies approximately 7.5 developed acres; the facility is paved and has chain link and barbed wire perimeter fencing, lighting, and gated entrance/exits. The Ukiah MS comprises multiple structures for office and storage; unused emergency fuel containers (in storage), and historically had underground storage tanks (removed). The associated records/fuel log building remains onsite; this is a shipping container structure that is located to the southeast of the center of the main lot.

There are five existing Level 2 EV charging stations (7.2 KW AC chargers) at the Ukiah MS. These EV chargers are located at the southern end of the MS near the primary staff parking area.

The Boonville MS facility occupies approximately 2.5 developed acres; the facility is mostly paved and has chain link and barbed wire perimeter fencing, lighting, and gated entrance/exits. The Boonville MS has multiple structures, storage areas, and a fuel station. The facility's existing materials storage structure is located along the northwestern boundary of the MS. The materials storage structure is 20-feet-wide by 60-feet-long (1,200 square feet (sq. ft.)) and has four storage bays (open to the front) that are used for storing landscaping and road materials such as rock, road base, and wood chips, among other things. The existing storage building is not equipped with interior bay lighting; it receives indirect lighting from a standard mast arm located above and behind the building. The concrete wall at the southeast corner of the building is failing.

There are currently no electric vehicle charging stations located at the Boonville MS.

Proposed Improvements

At the Ukiah MS, the project would replace the existing records/fuel log building and install a permanent bulk fuel island (4,000 gallons diesel and 4,000 gallons gasoline) and overhead canopy (1,952 sq.ft.) and a new records/fuel log building (500 sq.ft.). The new fuel island and records/fuel log building would have a larger footprint; however, would occupy the same relative location as the existing structures. A new Level 2 and a Level 3 EV charging station and designated EV parking spaces would be located adjacent to the proposed permanent fuel island and/or the existing EV chargers.

At the Boonville MS, the project would replace the existing materials storage structure with a 20-foot-wide by 90-foot-long (1800 sq.ft.) six-bay facility with LED lighting in each bay.

The new building would be located in the same relative location as the existing structure, however, would have additional storage bays and would extend an additional 30 feet to the south. The proposed Level 2 and Level 3 EV charging stations would be installed alongside an existing facility building located along the primary MS access road.

At both maintenance stations, the new EV chargers would be mounted on concrete foundations (approximately 15 sq. ft. per charger). Parking lines and signage for the chargers would be adjacent to the chargers within the existing paved areas. The Level 2 chargers can be wired into the existing power supply at the MSs. However, the Level 3 chargers would require separate direct current (DC) electrical service connections sourced from nearby transmission lines (they require a new power 'drop' at a power pole), and new transformers and switchboards.

All proposed project work would take place on land owned by Caltrans or within the existing Caltrans right of way. Demolition and construction of structures and the fuel island, and the installation of the EV chargers, would take place within the developed, paved boundaries of the existing Ukiah and Boonville maintenance stations.

Installation of electrical conduit could require trenching outside of the paved station areas on Caltrans land or within the Caltrans (state) right of way. In Ukiah, depending on the final plan, trenching for the Level 3 EV charger's DC connection could extend east of the developed station boundary through an adjacent Caltrans-owned parcel. In Boonville, trenching for the Level 3 EV charger's DC connection is anticipated to require only several feet of trenching outside of the developed station boundary to the power pole adjacent to State Route 128, within the Caltrans (state) right of way. See project layouts in Appendix A.

Project Elements

Utilities

The project would require new or upgraded electric utility connections and, depending on the location of existing underground utilities, rerouting of underground lines/conduit may be required.

All operational aspects of the Caltrans maintenance stations would be preserved during construction. Before and during construction, coordination would occur between the Caltrans MS supervisors, utility companies, and the contractor to coordinate timing of possible electric power, potable water, natural gas, sewer, and communication disruptions.

There are underground utilities that serve the maintenance stations (no 'pass through' power or other utilities). Where locations of underground utilities are unknown or approximated, they would be identified prior to construction. This would be carried out through a 'pot holing' or similar process in which small test holes are excavated in order to determine the actual location of underground utilities prior to excavation.

Right of Way

Project construction work would take place either on Caltrans-owned land or within the existing Caltrans right of way. No temporary construction easements (TCEs) or new right of way acquisition would be required. Each MS has existing access via public roadways.

Traffic and Staging

Traffic coordination for access to and around the construction areas would be limited to internal MS signage and barriers because construction work would not be conducted on public roadways; therefore, would not affect the general public. Temporary barriers around the construction areas would be required to direct visitors and vehicles. Hard hat area signs and temporary traffic signs would be placed during all operations.

Staging for construction materials and spoils is anticipated to occur on paved areas immediately adjacent to the construction activity within the MS boundaries; alternatively, Boonville MS may also utilize a portion of a paved pull-out area to the north of the entrance gate. Construction staging would be approved by each maintenance station's operational supervisors.

Demolition and Construction

General demolition activities would be similar at both MS locations. Existing structures would be dismantled and salvaged for reuse; if reuse is not feasible, the components of the structures (metal roofing, steel beams, etc.) would be removed to a recycling center or commercial waste facility. The asphalt in and around the proposed action areas and the existing concrete foundations would be excavated and removed to a construction debris recycling center.

Additional excavation would occur for construction of new concrete foundations at the Ukiah MS (bulk fuel island and storage building, EV charging stations, and associated components), and the Boonville MS (materials storage structure, EV charging stations and associated components). Trenching for installation of new electrical conduit would also be required at both maintenance stations.

The maximum depth of all proposed excavation for foundation work is 5 feet. Trenching for electrical conduit would excavate an area approximately 6 inches wide with a depth of 1 to 2 feet; the maximum length of conduit excavation is estimated to be 760 feet at Ukiah Maintenance Station and 60 feet at Boonville Maintenance Station, depending on the final design plan.

On completion of construction work, both MSs would require conformance paving that would connect the existing pavement to the new construction.

Equipment

Equipment likely to be used in the construction of this project includes, but is not limited to:

- Pickup Truck
- Dump Truck
- Water Truck
- Concrete Truck
- Concrete Mixer
- Concrete Pump
- Loader
- Backhoe
- Excavator
- Pumps, Generators, and Compressors
- Ground Compactor
- Vibratory Roller
- Impact Pile Driving Hammer
- Roller
- Equipment Backup Alarms/Horns
- Paver

Vegetation Removal

Vegetation disturbance would be limited to the areas of potential conduit trenching, which could disturb ruderal grasses (ruderal=growing where the natural vegetational cover has been disturbed) in the Caltrans-owned parcel adjacent to the Ukiah MS and ruderal grasses on the highway shoulder between the Boonville MS and SR 128. All trenching areas would be returned to existing conditions on completion of conduit installation; erosion control measures would be applied. No tree removal is proposed.

Schedule

Construction is estimated to begin in December of 2026, with less than 6 months (approximately 160 working days) of construction required to complete improvements at both stations.

No-Build Alternative

This alternative would maintain both facilities in their current condition and would not meet the purpose and need of the project. For each potential impact area discussed in Chapter 2, the No-Build alternative has been determined to have no impact. Under the No-Build alternative, no alterations to the existing conditions would occur and the proposed improvements would not be implemented.

General Plan Description, Zoning, and Surrounding Land Uses

The Ukiah MS is located on the east side of U.S. 101 in a suburb of Ukiah known as 'The Forks.' The environmental setting around the Ukiah MS is generally urban to the highway corridor on the east and rural/agricultural to the west of U.S. 101. In the immediate vicinity of the Ukiah MS, there is ruderal vegetation and planted redwood trees on the state right of way between the MS property and the highway, as well as oak trees along the MS boundary to the east and south. The Russian River and the East Fork of the Russian River converge approximately 0.5 mile to the east of the Ukiah MS. The East Fork is the outlet of nearby Lake Mendocino. The Ukiah MS and much of the Forks community area is within the mapped inundation zone of Lake Mendocino's Coyote Valley Dam (County of Mendocino 2023).

Long range planning for The Forks and other areas in the Ukiah Valley, outside of the Ukiah city limits, is described in the Ukiah Valley Area Plan (County of Mendocino 2011). The Ukiah MS is within an area zoned 'PF' and has a general plan designation of 'PF,' Public Facility. Surrounding lands to the north, south, and east of the Ukiah MS are zoned 'L1,' Limited Industrial; the land to the west of the MS and west of U.S. 101 is zoned 'AG', Agriculture. Adjacent parcels are occupied by commercial businesses, including Herc Rentals, Ferrell Gas, and a Chevron gas station, among others. The nearest school is the Pinoleville Head Start, a preschool, located approximately 1 mile to the southwest of the Ukiah MS. There are additional schools located between one and two miles away from the Ukiah MS, within the Ukiah city limits; these include Ukiah Elementary School, Tree of Life

Charter School, Redwood Collegiate Academy, and the New Morning Montessori School. The Ukiah Municipal Airport is located approximately four miles south of the Ukiah MS.

The Boonville MS is located in a rural area, bounded on the east by State Route 128, and on the south and the west by Anderson Creek. The boundary of the creek's associated riparian vegetation occurs approximately 110 feet to the west of the proposed materials storage building. The Boonville MS is located within the mapped 100 year flood zone of Anderson Creek; a portion of the MS is also located within a regulatory floodway of the creek (Federal Emergency Management Agency [FEMA] 2011). In the immediate vicinity of the Boonville MS extending to the north and west are residential and vacation properties; larger tracts of land on the east side of SR 128 include agriculture (wine grapes) and ranching.

The Boonville MS is located in the Anderson Valley Community Area (County of Mendocino General Plan 2009) and is zoned 'RR5,' Rural Residential with a five-acre minimum lot area. Surrounding parcels are occupied by rural residences and agriculture land uses consistent with this rural character. The most commonly found zoning in the area is 'AG,' Agriculture, 'RC,' Rural Community, and 'RR1,' Rural Residential with a one-acre minimum lot area. The nearest school is the Anderson Valley Junior High and High School, located at its closest point approximately 250 feet to the west of the Boonville MS. The Rancheria High School and the Anderson Valley Elementary School are located approximately 1.3 miles north of the Boonville MS. The Boonville Airport is located approximate 0.25 miles to the south to southwest of the MS.

1.3 Permits and Approvals Needed

New construction at both Maintenance Stations would require an inspection and final approval from the state Fire Marshal.

No additional environmental permits or approvals are required for this project.

1.4 Standard Measures and Best Management Practices Included in All Alternatives

Under CEQA, "mitigation" is defined as avoiding, minimizing, rectifying, reducing/ eliminating, and compensating for an impact. In contrast, Standard Measures and Best Management Practices (BMPs) are prescriptive and sufficiently standardized to be generally applicable, and do not require special tailoring for a project. They are measures that typically result from laws, permits, agreements, guidelines, resource management plans, and resource agency directives and policies. For this reason, the measures and practices are not considered "mitigation" under CEQA; rather, they are included as part of the project description in environmental documents.

The following section provides a list of project features, standard practices (measures), and Best Management Practices (BMPs) that are included as part of the project description. These measures predate the project's proposal, and apply to all similar projects. For this reason, these measures and practices do not qualify as project mitigation, and the effects of the project are analyzed with these measures in place.

Standard measures relevant to the protection of natural resources deemed applicable to the proposed project include:

Biological Resources

BR-1: General

Before start of work, as required by permit or consultation conditions, a Caltrans biologist or Environmental Construction Liaison (ECL) would brief the contractor on environmental conditions and requirements relative to each stage of the proposed project.

BR-2: Animal Species

A. To protect migratory and nongame birds (occupied nests and eggs), if possible, vegetation or structure removal would be limited to the period outside of the bird breeding season (removal would occur between September 16 and January 31). If vegetation or structure removal is required during the breeding season, a nesting bird survey would be conducted by a qualified biologist within five days prior to vegetation or structure removal. If an active nest is located, the biologist would coordinate with CDFW to establish appropriate species-specific buffer(s) and any monitoring requirements. The buffer would be delineated around each active nest and construction activities would be excluded from these areas until birds have fledged, or the nest is determined to be unoccupied.

B. A *Bird Exclusion Plan* would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle birds or bats. Exclusion devices would be installed outside of the breeding season (September 16 through January 31) to eliminate the re-occupancy of existing structures by migratory bird species that may attempt to nest on the structure during construction. On structures or parts of structures where it is not feasible to install bird exclusion devices, partially constructed and unoccupied nests within the construction area would be removed and disposed of on a regular basis throughout the breeding season (February 1 through September 15 with biologist discretion) to prevent their occupation. Nest removal would be repeated weekly under guidance of a qualified biologist to ensure nests are inactive prior to removal.

C. A qualified biologist would conduct pre-construction surveys for bats no more than 5 days prior to construction activities. If bats are present, a *Bat Exclusion Plan* would be developed.

D. A *Bat Exclusion Plan* would be prepared by a qualified biologist prior to construction. Exclusion devices would be designed so they would not trap or entangle bats or birds. The Bat Exclusion Plan would include guidelines for appropriate date of exclusion and temperature parameters based on bridge type, geographic location, and species present. At the direction of a qualified biologist, exclusion devices would be installed after the maternity season but before hibernation. If overlapping resources are present (e.g., nesting birds),

coordination between the Bat Exclusion Plan and any other relevant plans would occur. Measures would be monitored by a qualified biologist.

E. To prevent attracting corvids (birds of the *Corvidae* family which include jays, crows, and ravens), no trash or foodstuffs would be left or stored on-site. All trash would be deposited in a secure container daily and disposed of at an approved waste facility at least once a week. Also, on-site workers would not attempt to attract or feed any wildlife.

Cultural Resources

CR-1: A Hopland Band of Pomo Indians tribal monitor would be present where applicable during ground-disturbing activities.

CR-2: If cultural materials are discovered during construction, work activity within a 60-foot radius of the discovery would be stopped and the area secured until a qualified archaeologist can assess the nature and significance of the find in consultation with the State Historic Preservation Officer (SHPO).

CR-3: If human remains and related items are discovered on private or State land, they would be treated in accordance with State Health and Safety Code (H&SC) § 7050.5. Further disturbances and activities would cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to California Public Resources Code (PRC) § 5097.98, if the remains are thought to be Native American, the coroner would notify the Native American Heritage Commission (NAHC) who would then notify the Most Likely Descendent (MLD).

Human remains and related items discovered on federally-owned lands would be treated in accordance with the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA) (23 USC 3001). The procedures for dealing with the discovery of human remains, funerary objects, or sacred objects on federal land are described in the regulations that implement NAGPRA 43 CFR Part 10. All work in the vicinity of the discovery shall be halted and the administering agency's archaeologist would be notified immediately. Project activities in the vicinity of the discovery would not resume until the federal agency complies with the 43 CFR Part 10 regulations and provides notification to proceed.

Geology, Seismic/Topography, and Paleontology

GS-1: In the unlikely event that paleontological resources (fossils) are encountered, all work within a 60-foot radius of the discovery would stop, the area would be secured, and the work would not resume until appropriate measures are taken.

Greenhouse Gas Emissions

GHG-1: Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality.

GHG-2: Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.

GHG-3: Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB).

GHG-4: All areas temporarily disturbed during construction would be revegetated. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.

GHG-5: If practicable, recycle nonhazardous waste and excess material.

Hazardous Waste and Material

HW-1: Per Caltrans requirements, the contractor(s) would prepare a project-specific *Lead Compliance Plan* (California Code of Regulations [CCR] Title 8, § 1532.1, the "Lead in Construction" standard) to reduce worker exposure to lead-impacted soil. The plan would include protocols for environmental and personnel monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the handling of materials containing lead.

HW-2: If treated wood waste (such as removal of sign posts or guardrail) is generated during this project, it would be disposed of in accordance with Caltrans Specifications.

HW-3: If asbestos-containing material is removed during this project, it would be removed and disposed of in accordance with Caltrans Specifications.

HW-4: Excavating, transporting, and handling of material containing hazardous waste or contamination must result in no visible dust migration. During ground disturbing activities in areas of hazardous waste or contamination, the contractor must provide a water truck or tank.

Utilities and Emergency Services

UE-1: Caltrans would coordinate with utility providers to plan for relocation of any utilities.

UE-2: The Boonville MS is located within the *Moderate* CAL FIRE Hazard Severity Zone (FHSZ); the Ukiah MS is located in a Local Fire Responsibility area and does not have a CAL FIRE FHSZ rating. The contractor would be required to submit a jobsite Fire Prevention Plan as required by Cal/OSHA before starting job site activities. In the event of an emergency or wildfire, the contractor would cooperate with fire prevention authorities.

Water Quality and Stormwater Runoff

WQ-1: The project would comply with the provisions of the Caltrans Statewide National Pollutant Discharge Elimination System (NPDES) Permit (Order 2022-0033-DWQ), effective January 1, 2023.

Before any ground-disturbing activities, the contractor would prepare a Water Pollution Control Program (WPCP) (projects that result in a land disturbance of less than one acre) that includes erosion control measures and construction waste containment measures to protect Waters of the State during project construction. For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

The WPCP would identify the sources of pollutants that may affect the quality of stormwater; include construction site Best Management Practices (BMPs) to control sedimentation, erosion, and potential chemical pollutants; provide for construction materials management; include non-stormwater BMPs; and include routine inspections and a monitoring and reporting plan. All construction site BMPs would follow the latest edition of the *Caltrans Storm Water Quality Handbooks: Construction Site BMPs Manual* to control and reduce the impacts of construction-related activities, materials, and pollutants on the watershed.

The project WPCP would be continuously updated to adapt to changing site conditions during the construction phase.

Construction may require one or more of the following temporary construction site BMPs:

- Any spills or leaks from construction equipment (e.g., fuel, oil, hydraulic fluid, and grease) would be cleaned up in accordance with applicable local, state, and/or federal regulations.
- Accumulated stormwater, groundwater, or surface water from excavations or temporary containment facilities would be removed by dewatering.
- Water generated from the dewatering operations would be discharged on-site for dust control and/or to an infiltration basin or disposed of offsite.

- Existing vegetated areas would be maintained to the maximum extent practicable.
- Vegetation reestablishment or other stabilization measures would be implemented on disturbed soil areas, per the Erosion Control Plan.
- For WPCP projects (which are governed according to the Caltrans NPDES permit), soil disturbance is permitted to occur year-round as long as the Caltrans NPDES permit is adhered to.

WQ-2: The project would incorporate pollution prevention and design measures consistent with the *2016 Caltrans Storm Water Management Plan* (Caltrans 2016). This plan complies with the requirements of the Caltrans Statewide NPDES Permit (Order 2022-0033-DWQ).

The project design may include one or more of the following:

- Vegetated surfaces would feature native plants, and revegetation would use the seed mixture, mulch, tackifier, and fertilizer recommended in the Erosion Control Plan prepared for the project.
- Where possible, stormwater would be directed in such a way as to sheet flow across vegetated slopes, thus providing filtration of any potential pollutants.

1.5 Discussion of the NEPA Categorical Exclusion

This document contains information regarding compliance with the California Environmental Quality Act (CEQA) and other state laws and regulations. Separate environmental documentation supporting a Categorical Exclusion determination will be prepared in accordance with the National Environmental Policy Act. When needed for clarity, or as required by CEQA, this document may contain references to federal laws and/or regulations (CEQA, for example, requires consideration of adverse effects on species identified as a candidate, sensitive, or special status species by the National Marine Fisheries Service and the United States Fish and Wildlife Service—in other words, species protected by the Federal Endangered Species Act).

Chapter 2. CEQA Environmental Checklist

Environmental Factors Potentially Affected

The environmental factors noted below would be potentially affected by this project. Please see the CEQA Environmental Checklist on the following pages for additional information.

Potential Impact Area	Impacted: Yes / No
Aesthetics	No
Agriculture and Forest Resources	No
Air Quality	No
Biological Resources	No
Cultural Resources	No
Energy	No
Geology and Soils	No
Greenhouse Gas Emissions	**Yes**
Hazards and Hazardous Materials	**Yes**
Hydrology and Water Quality	No
Land Use and Planning	No
Mineral Resources	No
Noise	No
Population and Housing	No
Public Services	No
Recreation	No
Transportation	No
Tribal Cultural Resources	No
Utilities and Service Systems	No
Wildfire	No
Mandatory Findings of Significance	No

The CEQA Environmental Checklist identifies physical, biological, social, and economic factors that might be affected by the proposed project. In many cases, background studies performed in connection with the project will indicate there are no impacts to a particular resource. A "NO IMPACT" answer in the last column of the checklist reflects this determination. The words "significant" and "significance" used throughout the CEQA

Environmental Checklist are only related to potential impacts pursuant to CEQA. The questions in the CEQA Environmental Checklist are intended to encourage the thoughtful assessment of impacts and do not represent thresholds of significance.

Project features, which can include both design elements of the project, as well as standardized measures applied to all or most Caltrans projects (such as Best Management Practices [BMPs] and measures included in the Standard Plans and Specifications or as Standard Special Provisions [Section 1.4]), are considered to be an integral part of the project and have been considered prior to any significance determinations documented in the checklist or document.

Project Impact Analysis Under CEQA

CEQA broadly defines "project" to include "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment" (14 CCR § 15378). Under CEQA, normally the baseline for environmental impact analysis consists of the existing conditions at the time the environmental studies began. However, it is important to choose the baseline that most meaningfully informs decision-makers and the public of the project's possible impacts. Where existing conditions change or fluctuate over time, and where necessary to provide the most accurate picture practically possible of the project's impacts, a lead agency may define existing conditions by referencing historic conditions, or conditions expected when the project becomes operational, or both, that are supported with substantial evidence. In addition, a lead agency may also use baselines consisting of both existing conditions and projected future conditions that are supported by reliable projections based on substantial evidence in the record. The CEQA Guidelines require a "statement of the objectives sought by the proposed project" (14 CCR § 15124(b)).

CEQA requires the identification of each potentially "significant effect on the environment" resulting from the project, and ways to mitigate each significant effect. Significance is defined as "Substantial or potentially substantial adverse change to any of the physical conditions within the area affected by the project" (14 CCR § 15382). CEQA determinations are made prior to and separate from the development of mitigation measures for the project.

The legal standard for determining the significance of impacts is whether a "fair argument" can be made that a "substantial adverse change in physical conditions" would occur. The fair argument must be backed by substantial evidence including facts, reasonable assumption predicated upon fact, or expert opinion supported by facts. Generally, an environmental professional with specific training in an area of environmental review can make this determination.

Though not required, CEQA suggests Lead Agencies adopt thresholds of significance, which define the level of effect above which the Lead Agency will consider impacts to be significant, and below which it will consider impacts to be less than significant. Given the size of California and it's varied, diverse, and complex ecosystems, as a Lead Agency that encompasses the entire State, developing thresholds of significance on a state-wide basis has not been pursued by Caltrans. Rather, to ensure each resource is evaluated objectively, Caltrans analyzes potential resource impacts in the project area based on their location and the effect of the potential impact on the resource as a whole. For example, if a project has the potential to impact 0.10 acre of wetland in a watershed that has minimal development and contains thousands of acres of wetland, then a "less than significant" determination would be considered appropriate. In comparison, if 0.10 acre of wetland would be impacted that is located within a park in a city that only has 1.00 acre of total wetland, then the 0.10 acre of wetland impact could be considered "significant."

If the action may have a potentially significant effect on any environmental resource (even with mitigation measures implemented), then an Environmental Impact Report (EIR) must be prepared. Under CEQA, the lead agency may adopt a negative declaration (ND) if there is no substantial evidence that the project may have a potentially significant effect on the environment (14 CCR § 15070(a)). A proposed negative declaration must be circulated for public review, along with a document known as an Initial Study. CEQA also allows for a "Mitigated Negative Declaration" in which mitigation measures are proposed to reduce potentially significant effects to less than significant (14 CCR § 15369.5).

Although the formulation of mitigation measures shall not be deferred until some future time, the specific details of a mitigation measure may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review. The lead agency must (1) commit itself to the mitigation, (2) adopt specific performance standards the mitigation will achieve, and (3) identify the type(s) of potential action(s) that can feasibly achieve that performance standard and that will be considered, analyzed, and potentially incorporated in the mitigation measure.

Compliance with a regulatory permit or other similar processes may be identified as mitigation if compliance would result in implementation of measures that would be reasonably expected, based on substantial evidence in the record, to reduce the significant impact to the specified performance standards (§ 15126.4(a)(1)(B)).

Per CEQA, measures may also be adopted, but are not required, for environmental impacts that are not found to be significant (14 CCR § 15126.4(a)(3)). Under CEQA, mitigation is defined as avoiding, minimizing, rectifying, reducing, and compensating for any potential impacts (CEQA 15370). Regulatory agencies may require additional measures beyond those required for compliance with CEQA. Though not considered "mitigation" under CEQA, these measures are often referred to in an Initial Study as "mitigation", Good Stewardship, or Best Management Practices. These measures can also be identified after the Initial Study/Negative Declaration is approved.

CEQA documents must consider direct and indirect impacts of a project (California Public Resources [PRC] Code § 21065.3). They are to focus on significant impacts (14 CCR § 15126.2(a)). Impacts that are less than significant need only be briefly described (14 CCR § 15128). All potentially significant effects must be addressed.

No-Build Alternative

For each of the following CEQA Environmental Checklist questions, the "No-Build" Alternative has been determined to have "No Impact". Under the "No-Build" Alternative, no alterations to the existing conditions would occur and no proposed improvements would be implemented. The "No-Build" Alternative will not be discussed further in this document.

Definitions of Project Parameters

When determining the parameters of a project for potential impacts, the following definitions are provided:

Project Area: This is the general area where the project is located. This term is mainly used in the Affected Environment section (e.g., watershed, climate type, etc.).

Project Limits: This is the beginning and ending post miles for a project. This sets the beginning and ending limits of a project along the highway. It is the limits programmed for a project, and every report, memo, etc. associated with a project should use the same post mile limits. In some cases, there may be areas associated with a project that are outside of the project limits, such as staging and disposal locations.

Project Footprint: The area the project is anticipated to impact, both temporarily and permanently. This includes staging and disposal areas.

Environmental Study Limits (ESL): The project engineer provides the Environmental team the ESL as an anticipated boundary for potential impacts. The ESL is *not* the project footprint. Rather, it is the area *encompassing* the project footprint where there could *potentially* be direct and indirect disturbance by construction activity. The ESL is larger than the project footprint in order to accommodate any future scope changes. The ESL is also used for identifying the various Biological Study Areas (BSAs) needed for different biological resources.

Biological Study Area (BSA): The BSA encompasses the ESL plus any areas outside of the ESL that could be potentially affected by a project (e.g., noise, visual, Coastal Zone, etc.). At these active maintenance station locations, based on the proposed scope of work and available habitat, Depending on resources in the area, a project could have multiple BSAs. Each BSA should be identified and defined. If the project is within the Coastal Zone, this area would also include the required 100 foot buffer. At these active maintenance station locations, based on the proposed scope of work and available habitat, the BSA was detrmined to be the same as the ESL and no BSA was delineated.

Layouts of the ESL (BSA) are found in Appendix A.

2.1 Aesthetics

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Aesthetics are not anticipated because the project is a MS improvement project that would improve existing facilities and add EV charging stations to existing paved and developed areas.

New lighting is proposed at the Boonville MS, where the replacement material storage building would be equipped with new LED lighting inside of the storage bays. Lighting would be directed onto the materials and would not create a new source of substantial light or glare.

The scale and visibility of the construction work and replacement facilities would not substantially change from existing conditions. Therefore, the project would not have a substantial effect on scenic vistas or resources, or otherwise degrade the existing visual character of public views. The project would not result in impacts to Aesthetics.

2.2 Agriculture and Forest Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection (CAL FIRE) regarding the state's inventory of forest land, including the Forest and Range Assessment Project; the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board (CARB).

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
Would the project: b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				✓
Would the project: c) Conflict with existing zoning for, or cause rezoning of forest land (as defined by 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: d) Result in the loss of forest land or conversion of forest land to non-forest use?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Agriculture and Forest resources are not anticipated because the project is a MS improvement project that would replace existing facilities and add EV charging stations to existing paved and developed areas. There are no agricultural lands within the ESL. The project will not convert farmland to non-agricultural use; conflict with existing zoning for agricultural use, forest use, or a Williamson Act contract; result in the loss of forest land or conversion of forest land to non-forest use; or involve other changes to the existing environment that would result in conversion of farmland to non-agricultural use or forest land to non-forest use. The project would not result in impacts to Agriculture and Forest resources.

2.3 Air Quality

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the technical memorandum, *Air Quality and Noise Analysis for the Boonville/Ukiah MS Bulk Tank /Structures Project* dated January 12, 2024 (Caltrans 2024a).

Potential impacts to Air Quality are not anticipated because the construction work would be temporary and limited in area, and operations from this non-capacity increasing project would not generate changes to traffic volume, fleet mix, traffic speeds, traffic location, or other new emissions generating activities. Please refer to Section 2.8 for information specific to Greenhouse Gas Emissions. The project would not result in impacts to Air Quality.

2.4 Biological Resources

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, or NOAA Fisheries?				✓
Would the project: 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 U.S. Fish and Wildlife Service?				✓
Would the project: c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
Would the project: 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?				✓
Would the project: e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				✓

"No Impact" determinations in this section are based on the scope and location of the proposed project, as well as the *Biological Resources No Effects Memo 01-0K010 Ukiah and Boonville MSs Men 101 & 128*, dated February 15, 2024 (Caltrans 2024b).

Potential impacts to biological resources are not anticipated due to the minimal scope of work outside of previously disturbed or paved areas, and lack of wetlands, riparian areas, or sensitive natural communities within the project limits. No special status plants or their habitats would be impacted by the proposed project. Potential impacts to bats or nesting birds that may be present in the project area would be avoided with the implementation of Caltrans Standard Measures and Best Management Practices (Section 1.4); no other animals would be impacted by the project. All work would occur within developed land owned by Caltrans or within the existing Caltrans right of way. No conflicts with local, regional or state plans, policies, or ordinances are expected. The project would not result in impacts to Biological Resources.

2.5 Cultural Resources

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Screening Memo for The Ukiah & Boonville MS MTRF Upgrades Project*, completed November 2023 (Caltrans 2023a). Potential impacts to Cultural Resources are not anticipated because all ground-disturbing activities would occur outside of known potentially sensitive areas. Therefore, no impacts to cultural resources will occur. Because substantial evidence demonstrates that the project will not cause a substantial adverse change to a tribal cultural resource, AB 52 does not apply. The project would not result in impacts to Cultural Resources.

2.6 Energy

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as well as the technical memorandum, *Air Quality and Noise Analysis for the Boonville/Ukiah MS Bulk Tank/Structures Project* (Caltrans 2024a).

Potential impacts to Energy are not anticipated as the project construction activities would be temporary and limited to the necessary operating of construction equipment and would have no noticeable effect on peak or baseline demands for energy.

Operationally, the energy use associated with the upgraded facilities would be equivalent to existing uses, with the exception of the proposed Level 3 EV chargers that require new DC connections. These chargers, like other new electrical components (e.g., new lighting), represent a negligible increase in the local and regional power demand. Furthermore, the EV chargers would facilitate the electrification of the Caltrans fleet which would reduce fleet production of greenhouse gas emissions by reducing gasoline consumption. The project would not result in impacts to Energy.

2.7 Geology and Soils

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
ii) Strong seismic ground shaking?				✓
iii) Seismic-related ground failure, including liquefaction?				✓
iv) Landslides?				✓
Would the project: b) Result in substantial soil erosion or the loss of topsoil?				✓
Would the project: 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?				✓
Would the project: 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?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				✓
Would the project: f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				✓

"No Impact" determinations listed within the CEQA Environmental Checklist Geology and Soils section are based on the scope, description, and location of the proposed project as well as the *Paleontological Identification Report*, completed February 12, 2024 (Caltrans 2024c).

Potential impacts to Geology and Soils are not anticipated because the proposed work involves minor excavation to remove and replace MS facilities and add one EV charging station to each MS. All work would occur on flat, developed lands where no faults, unstable geological units or soils, including expansive soils, have been identified as occurring within the ESL of either MS (California Department of Conservation (DOC 2023)).

Within the developed limits of the project maintenance stations and the ESL, there are no recorded fossil findings. Native soils are described to comprise alluvium (Quaternary and early Holocene to late Pleistocene), which has a low potential to yield paleontological resources. Therefore, while there is some potential to encounter paleontological resources during proposed excavation work for foundations and conduit trenching, no unique resource is anticipated and, with the implementation of Standard Measures and Best Management Practices for inadvertent discovery (Section 1.4), no impacts to unanticipated resources would occur. The project would not result in impacts to Geology and Soils.

2.8 Greenhouse Gas Emissions

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

Climate Change

Climate change refers to long-term changes in temperature, precipitation, wind patterns, and other elements of the Earth's climate system. The Intergovernmental Panel on Climate Change, established by the United Nations and World Meteorological Organization in 1988, is devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy. Climate change in the past has generally occurred gradually over millennia, or more suddenly in response to cataclysmic natural disruptions. The research of the Intergovernmental Panel on Climate Change and other scientists over recent decades, however, has unequivocally attributed an accelerated rate of climatological changes over the past 150 years to GHG emissions generated from the production and use of fossil fuels.

Human activities generate GHGs consisting primarily of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), tetrafluoromethane, hexafluoroethane, sulfur hexafluoride (SF_6), and various hydrofluorocarbons (HFCs). CO_2 is the most abundant GHG; while it is a naturally occurring and necessary component of Earth's atmosphere, fossil-fuel combustion is the main source of additional, human-generated CO_2 that is the main driver of climate change. In the U.S. and in California, transportation is the largest source of GHG emissions, mostly CO_2.

The impacts of climate change are already being observed in the form of sea level rise, drought, extended and severe fire seasons, and historic flooding from changing storm patterns. The most important strategy to address climate change is to reduce GHG emissions. Additional strategies are necessary to mitigate and adapt to these impacts. In the context of climate change, "mitigation" involves actions to reduce GHG emissions to lessen adverse impacts that are likely to occur. "Adaptation" is planning for and responding to impacts to reduce vulnerability to harm, such as by adjusting transportation design standards to withstand more intense storms, heat, and higher sea levels. This analysis will include a discussion of both in the context of this transportation project.

Regulatory Setting

This section outlines federal and state efforts to comprehensively reduce greenhouse gas emissions from transportation sources. For a full list of laws, regulations, and guidance related to climate change (GHGs and adaptation), please refer to Caltrans' Standard Environmental Reference (SER), Chapter 16, Climate Change.

FEDERAL

To date, no nationwide numeric mobile-source GHG reduction targets have been established, nor have any regulations or legislation been enacted specifically to address climate change and GHG emissions reduction at the project level.

The National Environmental Policy Act (NEPA) (42 United States Code [USC] Part 4332) requires federal agencies to assess the environmental effects of their proposed actions prior to making a decision on the action or project. In January 2023, the White House Council on Environmental Quality (CEQ) issued updated and expanded interim National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change (88 Fed. Reg. 1196) (CEQ NEPA GHG Guidance), in accordance with Executive Order (EO) 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, 86 FR 70935 (Dec. 13, 2021) and EO 14008, *Tackling the Climate Crisis at Home and Abroad*. The CEQ guidance does not establish numeric thresholds of significance but emphasizes quantifying reasonably foreseeable lifetime direct and indirect emissions whenever possible. This guidance also emphasizes resilience and environmental justice in project-level climate change and GHG analyses.

The Federal Highway Administration (FHWA) recognizes the threats that extreme weather, sea level rise, and other changes in environmental conditions pose to valuable transportation infrastructure and those who depend on it. FHWA therefore supports a sustainability approach that assesses vulnerability to climate risks and incorporates resilience into planning, asset management, project development and design, and operations and maintenance practices (FHWA 2022). This approach encourages planning for sustainable highways by addressing climate risks while balancing environmental, economic, and social values— "the triple bottom line of sustainability" (FHWA n.d.). Program and project elements that foster sustainability and resilience also support economic vitality and global efficiency, increase safety and mobility, enhance the environment, promote energy conservation, and improve the quality of life.

Early efforts by the federal government to improve fuel economy and energy efficiency to address climate change and its associated effects include The Energy Policy and Conservation Act of 1975 (42 USC Section 6201); and Corporate Average Fuel Economy (CAFE) Standards. The U.S. Department of Transportation's National Highway Traffic and Safety Administration (NHTSA) sets and enforces CAFE standards for on-road motor vehicles sold in the United States (NHTSA 2022). The Environmental Protection Agency (U.S. EPA) calculates average fuel economy levels for manufacturers, and also sets related GHG emissions standards for vehicles under the Clean Air Act. Raising CAFE standards leads automakers to create a more fuel-efficient fleet, which improves our nation's energy security, saves consumers money at the pump, and reduces GHG emissions (U.S. DOT 2014). These standards are periodically updated and published through the federal rulemaking process.

STATE

California has been innovative and proactive in addressing GHG emissions and climate change by passing multiple Senate and Assembly bills and Executive Orders (EOs).

In 2005, EO S-3-05 initially set a goal to reduce California's GHG emissions to 80 percent below year 1990 levels by 2050, with interim reduction targets. Later EOs and Assembly and Senate bills refined interim targets and codified the emissions reduction goals and strategies. The California Air Resources Board (CARB) was directed to create a climate change scoping plan and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Ongoing GHG emissions reduction was also mandated in Health and Safety Code (H&SC) Section 38551(b).

In 2022, the California Climate Crisis Act was passed, establishing state policy to reduce statewide human- caused GHG emissions by 85 percent below 1990 levels, achieve net zero GHG emissions by 2045, and achieve and maintain negative emissions thereafter.

Beyond GHG reduction, the State maintains a climate adaptation strategy to address the full range of climate change stressors and passed legislation requiring state agencies to consider protection and management of natural and working lands as an important strategy in meeting the state's GHG reduction goals.

Environmental Setting

The Ukiah MS is located in a suburb of Ukiah, known as 'The Forks,' which is located north of the Ukiah city limits in Mendocino County. The project area is light industrial and commercial buildings with some residential areas to the north and east. The route in the project area is heavily used during peak hours. The Mendocino Council of Governments (MCOG) and the 2017 Regional Transportation Plan (RTP) (MCOG 2018) guide transportation development in the project area. In coordination with the RTP and the 2009 Mendocino County General Plan, the 2011 Ukiah Valley Area Plan (UVAP) promotes local goals related to transportation and circulation (UVAP Section 5); the UVAP also includes a discussion and goals related to greenhouse gas emissions and energy (Section 7).

The Boonville MS is in a rural area, with a primarily natural resources-based agricultural and tourism economy. State Route 128 is the main east to west transportation route to and through the area for both passenger and commercial vehicles. The nearest east to west alternate route is SR 20, over 25 miles to north, or SR 116, over 30 miles to the south. While SR 128 is the primary transportation route for the regional community, traffic counts are low relative to other rural population centers (i.e.: Fort Bragg) and SR 128 is rarely congested due to a general lack of commuter traffic and dispersed regional population (Caltrans 2021a). The MCOG and the RTP also guides transportation development in this area. The Boonville MS is in an area guided by the Mendocino County General Plan, with local planning guidance provided by the Anderson Valley Community, included in the "Communities Specific Policies" chapter (Chapter 6). The General Plan and the Communities Specific Policies chapter were adopted in 2009 and do not specifically address GHGs or climate change; however, the 2021 revisions of the Development Element and the Resource Management Elements include goals and policies related to greenhouse gas emissions and climate change.

GHG INVENTORIES

A GHG emissions inventory estimates the amount of GHGs discharged into the atmosphere by specific sources over a period of time. Tracking annual GHG emissions allows countries, states, and smaller jurisdictions to understand how emissions are changing and what actions may be needed to attain emission reduction goals. U.S. EPA is responsible for documenting GHG emissions nationwide, and the ARB does so for the state of California, as required by H&SC Section 39607.4. Cities and other local jurisdictions may also conduct local GHG inventories to inform their GHG reduction or climate action plans.

NATIONAL GHG INVENTORY

The annual GHG inventory submitted by the U.S. EPA to the United Nations provides a comprehensive accounting of all human-produced sources of GHGs in the United States. Total national GHG emissions from all sectors in 2021 were 5,586.0 million metric tons (MMT), factoring in deductions for carbon sequestration in the land sector. (Land Use, Land Use Change, and Forestry provide a carbon sink equivalent to 12% of total U.S. emissions in 2021 [U.S. EPA 2023a].) While total GHG emissions in 2021 were 17% below 2005 levels, they increased by 6% over 2020 levels. Of these, 79.4% were CO_2, 11.5% were CH_4, and 6.2% were N_2O; the balance consisted of fluorinated gases. From 1990 to 2021, CO_2 emissions decreased by only 2% (U.S. EPA 2023a).

The transportation sector's share of total GHG emissions increased to 28% in 2021 and remains the largest contributing sector (Figures 4–6). Transportation fossil fuel combustion accounted for 92% of all CO_2 emissions in 2021. This is an increase of 7% over 2020, largely due to the rebound in economic activity following the COVID-19 pandemic (U.S. EPA 2023a, 2023b)).

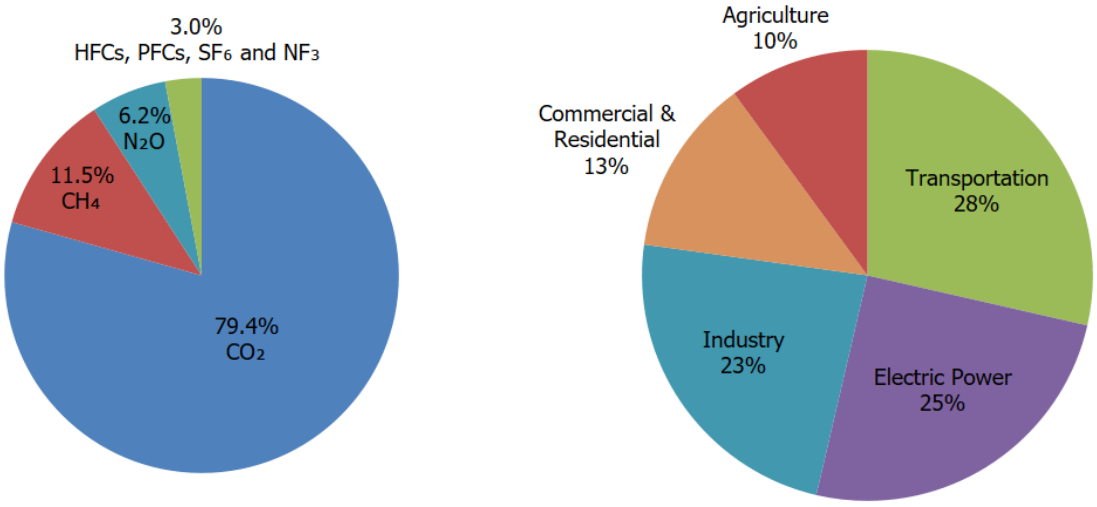

Figure 4. U.S. 2021 Greenhouse Gas Emissions

(Source: U.S. EPA 2023a)

STATE GHG INVENTORY

The CARB collects GHG emissions data for transportation, electricity, commercial and residential, industrial, agricultural, and waste management sectors each year. It then summarizes and highlights major annual changes and trends to demonstrate the state's progress in meeting its GHG reduction goals. Overall statewide GHG emissions declined from 2000 to 2020 despite growth in population and state economic output (Figure 5) (CARB 2022a).

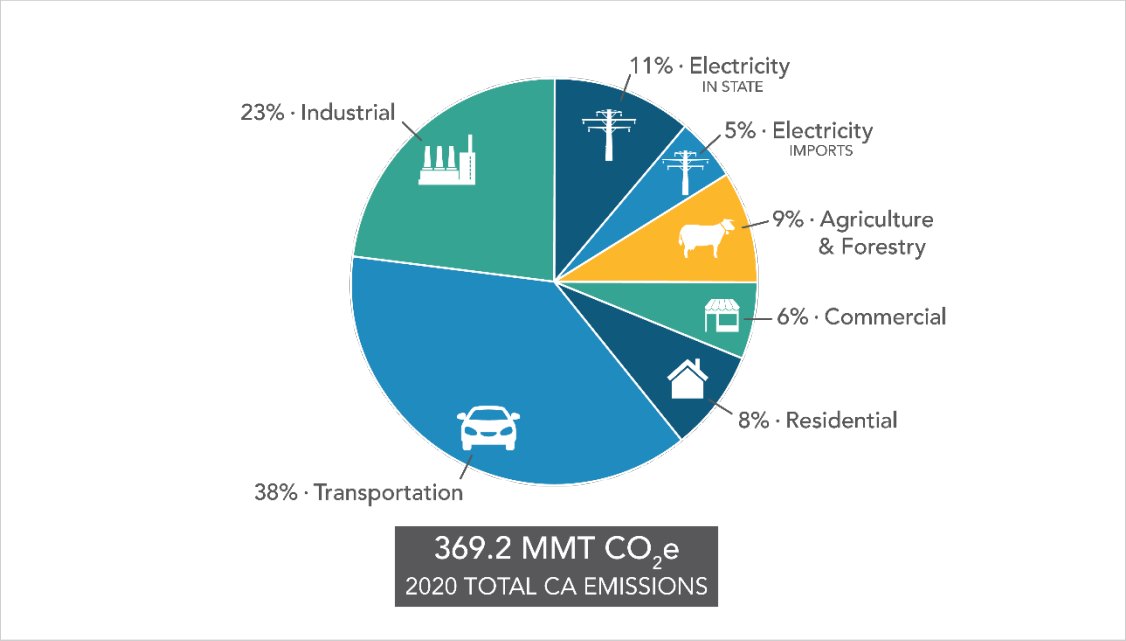

Figure 5. California 2020 Greenhouse Gas Emissions by Scoping Plan Category
(Source: CARB 2022a)

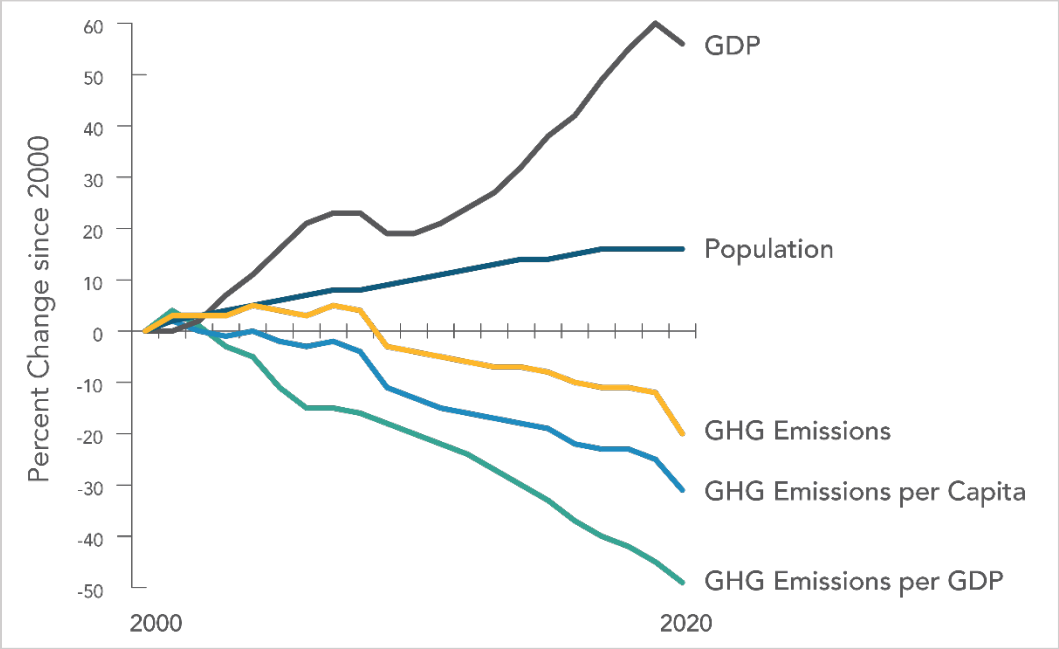

Figure 6. Change in California GDP, Population, and GHG Emissions since 2000
(Source: CARB 2022a)

AB 32 required the CARB to develop a Scoping Plan that describes the approach California will take to achieve the goal of reducing GHG emissions to 1990 levels by 2020, and to update it every 5 years. The *AB 32 Scoping Plan*, and the subsequent updates, contain the main strategies California will use to reduce GHG emissions. The CARB adopted the first scoping plan in 2008. The second updated plan, *California's 2017 Climate Change Scoping Plan*, adopted on December 14, 2017, reflects the 2030 target established in EO B-30-15 and SB 32. The *2022 Scoping Plan for Achieving Carbon Neutrality*, adopted September 2022, assesses progress toward the statutory 2030 reduction goal and defines a path to reduce human-caused emissions to 85 percent below 1990 levels and achieve carbon neutrality no later than 2045, in accordance with AB 1279 (CARB 2022b).

REGIONAL PLANS

As required by *The Sustainable Communities and Climate Protection Act of 2008*, the CARB sets regional GHG reduction targets for California's 18 Metropolitan Planning Organizations (MPOs) to achieve through planning future projects that will cumulatively achieve those goals and reporting how they will be met in the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS).

The project area is not within the jurisdiction of an MPO and is therefore not required to produce a RTP or SCS and is not subject to CARB GHG reduction targets; nor does Mendocino County have an adopted Climate Action Plan. MCOG serves as the Regional Transportation Planning Agency (RTPA) for Mendocino County cities and unincorporated areas, which include Boonville and 'The Forks' suburb of Ukiah. Both the Mendocino County General Plan's Development Element (DE) and Resource Management Element (RE; 2021) and MCOG's RTP (2018) include generalized goals related to transportation and greenhouse gas reduction, supporting expansion of electric vehicle charging stations and support for the region's mass transit system, the Mendocino Transit Authority.

Similarly, the Ukiah Valley Area Plan (County of Mendocino 2011) identifies pedestrian and bicycle connectivity within the existing system as goals related to reduction of vehicle use and greenhouse gas emissions.

These regional plans do not provide quantifiable GHS reduction objectives; however, the broader vison and goals identified by these plans indicate that the development of new EV charging stations for any vehicle use in the county would align with the goals of overall greenhouse gas reduction that are expressed in these guidance documents. See some of the related policy statements from these regional plans in Table 1 below.

However, the oldest policies, directly associated with the Anderson Valley Community Planning area in the Mendocino General Plan (County of Mendocino 2009), where the Boonville MS is located, do not include policies related to greenhouse gas reductions or climate change.

Table 1. Regional and Local Greenhouse Gas Reduction Plans

Title	GHG Reduction Policies or Strategies
MCOG's RTP (MCOG 2018)	Policies on Climate Change and the Environment • Evaluate transportation projects based on their ability to reduce Mendocino County's transportation-related greenhouse gas emissions. • Prioritize transportation projects which lead to reduced greenhouse gas emissions. • Monitor new technologies and opportunities to implement energy efficient and nonpolluting transportation infrastructure. • Encourage private and public investment in a countywide electric vehicle charging station network and seek funding to fill gaps in the network.
Mendocino County General Plan Development Element (County of Mendocino 2021)	• Policy DE-35: Encourage compact development patterns, infill, redevelopment, and reuse in community areas to protect natural resources and maximize the efficient use of infrastructure and services. • Policy DE-47: Mixed commercial, employment, and residential uses, including daycare centers, should be designed and located to reduce vehicle trips. • Policy DE-64: Promote and encourage environmentally sound industries and practices that achieve or promote General Plan objectives. • Policy DE-66: Promote activities (such as waste-to-energy) that process, use, recycle, or reduce locally generated wastes or materials. • Policy DE -67: New and expanding industries should incorporate clean technology to the extent possible, and existing industries should work toward this objective.

Title	GHG Reduction Policies or Strategies
	• Policy DE-134: Facilitate the increased use of electric vehicles by providing opportunities for vehicle charging. • Policy DE-160: Connect pedestrian, bicycle, and trail routes to form local and regional networks. Link pedestrian, bicycle, and trail routes with other transportation modes to maximize local and regional non-motorized transportation. • Policy DE-166: The County will demonstrate leadership in the implementation of programs encouraging the use of alternative modes of transportation by its employees, as well as the use of alternative fuels.
Mendocino County General Plan Resource Management Element (County of Mendocino 2021)	• Policy RM-53: Identify, map, and protect resources and areas that may provide energy production opportunities, such as geothermal reserves and solar easements. • Policy RM-54: Encourage the installation of solar or other renewable energy systems to adequately address year-round need. • Policy RM-55: Encourage research and development of distributed, renewable energy sources to meet current and increasing energy demands.
Ukiah Valley Area Plan (County of Mendocino 2011)	• Policy CT2.2: Develop a safe and integrated bicycle transportation system in order to promote the use of bicycles as a viable and attractive alternative to the automobile. • Policy EA1.1k: Prepare and Adopt a Qualified Greenhouse Gas Reduction and Energy Management Plan • Policy EA1.1i: Fleet Vehicle Replacement • Policy EA1.1j: Electric Vehicle Incentives

Project Analysis

GHG emissions from transportation projects can be divided into those produced during operation and use of the State Highway System (SHS) (operational emissions) and those produced during construction. The primary GHGs produced by the transportation sector are CO_2, CH_4, N_2O, and HFCs. CO_2 emissions are a product of burning gasoline or diesel fuel in internal combustion engines, along with relatively small amounts of CH_4 and N_2O. A small amount of HFC emissions related to refrigeration is also included in the transportation sector. (GHGs differ in how much heat each traps in the atmosphere, called global warming potential, or GWP. CO_2 is the most important GHG, so amounts of other gases are expressed relative to CO_2, using a metric called "carbon dioxide equivalent", or CO_2e. The global warming potential of CO_2 is assigned a value of 1, and the GWP of other gases is assessed as multiples of CO_2.)

The CEQA Guidelines generally address greenhouse gas emissions as a cumulative impact due to the global nature of climate change (Public Resources Code, § 21083(b)(2)). As the California Supreme Court explained, "because of the global scale of climate change, any one project's contribution is unlikely to be significant by itself." (Cleveland National Forest Foundation *v.* San Diego Assn. of Governments (2017) 3 Cal.5th 497, 512.) In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable" (CEQA Guidelines Sections 15064(h)(1) and 15130).

To make this determination, the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. Although climate change is ultimately a cumulative impact, not every individual project that emits greenhouse gases must necessarily be found to contribute to a significant cumulative impact on the environment.

Operational Emissions

The purpose of the proposed project is to improve existing Caltrans maintenance facilities in order to maintain safe and reliable access to fuel and materials on vital public transportation routes in northern California. Facility improvements include the addition of Levels 2 and 3 EV vehicle charging stations, which will facilitate the transition of the Caltrans fleet (including passenger and heavy-duty maintenance equipment) to a zero emissions fuel source.

The proposed project would not result in changes to roadway capacity, vehicle miles traveled (VMT), traffic volume, speed, the location of an existing facility, or any other factor that would cause an increase in GHG emissions. While construction emissions would be unavoidable, no increase in operational GHG emissions is expected.

Construction Emissions

Construction GHG emissions would result from material processing and transportation, on-site construction equipment, and potential traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. While construction GHG emissions are only produced for a short time, they have long-term effects in the atmosphere, so cannot be considered "temporary" in the same way as criteria pollutants that subside after construction is completed.

Use of long-life pavement, improved Transportation Management Plans, and changes in materials can also help offset GHG emissions produced during construction by allowing longer intervals between maintenance and rehabilitation activities.

Greenhouse gas emissions were estimated for the project using the CAL-CET 2021 v1.0.2, Caltrans construction modeling tool. Anticipating approximately five to six months of construction (160 working days), the project would have an estimated total release of 71 metric tons of CO_2e. The Cal-CET 2021 tool was also used to estimate average carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), Black Carbon (BC), and hydrofluorocarbon-134a (HFC-134a) emissions from construction activities. Table 2 summarizes estimated GHG emissions generated by on-site equipment for the project. The total CO_2e produced during construction is estimated to be 71 US tons (or 64 metric tons).

Table 2. Estimates (US tons) of GHG Emissions during Construction

Construction Year	CO_2	CH_4	N_2O	BC	HFC-134a	CO_2e*
2026	13	0.000	0.001	0.001	0.000	14
2027	52	0.001	0.003	0.003	0.002	56
Total	**65**	**0.001**	**0.003**	**0.003**	**0.002**	**71**

* A quantity of GHG is expressed as carbon dioxide equivalent (CO_2e) that can be estimated by the sum after multiplying each amount of CO_2, CH_4, N_2O, and HFC134a by its global warming potential (GWP). Each GWP of CO_2, CH_4, N_2O, BC and HFC-134a is 1, 25, 298, 460 and 1,430, respectively. Totals may not add due to rounding.

All construction contracts include Caltrans Standard Specifications related to air quality. Sections 7-1.02A and 7 1.02C, Emissions Reduction, require contractors comply with all laws applicable to the project and to certify they are aware of and will comply with all CARB emission reduction regulations.

Section 14-9.02, Air Pollution Control, requires contractors comply with all air pollution control rules, regulations, ordinances, and statutes. The implementation of these Standard Specifications contributes to reduced GHG emission during construction. Certain common regulations (such as equipment maintenance recommendations, and idling restrictions) that reduce construction vehicle emissions also help reduce GHG emissions.

CEQA Conclusion

While the proposed project would result in GHG emissions during construction, it is anticipated the project would not result in any increase in operational GHG emissions. The proposed project does not conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. With implementation of construction GHG reduction measures, the impact would be less than significant.

Caltrans is firmly committed to implementing measures to help reduce GHG emissions. These measures are outlined in the following section.

Greenhouse Gas Reduction Strategies

STATEWIDE EFFORTS

In response to Assembly Bill 32, the Global Warming Solutions Act, California is implementing measures to achieve emission reductions of GHGs that cause climate change. Climate change programs in California are effectively reducing GHG emissions from all sectors of the economy. These programs include regulations, market programs, and incentives that will transform transportation, industry, fuels, and other sectors to take California into a sustainable, cleaner, low-carbon future, while maintaining a robust economy (CARB 2022c).

Major sectors of the California economy, including transportation, will need to reduce emissions to meet 2030 and 2050 GHG emissions targets. The Governor's Office of Planning and Research (OPR) identified five sustainability pillars in a 2015 report:

1. Increasing the share of renewable energy in the State's energy mix to at least 50 percent by 2030;
2. Reducing petroleum use by up to 50 percent by 2030;
3. Increasing the energy efficiency of existing buildings by 50 percent by 2030;
4. Reducing emissions of short-lived climate pollutants; and
5. Stewarding natural resources, including forests, working lands, and wetlands, to ensure that they store carbon, are resilient, and enhance other environmental benefits (OPR 2015).

The transportation sector is integral to the people and economy of California. To achieve GHG emission reduction goals, it is vital that the state build on past successes in reducing criteria and toxic air pollutants from transportation and goods movement. GHG emission reductions will come from cleaner vehicle technologies, lower-carbon fuels, and reduction of vehicle miles traveled (VMT). Reducing today's petroleum use in cars and trucks is a key state goal for reducing greenhouse gas emissions by 2030 (California Environmental Protection Agency 2015).

In addition, SB 1386 (Wolk 2016) established as state policy the protection and management of natural and working lands and requires state agencies to consider that policy in their own decision making. Trees and vegetation on forests, rangelands, farms, and wetlands remove carbon dioxide from the atmosphere through biological processes and sequester the carbon in above- and below-ground matter.

Subsequently, Governor Gavin Newsom issued Executive Order N-82-20 to combat the crises in climate change and biodiversity. It instructs state agencies to use existing authorities and resources to identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities and in particular low-income, disadvantaged, and vulnerable communities. To support this order, the California Natural Resources Agency released *Natural and Working Lands Climate Smart* Strategy (California Natural Resources Agency 2022).

CALTRANS ACTIVITIES

Caltrans continues to be involved on the Governor's Climate Action Team as the CARB works to implement EOs S-3-05 and S-01-07 and help achieve the targets set forth in AB 32. EO B-30-15, issued in April 2015, and SB 32 in 2016 set an interim target to cut GHG emissions to 40% below 1990 levels by 2030. The following major initiatives are underway at Caltrans to help meet these targets.

Climate Action Plan for Transportation Infrastructure

The *California Action Plan for Transportation Infrastructure* (CAPTI) builds on executive orders signed by Governor Newsom in 2019 and 2020 targeted at reducing GHG emissions in transportation, which account for more than 40% of all polluting emissions, to reach the state's climate goals. Under CAPTI, where feasible and within existing funding program structures, the state will invest discretionary transportation funds in sustainable infrastructure projects that align with its climate, health, and social equity goals (California State Transportation Agency 2021).

California Transportation Plan

The *California Transportation Plan* (CTP) is a statewide, long-range transportation plan to meet our future mobility needs and reduce GHG emissions. It serves as an umbrella document for all the other statewide transportation planning documents. The *CTP 2050* presents a vision of a safe, resilient, and universally accessible transportation system that supports vibrant communities, advances racial and economic justice, and improves public and environmental health. The plan's climate goal is to achieve statewide GHG emissions reduction targets and increase resilience to climate change. It demonstrates how GHG emissions from the transportation sector can be reduced through advancements in clean fuel technologies; continued shifts toward active travel, transit, and shared mobility; more efficient land use and development practices; and continued shifts to telework (Caltrans 2021b).

Caltrans Strategic Plan

The *Caltrans 2020–2024 Strategic Plan* includes goals of stewardship, climate action, and equity. Climate action strategies include developing and implementing a Caltrans Climate Action Plan; a robust program of climate action education, training, and outreach; partnership and collaboration; a VMT monitoring and reduction program; and engaging with the most vulnerable communities in developing and implementing Caltrans climate action activities (Caltrans 2021c).

Caltrans Policy Directives and Other Initiates

Caltrans Director's Policy 30 (DP-30) Climate Change (June 22, 2012) established a Department policy to ensure coordinated efforts to incorporate climate change into Departmental decisions and activities. *Caltrans Greenhouse Gas Emissions and Mitigation Report* (Caltrans 2020) provides a comprehensive overview of Caltrans' emissions. The report documents and evaluates current Caltrans procedures and activities that track and reduce GHG emissions and identifies additional opportunities for further reducing GHG emissions from Department-controlled emission sources, in support of Departmental and State goals.

Project-Level Greenhouse Gas Reduction Strategies

The following Caltrans Standard Measures and Best Management Practices (Section 1.4) would be implemented to reduce greenhouse gas emissions and potential climate change impacts from the project.

- Caltrans Standard Specification "Air Quality" requires compliance by the contractor with all applicable laws and regulations related to air quality
- Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of diesel-fueled commercial motor vehicles and equipment with gross weight ratings of greater than 10,000 pounds to no more than 5 minutes.
- Caltrans Standard Specification "Emissions Reduction" ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board (CARB).

- All areas temporarily disturbed during construction would be revegetated with native species, as appropriate. Landscaping reduces surface warming and, through photosynthesis, decreases CO_2. This replanting would help offset any potential CO_2 emissions increase.
- To the extent possible, construction debris (including asphalt and concrete) would be removed for recycling.

In addition, one of the project outcomes, the installation of Level 3 EV chargers, would itself result in reduced emissions as the charges would facilitate the use and increase the range of the Caltrans EV fleet. As EV vehicles replace gasoline burning vehicles, GHG emissions are reduced.

Adaptation

Reducing GHG emissions is only one part of an approach to addressing climate change. Caltrans must plan for the effects of climate change on the state's transportation infrastructure and strengthen or protect the facilities from damage. Climate change is expected to produce increased variability in precipitation, rising temperatures, rising sea levels, variability in storm surges and their intensity, and in the frequency and intensity of wildfires. Flooding and erosion can damage or wash out roads; longer periods of intense heat can buckle pavement and railroad tracks; storm surges, combined with a rising sea level, can inundate highways. Wildfire can directly burn facilities and indirectly cause damage when rain falls on denuded slopes that landslide after a fire. Effects will vary by location and may, in the most extreme cases, require that a facility be relocated or redesigned. Furthermore, the combined effects of transportation projects and climate stressors can exacerbate the impacts of both on vulnerable communities in a project area. Accordingly, Caltrans must consider these types of climate stressors in how highways are planned, designed, built, operated, and maintained.

FEDERAL EFFORTS

Under NEPA Assignment, Caltrans is obligated to comply with all applicable federal environmental laws and FHWA NEPA regulations, policies, and guidance. Caltrans practices generally align with the *2023 CEQ Interim Guidance on Consideration of Greenhouse Gas Emissions and Climate Change*, which offers recommendations for additional ways of evaluating project effects related to GHG emissions and climate change. These recommendations are not regulatory requirements.

The Fifth National Climate Assessment, published in 2023, presents the most recent science and "analyzes the effects of global change on the natural environment, agriculture, energy production and use, land and water resources, transportation, human health and welfare, human social systems, and biological diversity; [It] analyzes current trends in global change, both human-induced and natural, and projects major trends for the subsequent 25 to 100 years … to support informed decision-making across the United States." Building on previous assessments, it continues to advance "an inclusive, diverse, and sustained process for assessing and communicating scientific knowledge on the impacts, risks, and vulnerabilities associated with a changing global climate" (U.S. Global Change Research Program 2023).

The U.S. Department of Transportation recognizes the transportation sector's major contribution of GHGs that cause climate change and has made climate action one of the department's top priorities (U.S. DOT 2023). FHWA's policy is to strive to identify the risks of climate change and extreme weather events to current and planned transportation systems. FHWA has developed guidance and tools for transportation planning that fosters resilience to climate effects and sustainability at the federal, state, and local levels (FHWA 2022).

The National Oceanic and Atmospheric Administration provides sea level rise projections for all U.S. coastal waters to help communities and decision makers assess their risk from sea level rise. Updated projections through 2150 were released in 2022 in a report and online tool (NOAA 2022).

STATE EFFORTS

Climate change adaptation for transportation infrastructure involves long-term planning and risk management to address vulnerabilities in the transportation system. A number of state policies and tools have been developed to guide adaptation efforts.

California's Fourth Climate Change Assessment (Fourth Assessment–2018) provides information to help decision makers across sectors and at state, regional, and local scales protect and build the resilience of the state's people, infrastructure, natural systems, working lands, and waters. The Fourth Assessment reported that if no measures are taken to reduce GHG emissions by 2021 or sooner, the state is projected to experience an up to 8.8 degrees Fahrenheit increase in average annual maximum daily temperatures; a two-thirds decline in water supply from snowpack resulting in water shortages; a 77% increase in average area burned by wildfire; and large-scale erosion of up to 67% of Southern California beaches due to sea level rise. These effects will have profound impacts on infrastructure, agriculture, energy demand, natural systems, communities, and public health (State of California 2018).

Sea level rise is a particular concern for transportation infrastructure in the Coastal Zone. Major urban airports will be at risk of flooding from sea level rise combined with storm surge as early as 2040; San Francisco airport is already at risk. Miles of coastal highways vulnerable to flooding in a 100-year storm event will triple to 370 by 2100, and 3,750 miles will be exposed to temporary flooding. The Fourth Assessment's findings highlight the need for proactive action to address these current and future impacts of climate change.

To help actors throughout the state address the findings of California's Fourth Climate Change Assessment, AB 2800's multidisciplinary Climate-Safe Infrastructure Working Group published *Paying it Forward: The Path Toward Climate-Safe Infrastructure in California.* This report provides guidance on assessing risk in the face of inherent uncertainties still posed by the best available climate change science. It also examines how state agencies can use infrastructure planning, design, and implementation processes to respond to the observed and anticipated climate change impacts (Climate-Safe Infrastructure Working Group 2018).

EO S-13-08, issued in 2008, directed state agencies to consider sea level rise scenarios for 2050 and 2100 during planning to assess project vulnerabilities, reduce risks, and increase resilience to sea level rise. It gave rise to the *2009 California Climate Adaptation Strategy*, the Safeguarding California Plan, and a series of technical reports on statewide sea level rise projections and risks, including the *State of California Sea-Level Rise Guidance Update* in

2018. The reports addressed the full range of climate change impacts and recommended adaptation strategies. The current *California Climate Adaptation Strategy incorporates* key elements of the latest sector-specific plans such as the *Natural and Working Lands Climate Smart Strategy, Wildfire and Forest Resilience Action Plan, Water Resilience Portfolio,* and the *CAPTI* (described above). Priorities in the *2023 California Climate Adaptation Strategy* include acting in partnership with California Native American Tribes, strengthening protections for climate-vulnerable communities that lack capacity and resources, implementing nature-based climate solutions, using best available climate science, and partnering and collaboration to best leverage resources (California Natural Resources Agency 2023).

EO B-30-15 recognizes that effects of climate change threaten California's infrastructure and requires state agencies to factor climate change into all planning and investment decisions. Under this EO, the Office of Planning and Research published *Planning and Investing for a Resilient California: A Guidebook for State Agencies*, to encourage a uniform and systematic approach to building resilience.

SB 1 Coastal Resources: Sea Level Rise (Atkins 2021) established statewide goals to "anticipate, assess, plan for, and, to the extent feasible, avoid, minimize, and mitigate the adverse environmental and economic effects of sea level rise within the Coastal Zone." As the legislation directed, the Ocean Protection Council collaborated with 17 state planning and coastal management agencies to develop the *State Agency Sea-Level Rise Action Plan for California* in February 2022. This plan promotes coordinated actions by state agencies to enhance California's resilience to the impacts of sea level rise (California Ocean Protection Council 2022).

CALTRANS ADAPTATION EFFORTS

Caltrans Vulnerability Assessments

Caltrans completed climate change vulnerability assessments to identify segments of the State Highway System vulnerable to climate change effects of precipitation, temperature, wildfire, storm surge, and sea level rise.

The climate change data in the assessments were developed in coordination with climate change scientists and experts at federal, state, and regional organizations at the forefront of climate science. The findings of the vulnerability assessments guide analysis of at-risk assets

and development of Adaptation Priority Reports as a method to make capital programming decisions to address identified risks.

Caltrans Sustainability Programs

The Director's Office of Equity, Sustainability and Tribal Affairs supports implementation of sustainable practices at Caltrans. The Sustainability Roadmap is a periodic progress report and plan for meeting the Governor's sustainability goals related to EOs B-16-12, B-18-12, and B-30-15. The Roadmap includes designing new buildings for climate change resilience and zero-net energy, and replacing fleet vehicles with zero-emission vehicles (Caltrans 2023b).

Project Adaptation Analysis

In Ukiah, the construction of the permanent bulk fuel island (with power back-up) would allow maintenance station staff, and emergency responders that are unable to access or utilize commercial fueling facilities due to blocked roads or power outages, to fuel vehicles in case of landslides or other weather emergencies, including those resulting from climate-related increases in the frequency and intensity of storms and wildfires. The permanent fuel island would increase resiliency to climate change effects because it would provide an improved ability to respond to and function during climate-related emergencies.

At both maintenance stations, adaptation against the potential for increased frequency and severity of wildfire includes the use of nonflammable materials (concrete and steel) in the construction of new buildings. Additionally, the project would utilize, as feasible, pavement types that would be selected to withstand rising temperatures within the design life of the pavement (approximately 20 years).

Sea Level Rise

The proposed project affects inland locations. The Ukiah and Boonville maintenance stations are outside of the Coastal Zone and not in areas subject to sea level rise. See Figure 7 below for a visual representation of potential sea level rise (10 foot sea level rise scenario) at the maintenance stations (NOAA 2022). Accordingly, direct impacts to transportation facilities due to projected sea level rise are not expected.

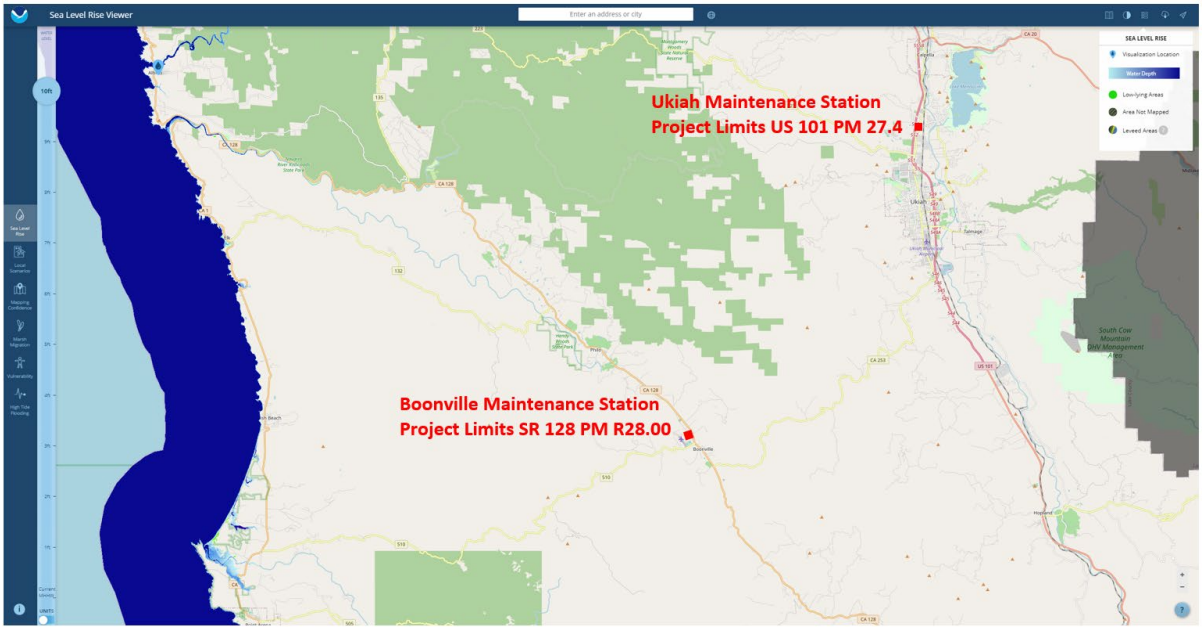

Figure 7. Predicted Sea Level Rise Map–Boonville and Ukiah Maintenance Stations

(Source: NOAA 2023)

Precipitation and Flooding

Changes in precipitation scenarios under future climate conditions include more extreme precipitation events and more precipitation falling as rain than snow, depending on geographic location. These factors and others, such as land use changes that increase impervious surface in the watershed, can affect flood magnitude and frequency.

According to the Federal Emergency Management Agency (FEMA), the Ukiah MS is not located within a FEMA-designated 100 year flood zone (Caltrans 2024d), the station is located in an area mapped within Lake Mendocino's Coyote Valley Dam failure inundation zone (Mendocino County 2023). Similarly, the Boonville MS is located entirely within a 100-year flood zone (Zone AE) and the existing material storage building that the project would replace is located within the Regulatory Floodway of Anderson Creek (FEMA 2011). See Section 2.10 and Figure 8 for additional details on flood hazards in the project areas.

The EV chargers would be the only new component in these existing systems. Because the EV chargers have a predicted useful lifespan of 5–15 years, in which time neither a 100-year flood event nor a dam failure would be a probable occurrence, and because the chargers are an essential component of a transition to an electric fleet, the benefit of the EV chargers outweighs the risk of potential inundation and loss of the chargers to flood or dam inundation damage.

The project would not add new impervious surface area; nor would the project add a substantial new volume to the flood areas (Caltrans 2024d). Therefore, the project would not exacerbate the impacts of a flood or inundation event. The Ukiah MS and the Boonville MS are existing, functioning features of the Caltrans network and play key roles in rural highway maintenance. The project would improve existing features that would allow for safer and more reliable access to fuels and materials with no significant changes to the physical environment.

Wildfire

Neither the Ukiah MS nor the Boonville MS are in areas that are currently mapped as high or very high Fire Hazard Severity (See Section 2.20–Wildfire in this document for details on fire hazard severity levels). The Caltrans District 1 Vulnerability Assessment (Caltrans 2019) indicates that while sections of U.S. 101 to the north and south of the Ukiah MS will experience increased wildfire exposure in the next 3 to 50 years, the Ukiah MS itself is not likely to experience significant increases in wildfire exposure.

Project development would not result in site-specific changes that could lead to an increased risk of localized wildfire exposure or potential new source of fire that exacerbate the danger to the community. The project would not add new activities at the Ukiah MS that could contribute to increased risk (charging and fueling vehicles are existing activities). Similar to the existing fuel infrastructure, proposed new infrastructure does not constitute a new risk in that the permanent fuel island would be constructed with fire hazard safeguards (parking bollards, horizontal offset, etc.).

The Boonville MS is predicted to see an increase in wildfire exposure in the next 3 to 50 years. Similar to existing conditions, the proposed new materials storage structure would consist of concrete, with metal roofing/siding, which would improve resilience to wildfire. Also, because project operations would be operationally similar to the existing conditions, with the exception of the new charging stations (EV chargers are not a significant source of fire risk (FEMA 2023), project operations are not anticipated to exacerbate the impacts of wildfire or add new site-specific source of fire risk.

Proposed construction at both maintenance stations would require approval from the Fire Marshal and a Fire Prevention Plan would be in place during construction. The project is not anticipated to exacerbate the impacts of wildfires intensified by climate change.

Temperature

The Caltrans Climate Change Vulnerability Assessment–District 1 Technical Report indicates that for both maintenance stations the maximum temperature increase over the next 50 years would be between 2 to 5 degrees (Caltrans 2019). The Caltrans Climate Change Vulnerability Assessment analyzed the effects of temperature on the choice of pavement binders; however, because the project would add limited new pavement in the immediate vicinity of the new structure foundations (conformance paving), pavement considerations would not be significant for this project in terms of climate change resiliency.

2.9 Hazards and Hazardous Materials

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			✓	
Would the project: 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?			✓	
Would the project: c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				✓
Would the project: 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?			✓	
Would the project: e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				✓
Would the project: g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				✓

Regulatory Setting

Hazardous materials, including hazardous substances and wastes, are regulated by many state and federal laws. Statutes govern the generation, treatment, storage, and disposal of hazardous materials, substances, and waste, and also the investigation and mitigation of waste releases, air and water quality, human health, and land use.

The primary laws governing hazardous materials, waste and substances include:

- California Health and Safety Code–Chapter 6.5
- Porter-Cologne Water Quality Control Act–§ 13000 et seq.
- CFR Title 22 Division 4.5 Environmental Health Standards for the Management of Hazardous Waste, Title 23 Waters, and Title 27 Environmental Protection

Worker and public health and safety are key issues when addressing hazardous materials that may affect human health and the environment. Proper management and disposal of hazardous material is vital if it is found, disturbed, or generated during project construction.

Affected Environment

The Ukiah MS and the Boonville MS are on the Hazardous Waste and Substances Site List (Cortese List), as a result of historical leaking underground storage tanks (LUSTs).

The last active leaking contamination at the Ukiah MS occurred in 1987. Caltrans began working with Mendocino County and the Regional Water Quality Control Board to clean up the site. In 2014, after remediation, the site was in compliance with the County and Regional Water Quality Control Board standards and the case was closed.

The last active leaking contamination at the Boonville MS occurred in 1993. Caltrans worked with Mendocino County and the Regional Water Quality Control Board to clean up the site. In 1996, the site was in compliance with the County and Regional Water Quality Control Board standards and the case was closed.

For the purposes of full disclosure, the Maintenance Station remains on the list of Hazardous Waste sites to inform the public that at one time there was a contamination issue at the site. When ground disturbance is planned at a Cortese site, regardless of the closure date or status, Caltrans evaluates the site for potential contamination.

An *Initial Site Assessment* (ISA) was completed in January 2024 (Caltrans 2024d) and is on file with the Department. In order to determine the presence/absence and potential scope of residual Petroleum Hydrocarbons and Title 22 metals in the soil and groundwater from the leaking tanks at the Ukiah and Boonville maintenance stations, a *Preliminary Site Investigation* (PSI) was conducted at both locations in December 2023. This investigation included advancing borings to a depth of 5 feet in potential excavation locations to determine the potential for residual petroleum hydrocarbons and heavy metals in soils; no groundwater was encountered during the PSI.

Additionally, an Asbestos Containing Materials (ACM)/Lead Containing Paint (LCP) structure survey was completed in March 2023 to assess the presence and quantity of asbestos and deteriorated LCP in the records/fuel log building at the Ukiah MS and the existing materials storage structure at the Boonville MS.

The ISA summarizes the results of the PSI, ACM and LCP surveys, and makes recommendations for handling, storage, and disposal of materials.

Environmental Consequences

At the Ukiah MS, the ISA reports that neither hydrocarbons nor metals of concern were detected in soils at levels considered to be hazardous and no special handling procedures for excavated soils are recommended; however, regulated ACM and LCP were identified.

At the Boonville MS, neither hydrocarbons nor metals of concern were detected in soils at levels considered to be hazardous and no special handling procedures for excavated soils are recommended. Regulated amounts of ACM and LCP were also not detected. However, pressure-treated wood cribbing is present at the Boonville MS materials storage structure. This pressure treated wood cribbing meets the criteria for management as treated wood waste (TWW) when removed.

Discussion of CEQA Environmental Checklist Questions 2.9—Hazards and Hazardous Materials

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

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

Less Than Significant Impact. During project construction, transportation and use of common hazardous materials (such as fuels and lubricants) is anticipated. Construction will not require transportation of hazardous materials in unusual quantities or with unusual risks compared to typical construction projects; additionally, Caltrans Standard Measures and BMPs and Standard Special Provisions (SSPs) for storage and handling of common construction site contaminants would be applied (Section 1.4).

The Ukiah MS would re-introduce onsite fueling as a component of project operations with a new fuel island (4,000 gallon gas and 4,000 gallons diesel) as well as the addition of new EV charging options. Associated actions would include the regular transport of petroleum fuels to the site, onsite refueling of the fuel tanks, and daily fueling of vehicles and equipment. There would be risk of spilling, line breaks, etc., that could occur as a result of project operations. However, the potential for a hazardous material release due to the use of fuel tanks is considered low because the project would be required to adhere to all related federal and state rules and regulations. For example, all fuel trucks visiting the Ukiah MS would have the required Hazardous Materials Transportation License from the California Highway

Patrol (CHP). The CHP is responsible for enforcing regulations related to the transportation of hazardous materials on roadways. The project would also require a Certified Unified Program Agencies (CUPA) permit, and a site-specific Spill Prevention, Control, and Countermeasure Plan (SPCC Plan) would be prepared and implemented in compliance with 40 Code of Federal Regulations (CFR) 112.

At the Boonville MS, project operations would be similar to existing conditions, with the addition of EV charging options and an additional storage bay for materials storage.

Additional applicable federal and state regulations, include provisions described in Section 2540.7, Gasoline Dispensing and Service Stations, of the California OSHA Regulations; Chapter 38, Liquefied Petroleum Gases, of the California Fire Code; and the Resource Conservation and Recovery Act, among others.

Because the proposed project would be required to comply with existing regulations, project implementation would have a less than significant impact on the environment due to routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials.

As mentioned previously (Sections 1.2 and 2.8), the Ukiah MS is located within the inundation zone of the Coyote Valley Dam on Lake Mendocino (Mendocino County 2023). Unlike a mapped flood area with calculated flood probability, an inundation event from the Coyote Valley Dam is not easily predicted. Regulatory agencies at the federal and state level rely on a variety of controls and inspections to ensure dam safety. Some of the agencies responsible for overseeing the regulation and monitoring the safety of existing and new dams include the Federal Energy Regulatory Commission (FERC), the U.S. Army Corps of Engineers Dam Safety Program, and California's Division of Safety of Dams.

At the local level, the Mendocino County General Plan (2009) includes the following policy within the Development Element (DE) to mitigate the effects of dam failure:

- DE-194: To the maximum extent practical, avoid constructing critical facilities within the designated 100-year flood plain areas or areas potentially subject to inundation by dam failures (or other water impoundment facilities) or seiches.

While the addition of new fuel tanks in a dam inundation zone could increase the risk of a pollutant release, compliance with all rules and regulations governing the placement, installation requirements, and use of the tanks would reduce the potential to less than significant.

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

No Impact. According to the ISA, no materials defined as California hazardous (per 22 CCR § 66261.3. Definition of Hazardous Waste) were identified onsite in their current conditions. The application of Caltrans standard measures, including the implementation of lead, asbestos, and treated wood waste management provisions (Section 1.4), would ensure that materials are correctly managed and do not become a potentially significant source of toxic emissions or waste such that the nearby schools would be exposed to toxins. Therefore, there would be no impact.

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?

Less Than Significant Impact. The project would be located on a site that is on the Cortese list of hazardous waste and substances sites. Based on the results of the ISA, activities associated with this project, and the implementation of Caltrans standard measures (Section 1.4), there would be a less than significant impact on the public or the environment.

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

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

No Impact. For both the Ukiah and Boonville maintenance stations, because no road lane closures or delays on public roads would occur as a result of project construction and all public roads and MS access roads would remain open to emergency vehicles at all times, the project would not interfere with an adopted emergency response plan or emergency evacuation plan. Therefore, there would be no impact.

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

No Impact. Project construction would be located primarily within the boundaries of established and surfaced MS yards. All operations would be limited to the paved areas within the MS yards. Operations would be routine MS operations (fueling vehicles, servicing equipment, retrieving materials, etc.). Project development would not exacerbate or create new fire risk and therefore would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires. Therefore, there would be no impact.

Avoidance, Minimization and Mitigation Measures

Based on the determinations made in the CEQA Environmental Checklist, no mitigation measures are proposed for this project.

2.10 Hydrology and Water Quality

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?				✓
Would the project: b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?				✓
Would the project: c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: (i) result in substantial erosion or siltation on- or off-site;				✓
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;				✓
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or				✓
(iv) impede or redirect flood flows?				✓

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project: d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?				✓
Would the project: e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Floodplain Evaluation Report Summary* (FERS), completed February 2024 (Caltrans 2024e). The FERS found that the project would not alter existing drainages, create any new sources of pollutants, result in increased risk of pollutant release, or otherwise interfere with ground water supply, quality, or regulation. A *Water Quality Assessment Checklist* was completed March 2023 (Caltrans 2023c); this standard screening tool resulted in an exemption determination, where the risk to water quality was determined to be very low and no additional water quality assessment was needed.

The project proposes to add new gasoline and diesel fuel tanks to the Ukiah MS. The Ukiah MS is not located within a flood, tsunami, or seiche zone and would not experience predictable flood events that would result in a risk of a release of pollutants.

The FERS identifies the Boonville MS as located partially within the regulatory floodway of Anderson Creek and within the Federal Emergency Management Agency (FEMA) mapped 100 year flood zone (FEMA 2011; Figure 8 below); compared to baseline conditions, the project would not result in significant floodplain encroachment and no new impacts on natural or beneficial floodplain values would occur. The project would not result in impacts to Hydrology and Water Quality.

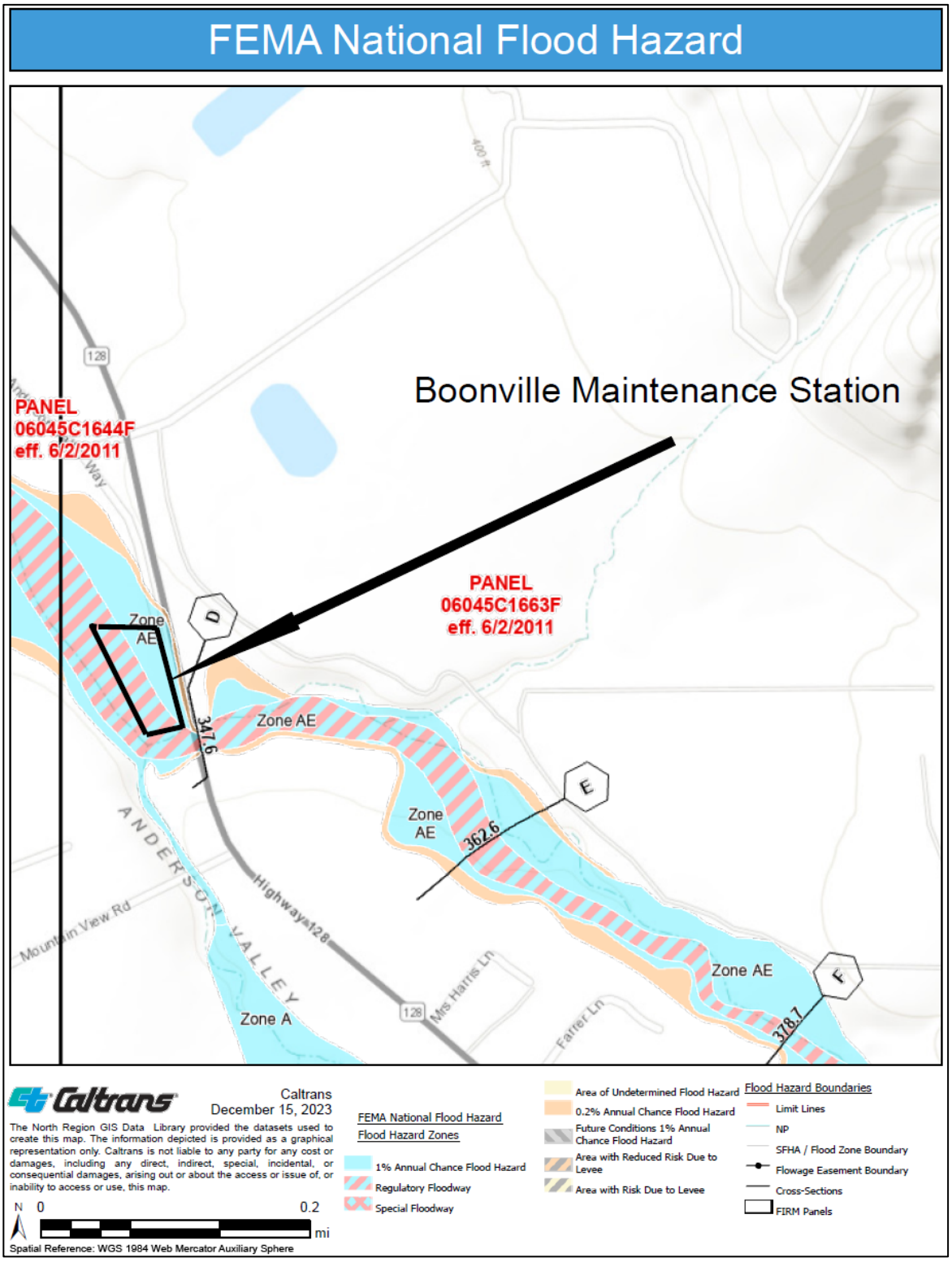

Figure 8. Boonville Maintenance Station-FEMA National Flood Hazard Layer Map

(Source: FEMA 2011)

2.11 Land Use and Planning

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Land Use are not anticipated because the project is a maintenance station improvement project that would replace existing facilities and add EV charging stations to existing paved and developed areas at established Caltrans maintenance stations. No changes to land use are proposed.

During construction or operations, the project would not divide a community, nor would the proposed MS improvements conflict with any policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The project would not result in impacts to Land Use and Planning.

2.12 Mineral Resources

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Mineral Resources are not anticipated because the project is a maintenance station improvement project that would remove and replace existing facilities and add EV charging stations in already developed areas.

According to the California Geologic Survey (CGS), there are no designated mineral resource areas of state or regional importance in the project area (CGS 2022). The most common extraction operation in Mendocino County is quarry or aggregate extraction. There is at least one rock quarry in the project vicinity of the Boonville MS and a rock and gravel extraction operation in the Ukiah vicinity (Division of Mine Reclamation 2024). The project would be operationally similar to existing conditions and would not add new impediments to future resource extraction. The project would not result in impacts to Mineral Resources.

2.13 Noise

Question	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in: a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				✓
Would the project result in: b) Generation of excessive groundborne vibration or groundborne noise levels?				✓
Would the project result in: c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Air Quality and Noise Analysis for the Boonville/Ukiah MS Bulk Tank /Structures Project* dated January 12, 2024 (Caltrans 2024a). Potential impacts to Noise from the project would be limited to temporary ambient noise increases during construction. Application of Caltrans Standard Specification for "Noise Control," would ensure that the noise levels would not raise above established construction noise thresholds (Section 1.4). Anticipated operational noise from the replacement and upgrades to existing MS components and the addition of new EV charging stations would be effectively equal to baseline conditions; the only new operational component resulting from the project would be the EV charging stations, which operate silently. The project would not result in impacts to Noise.

2.14 Population and Housing

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. This project would replace existing facilities and add EV charging stations to existing paved and developed areas at established Caltrans maintenance stations. Potential impacts to Population and Housing are not anticipated as the project does not involve activities that would directly or indirectly affect population growth or housing. The project would not result in impacts to Population and Housing.

2.15 Public Services

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Public Services are not anticipated because construction of this non-capacity-increasing project will be within existing developed Caltrans facilities and no work would occur outside current maintenance station boundaries. During construction, no change in access to public roadways would occur. Construction of the proposed project would be temporary and coordinated with maintenance station managers such that all services would remain open and accessible to Caltrans and emergency service personnel. The project would not result in impacts to Public Services.

2.16 Recreation

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Recreation are not anticipated because the proposed project does not include recreational facilities; nor would this non-capacity-increasing project affect population growth, which may require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. The proposed project involves the addition of new EV charging stations and removal and replacement of existing facilities within the boundaries of the existing developed Caltrans Ukiah and Boonville maintenance stations. The project would not result in impacts to Recreation.

2.17 Transportation

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Transportation are not anticipated due to the temporary and low volume of construction-related traffic and because the project is not capacity increasing and would result in an operational condition that is similar to the existing condition. No lane closures or delays on public roads would occur as a result of project construction and public roads and maintenance station access roads would remain open to emergency vehicles at all times. The proposed project would utilize existing roads to access existing Caltrans facilities; no roads or other transportation features would be constructed. The proposed project would not conflict with local plans and ordinances for ensuring a safe and effective transportation system and will be consistent with CEQA Guidelines Section 15064. The project would not result in impacts to Transportation.

2.18 Tribal Cultural Resources

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project, as well as the *Screening Memo for The Ukiah & Boonville MS MTRF Upgrades Project*, dated November 7, 2023 (Caltrans 2023a). No previously recorded tribal cultural resources have been identified within or adjacent to the proposed project areas.

Consultation with the Hopland Band of Pomo Indians resulted in no knowledge of tribal cultural resources inside the ESL. The project would incorporate standard inadvertent discovery procedures and the presence of a tribal cultural monitor during ground disturbance activities (Section 1.4). Tribal consultation is ongoing throughout the duration of the project.

Due to the disturbed nature of the work locations, the lack of previously recorded tribal cultural resources, the limited ground disturbance anticipated, and implementation of standard measures, The project would not result in impacts to Tribal Cultural Resources under CEQA.

2.19 Utilities and Service Systems

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

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Utilities and Service Systems are not anticipated because, while some utilities and service systems are present and could be diverted around proposed concrete foundations, all relocations would occur within the boundaries of Caltrans property. All utility relocations would be coordinated with the Caltrans maintenance station managers in order to minimize disruption of facility operations (Section 1.4).

There would be no impacts to existing water, wastewater, stormwater, natural gas, or telecommunications facilities. The project would result in an additional electrical demand from the EV chargers and the proposed lighting changes; this demand would be met by the existing facility power source and PG&E transmission lines adjacent to the maintenance stations and would not result in the relocation or construction of new or expanded electric power facilities. The project would not result in impacts to Utilities and Service Systems.

2.20 Wildfire

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

Senate Bill 1241 required the Governor's Office of Planning and Research, the California Natural Resources Agency, and the California Department of Forestry and Fire Protection (CAL FIRE) to develop amendments to the "CEQA Environmental Checklist" for the inclusion of questions related to fire hazard impacts for projects located on lands classified as *very high* Fire Hazard Severity Zones (FHSZ). The 2018 updates to the CEQA Guidelines expanded this to include projects "near" these *very high* FHSZs.

"No Impact" determinations in this section are based on the scope, description, and location of the proposed project. Potential impacts to Wildfire are not anticipated because the project would not be located in or near areas mapped by the California Department of Forestry and Fire Protection (CAL FIRE) as a *Very High* FHSZ. The Ukiah MS is located in a local Fire Responsibility Area and does not have a FHSZ designation; the Boonville MS is located in a State Responsibility Area with a *Moderate* severity FHSZ designation (CAL FIRE 2020). See Figures 9 and 10 below. The project would not result in impacts to Wildfire.

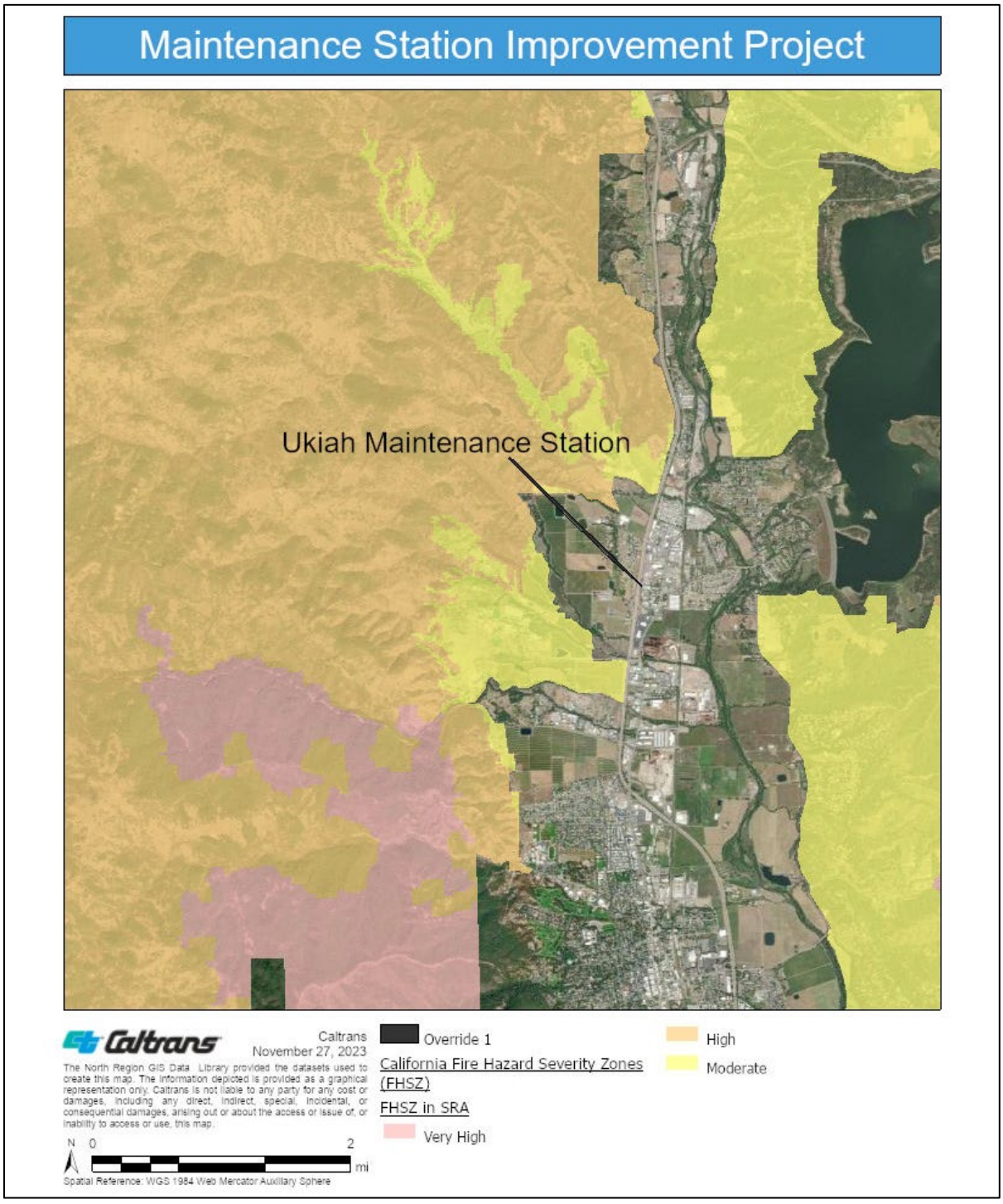

Figure 9. Ukiah Maintenance Station–CAL FIRE Hazard Severity Zone

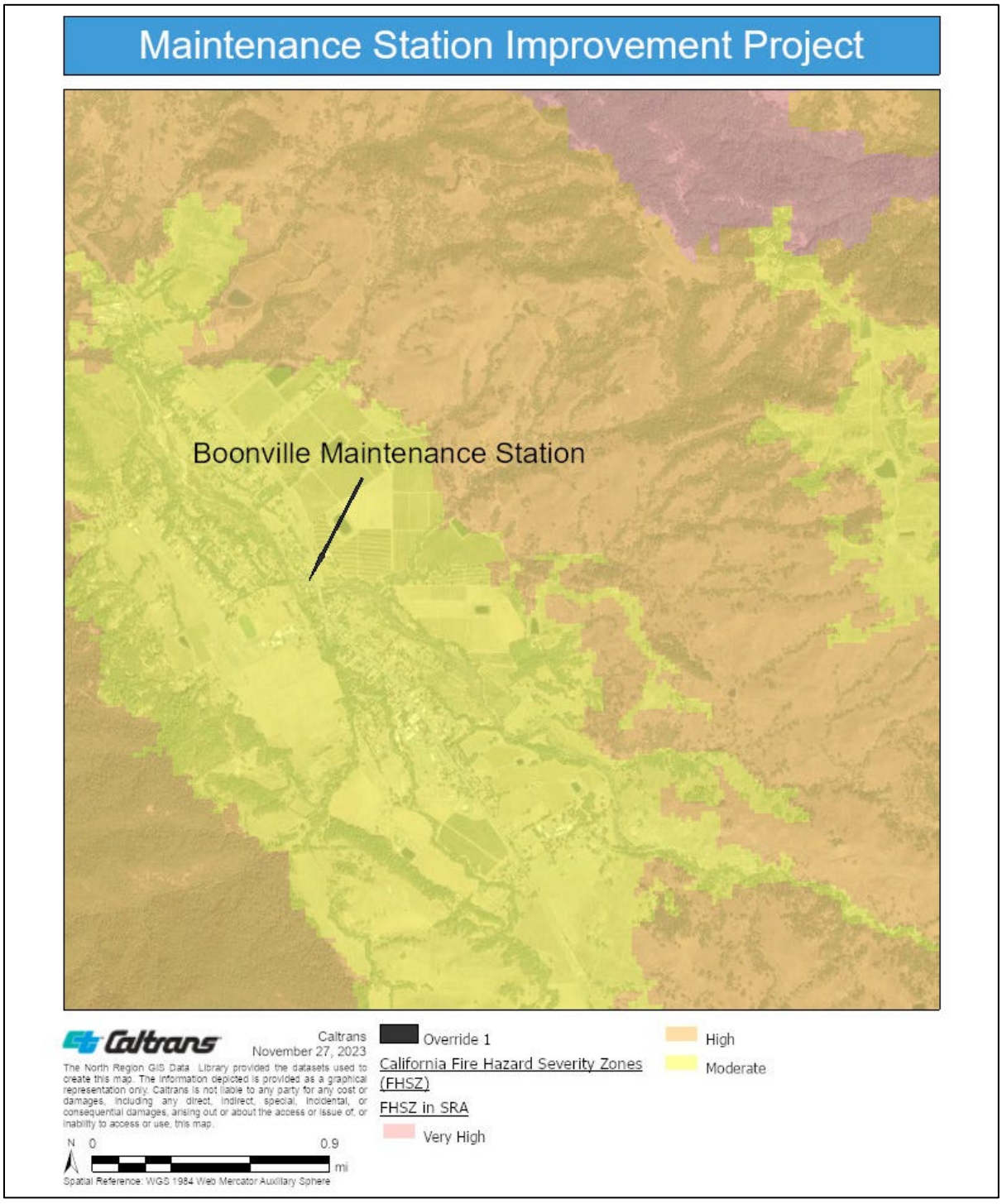

Figure 10. Boonville Maintenance Station–CAL FIRE Fire Hazard Severity Zone

2.21 Mandatory Findings of Significance

Does the project:	Significant and Unavoidable Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?				✓
b) Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				✓
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				✓

The California Environmental Quality Act of 1970 (CEQA) requires preparation of an Environmental Impact Report (EIR) when certain specific impacts may result from construction or implementation of a project. Project analyses indicated the potential impacts associated with this project would not require an EIR. Mandatory Findings of Significance are not required for projects where an EIR has not been prepared.

2.22 Cumulative Impacts

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this proposed project. A cumulative impact assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor but collectively substantial impacts taking place over a period of time (CEQA § 15355).

Cumulative impacts to resources may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

Per Section 15130 of CEQA, a Cumulative Impact Analysis (CIA) discussion is only required in "*…situations where the cumulative effects are found to be significant*." This project would remove and replace existing maintenance station facilities and add EV charging stations within existing developed maintenance stations. This project is not anticipated to result in a "significant" direct, indirect, or cumulative impact on any resource.

In the Ukiah area, Caltrans is aware of a pavement rehabilitation project planned to begin construction in 2025 on U.S. 101 in the vicinity of the maintenance station (EA 01-0H570). As the maintenance station project would begin construction in 2026, these projects would not interfere with each other due to the timing of construction; nor would the project areas overlap as the MS is located adjacent to and not on U.S. 101.

In the Boonville area, Caltrans is aware of a drainage repair and fish passage project (EA 01-0K680) that would require work at various locations along State Route 128; however, this project is still in the scoping phase and therefore, due to construction timing and geographic location (no currently proposed work would occur adjacent to the Boonville MS), it would not have the potential to overlap with this project.

Because potential project construction impacts would not be significant, and as nearby projects are not expected to be in construction at the same time as this project, there would be no cumulatively significant impacts due to construction of this project. Operationally, potential project impacts to the public would be site specific. Impacts would not rise above the level of less than significant in any resource area; impacts are anticipated to be minor and not cumulatively considerable across the Mendocino County region. Given this, an EIR and CIA were not required for this project.

Chapter 3. Agency and Public Coordination

Early and continuing coordination with the general public and public agencies is an essential part of the environmental process. It helps planners determine the necessary scope of environmental documentation and the level of analysis required, and to identify potential impacts and avoidance, minimization and/or mitigation measures and related environmental requirements. Tribal consultation and public participation for this project have been accomplished through a variety of informal methods, including Project Development Team (PDT) meetings, and inter-government coordination. This chapter summarizes the results of Caltrans' efforts to identify, address, and resolve project-related issues through early and continuing coordination.

The Initial Study with Proposed Negative Declaration will be made available for public and agency review and comment for 30 days. Caltrans has ensured the document will be made available to all appropriate parties and agencies, including 1) Responsible agencies, 2) other federal, state, and local agencies which have regulatory jurisdiction, or that exercise authority over resources which may be affected by the project, 3) the general public.

Copies of the document will be made available at the Caltrans District 1 office located at the District 1 Office at 1656 Union Street, Eureka and on request. This document may be downloaded at the following website address:

> https://dot.ca.gov/caltrans-near-me/district-3/d3-programs/d3-environmental/d3-environmental-docs/d3-mendocino-county

Tribal Cultural Resource Coordination

A Cultural Screening Memo, dated November 7, 2023, documents the consultation conducted with the Hopland Band of Pomo Indians during 2023 (Caltrans 2023a). No specific concerns were expressed regarding the proposed project.

Chapter 4. List of Preparers

The following individuals performed the environmental work and contributed to the preparation of the Initial Study/Proposed Negative Declaration for this project:

California Department of Transportation, District 1

Liza Walker	Office Chief, North Region Environmental
Dominic Vitali	Environmental Branch Chief
Tim Keefe	Senior Environmental Scientist/Archaeology
Breeanna Kalson	Environmental Coordinator
Karen Radford	Technical Editor
Paul Sundberg	Engineering Geologist – Hazardous Waste/Paleontology
Tina Fulton	Associate Environmental Planner/Archaeology
Kim Tanksley	Associate Environmental Planner/Archaeology
Morgan Kipf	Environmental Scientist
Aaron Bali	Transportation Engineer
Jeremy Miller-Schultz	Transportation Engineer

Chapter 5. Distribution List

Regional/County/Local Agencies

Mendocino Council of Governments
367 N. State Street, Suite 206
Ukiah, CA 95482

Mendocino County Planning and Building Services Department
501 Low Gap Road
Ukiah, CA 95482

Chapter 6. References

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Appendix A. Project Layouts

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	27.4		03

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA

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ENVIRONMENTAL STUDY LIMITS (ESL)

SCALE: 1"=20'

UKIAH-1

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 29-MAR-2024 | TIME PLOTTED => 11:24

BORDER LAST REVISED 7/2/2010 | USERNAME => s157255 | DGN FILE => UKIAH1.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0306 | PROJECT NUMBER & PHASE 0119000131

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	27.4	02	03

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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UKIAH-2

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CALCULATED-DESIGNED BY

CHECKED BY

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LAST REVISION 00-00-00 DATE PLOTTED => 29-FEB-2024 TIME PLOTTED => 16:28

BORDER LAST REVISED 7/2/2010

USERNAME => s153107
DGN FILE => UKIAH2.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0306

PROJECT NUMBER & PHASE 0119000131

Dist	COUNTY	LOCATION CODE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	27.4	03	03

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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UKIAH-3

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00-00-00 | TIME PLOTTED => 11:46

BORDER LAST REVISED 7/2/2010

USERNAME => s157255
DGN FILE => UKIAH3.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0306

PROJECT NUMBER & PHASE 0119000131

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	27/27.4		

9/25/23

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

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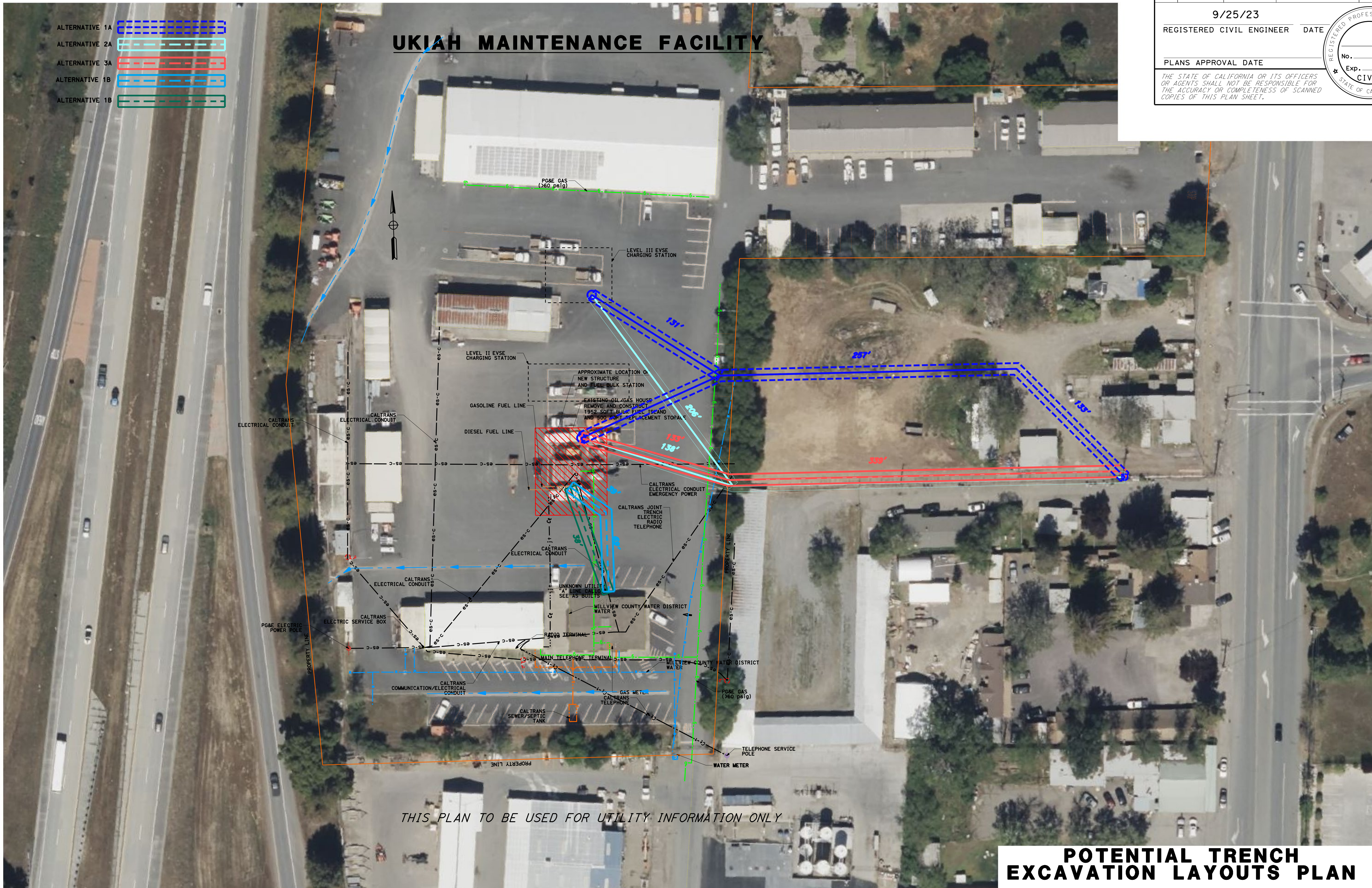
REGISTERED PROFESSIONAL ENGINEER No. Exp. CIVIL STATE OF CALIFORNIA



UKIAH MAINTENANCE FACILITY
ALTERNATIVE 1A
ALTERNATIVE 2A
ALTERNATIVE 3A
ALTERNATIVE 1B
ALTERNATIVE 1B
PG&E GAS (360 psig)
LEVEL III EVSE CHARGING STATION
LEVEL II EVSE CHARGING STATION
APPROXIMATE LOCATION OF NEW STRUCTURE AND FUEL BULK STATION
EXISTING OIL/GAS HOUSE REMOVE AND CONSTRUCT 1952 SQFT BULK FUEL ISLAND AND 500 SQFT REPLACEMENT STORAGE
GASOLINE FUEL LINE
DIESEL FUEL LINE
CALTRANS ELECTRICAL CONDUIT
CALTRANS ELECTRICAL CONDUIT EMERGENCY POWER
CALTRANS JOINT TRENCH ELECTRIC RADIO TELEPHONE
131'
257'
206'
132'
138'
338'
139'
CALTRANS ELECTRICAL CONDUIT
UNKNOWN UTILITY "A" LINE CALLED SEE AS BUILTS
MILLVIEW COUNTY WATER DISTRICT WATER
PG&E ELECTRIC POWER POLE
CALTRANS ELECTRIC SERVICE BOX
RADIO TERMINAL
MAIN TELEPHONE TERMINAL
CALTRANS COMMUNICATION/ELECTRICAL CONDUIT
GAS METER
CALTRANS TELEPHONE
CALTRANS SEWER/SEPTIC TANK
PG&E GAS (360 psig)
TELEPHONE SERVICE POLE
WATER METER
PROPERTY LINE
THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

POTENTIAL TRENCH EXCAVATION LAYOUTS PLAN

SCALE: 1"=40'

HW-1

REVISED BY | DATE REVISED | CALCULATED-DESIGNED BY | CHECKED BY | FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 11-04-22 | DATE PLOTTED => 2-APR-2024 | TIME PLOTTED => 11:42

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

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ESL

REMOVE FOUR BAY BIN STRUCTURE AND CONSTRUCT SIX BAY STRUCTURE WITH CANOPY

STAGING AREA #2

STAGING AREA #1

CONSTRUCT EVSE LEVEL II CHARGER AND LEVEL III CHARGER

ANDERSON VALLEY WAY

ENVIRONMENTAL STUDY LIMITS (ESL)

SCALE 1" = 20'

BOONVILLE MAINTENANCE STATION

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => 2-APR-2024 | TIME PLOTTED => 11:25

BORDER LAST REVISED 7/2/2010 | USERNAME => s157255 | DGN FILE => Boonville MS.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0000 | PROJECT NUMBER & PHASE 00000000001

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	MEN	101	27/27.4		

9/25/23
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
No.
Exp.
CIVIL
STATE OF CALIFORNIA

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NOTE:
NO AS BUILTS FOUND FOR BOONVILLE MAINTENANCE STATION.
ONLY OVERHEAD UTILITIES HAVE BEEN SHOWN.

BOONVILLE MAINTENANCE STATION

POTENTIAL TRENCH EXCAVATION LAYOUTS PLAN

SCALE: 1"=20'

HW-1

THIS PLAN TO BE USED FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

FUNCTIONAL SUPERVISOR: ROBERT M. FLOYD II

CALCULATED-DESIGNED BY: KYLE RICE
CHECKED BY: JOSE LOPEZ

REVISED BY	DATE REVISED

LAST REVISION: 11-08-22
DATE PLOTTED => 29-MAR-2024
TIME PLOTTED => 09:22

BORDER LAST REVISED 7/2/2010

USERNAME => s157255
DGN FILE => 001bhz_092725_merged_file.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0310

PROJECT NUMBER & PHASE 01190001311

Appendix B. Title VI Policy Statement

California Department of Transportation

OFFICE OF THE DIRECTOR
P.O. BOX 942873, MS–49 | SACRAMENTO, CA 94273–0001
(916) 654-6130 | FAX (916) 653-5776 TTY 711
www.dot.ca.gov

September 2022

NON-DISCRIMINATION POLICY STATEMENT

The California Department of Transportation, under Title VI of the Civil Rights Act of 1964, ensures "*No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.*"

Caltrans will make every effort to ensure nondiscrimination in all of its services, programs and activities, whether they are federally funded or not, and that services and benefits are fairly distributed to all people, regardless of race, color, or national origin. In addition, Caltrans will facilitate meaningful participation in the transportation planning process in a non-discriminatory manner.

Related federal statutes, remedies, and state law further those protections to include sex, disability, religion, sexual orientation, and age.

For information or guidance on how to file a complaint, or obtain more information regarding Title VI, please contact the Title VI Branch Manager at (916) 639-6392 or visit the following web page: https://dot.ca.gov/programs/civil-rights/title-vi.

To obtain this information in an alternate format such as Braille or in a language other than English, please contact the California Department of Transportation, Office of Civil Rights, at PO Box 942874, MS-79, Sacramento, CA 94274-0001; (916) 879-6768 (TTY 711); or at Title.VI@dot.ca.gov.

TONY TAVARES
Director

Appendix C. USFWS, NMFS, CNDDB, and CNPS Species Lists

IPaC **U.S. Fish & Wildlife Service**

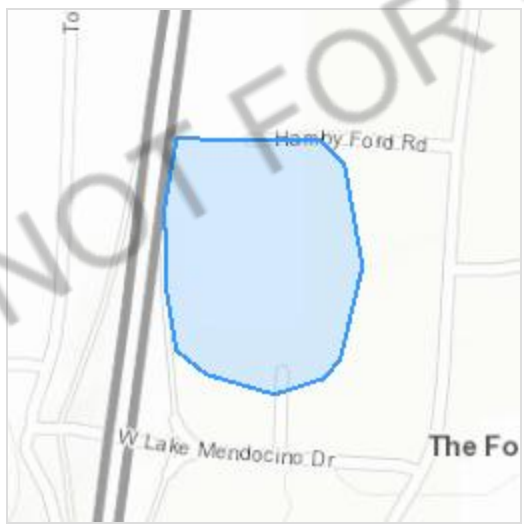
IPaC resource list

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

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

Location

Mendocino County, California



Local office

Arcata Fish And Wildlife Office

(707) 822-7201
(707) 822-8411

1655 Heindon Road
Arcata, CA 95521-4573

Endangered species

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

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

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

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

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

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

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

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Birds

NAME	STATUS
Northern Spotted Owl Strix occidentalis caurina Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1123	Threatened
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

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

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS

Burke's Goldfields Lasthenia burkei — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/4338

Contra Costa Goldfields Lasthenia conjugens — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/7058

Showy Indian Clover Trifolium amoenum — Endangered
Wherever found
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/6459

Critical habitats

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

There are no critical habitats at this location.

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

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management

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

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

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

Probability of Presence Summary

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

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

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

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

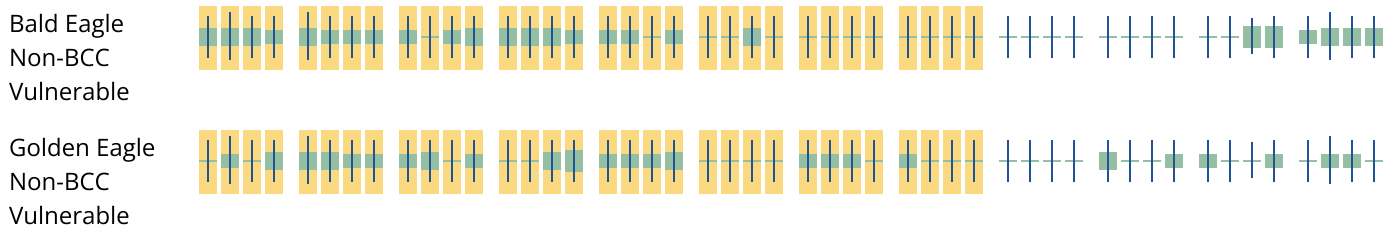
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

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

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

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



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

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

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

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Allen's Hummingbird Selasphorus sasin This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9637	Breeds Feb 1 to Jul 15

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Belding's Savannah Sparrow Passerculus sandwichensis beldingi — Breeds Apr 1 to Aug 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Thrasher Toxostoma redivivum — Breeds Jan 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

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

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

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

Probability of Presence (■)

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

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

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

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

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

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

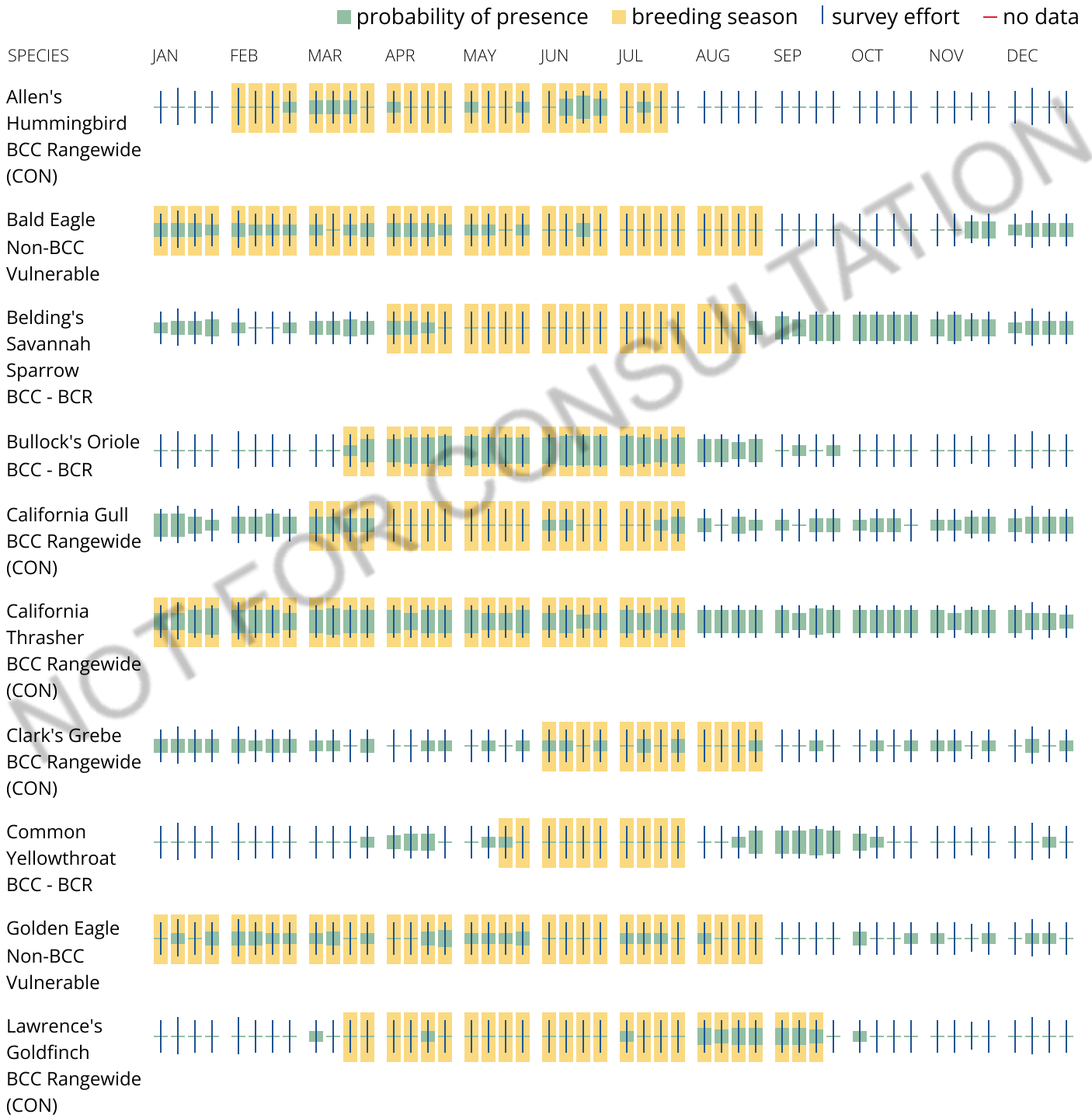
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

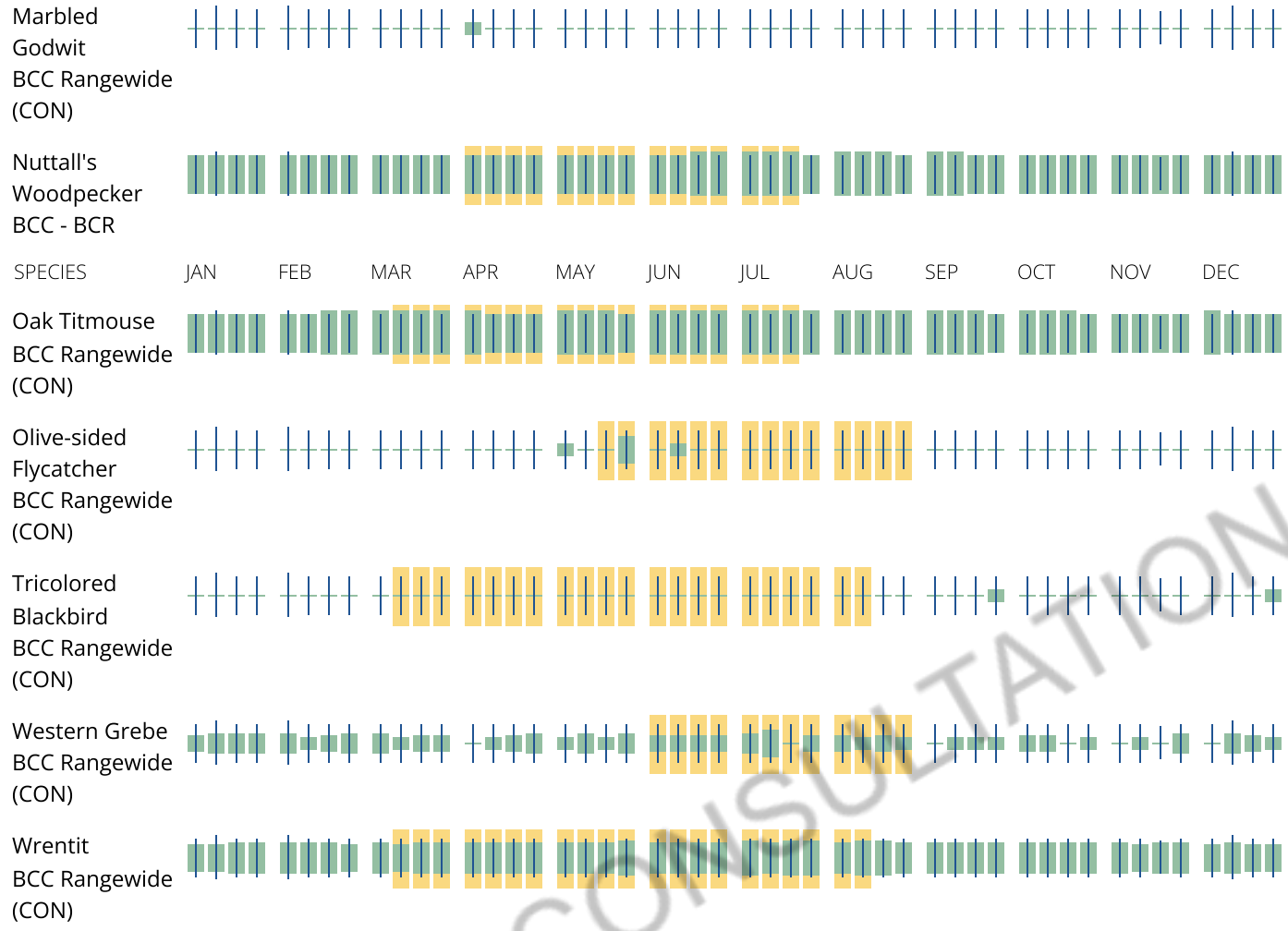
No Data (–)

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

Survey Timeframe

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





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

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

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

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

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

Data limitations

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

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

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

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid 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.

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

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

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

Location

Mendocino County, California

Local office

Arcata Fish And Wildlife Office

(707) 822-7201
(707) 822-8411

1655 Heindon Road
Arcata, CA 95521-4573

Endangered species

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

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

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

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

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

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

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

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

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

Birds

NAME	STATUS
Northern Spotted Owl Strix occidentalis caurina Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/1123	Threatened
Western Snowy Plover Charadrius nivosus nivosus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8035	Threatened
Yellow-billed Cuckoo Coccyzus americanus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/3911	Threatened

Reptiles

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

Fishes

NAME	STATUS
Tidewater Goby Eucyclogobius newberryi Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/57	Endangered

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Burke's Goldfields Lasthenia burkei Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4338	Endangered
Contra Costa Goldfields Lasthenia conjugens Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7058	Endangered
Showy Indian Clover Trifolium amoenum Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6459	Endangered

Critical habitats

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

There are no critical habitats at this location.

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

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

Additional information can be found using the following links:

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

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Jan 1 to Sep 30
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read

"Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

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

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

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

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

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

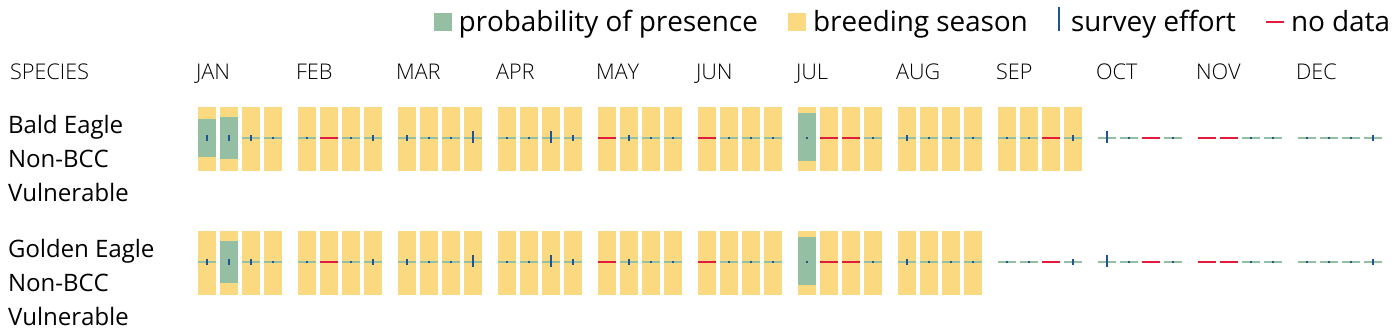
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

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



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

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

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

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Sep 30
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

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

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Rufous Hummingbird selasphorus rufus — Breeds Apr 15 to Jul 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8002

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

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

Probability of Presence (■)

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

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

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

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

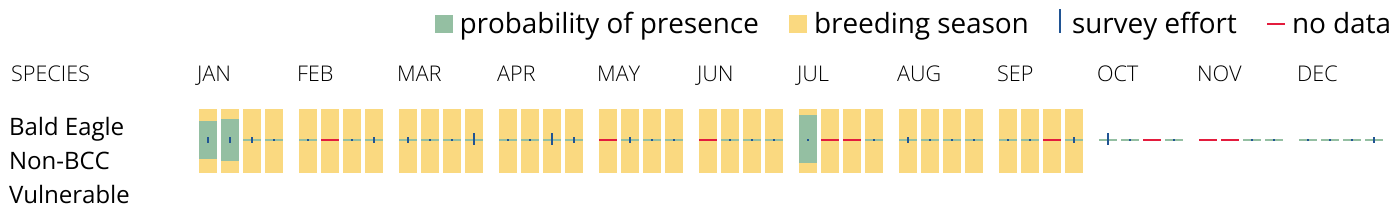
Breeding Season (▬)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

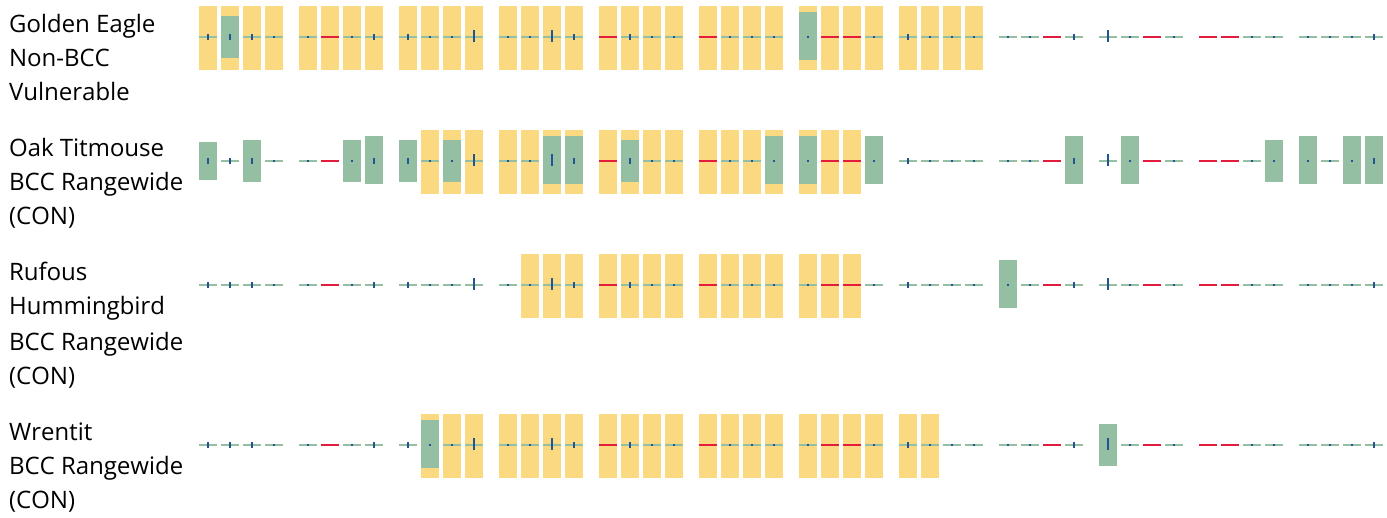
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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

No Data (–)
A week is marked as having no data if there were no survey events for that week.

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





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

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

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

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

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

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

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

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

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

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

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

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

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

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

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

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

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

Facilities

National Wildlife Refuge lands

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

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

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

Data limitations

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

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

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

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid 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.

Quad Name **Ukiah**
Quad Number **39123-B2**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) - **X**
CC Chinook Salmon ESU (T) - **X**
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) - **X**
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat - **X**
CC Chinook Salmon Critical Habitat - **X**
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat - **X**
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH - **X**
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult Monica DeAngelis

monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Quad Name **Boonville**
Quad Number **39123-A3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) - **X**
CC Chinook Salmon ESU (T) - **X**
CVSR Chinook Salmon ESU (T) -
SRWR Chinook Salmon ESU (E) -
NC Steelhead DPS (T) - **X**
CCC Steelhead DPS (T) - **X**
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) -
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat - **X**
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat - **X**
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat -
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -

Essential Fish Habitat

Coho EFH - **X**
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult Monica DeAngelis

monica.deangelis@noaa.gov
562-980-3232

MMPA Cetaceans -
MMPA Pinnipeds -

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Potter Valley (3912331) OR Cow Mountain (3912321) OR Purdys Gardens (3912311) OR Orrs Springs (3912323) OR Ukiah (3912322) OR Redwood Valley (3912332) OR Elledge Peak (3912312) OR Boonville (3912313) OR Laughlin Range (3912333))
 AND County IS (Mendocino)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Baker's meadowfoam *Limnanthes bakeri*	PDLIM02020	None	Rare	G1	S1	1B.1
Baker's navarretia *Navarretia leucocephala ssp. bakeri*	PDPLM0C0E1	None	None	G4T2	S2	1B.1
beaked tracyina *Tracyina rostrata*	PDAST9D010	None	None	G2	S2	1B.2
Boggs Lake hedge-hyssop *Gratiola heterosepala*	PDSCR0R060	None	Endangered	G2	S2	1B.2
Bolander's catchfly *Silene bolanderi*	PDCAR0U2L0	None	None	G2	S2	1B.2
Bolander's horkelia *Horkelia bolanderi*	PDROS0W011	None	None	G1	S1	1B.2
Burke's goldfields *Lasthenia burkei*	PDAST5L010	Endangered	Endangered	G1	S1	1B.1
Colusa layia *Layia septentrionalis*	PDAST5N0F0	None	None	G2	S2	1B.2
Fisher *Pekania pennanti*	AMAJF01020	None	None	G5	S2S3	SSC
foothill yellow-legged frog - north coast DPS *Rana boylii pop. 1*	AAABH01051	None	None	G3T4	S4	SSC
glandular western flax *Hesperolinon adenophyllum*	PDLIN01010	None	None	G2G3	S2S3	1B.2
grasshopper sparrow *Ammodramus savannarum*	ABPBXA0020	None	None	G5	S3	SSC
Hoffman's bristly jewelflower *Streptanthus glandulosus ssp. hoffmanii*	PDBRA2G0J4	None	None	G4T2	S2	1B.3
Koch's cord moss *Entosthodon kochii*	NBMUS2P050	None	None	G1	S1	1B.3
Mayacamas popcornflower *Plagiobothrys lithocaryus*	PDBOR0V0P0	None	None	GX	SX	1A
Mendocino bush-mallow *Malacothamnus mendocinensis*	PDMAL0Q0D0	None	None	G1Q	S1	1B.1
Methuselah's beard lichen *Usnea longissima*	NLLEC5P420	None	None	G4	S4	4.2
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
North Coast semaphore grass *Pleuropogon hooverianus*	PMPOA4Y070	None	Threatened	G2	S2	1B.1
northern goshawk *Accipiter gentilis*	ABNKC12060	None	None	G5	S3	SSC
Northern Interior Cypress Forest *Northern Interior Cypress Forest*	CTT83220CA	None	None	G2	S2.2	
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G2G3	S1S2	
osprey *Pandion haliaetus*	ABNKC01010	None	None	G5	S4	WL
oval-leaved viburnum *Viburnum ellipticum*	PDCPR07080	None	None	G4G5	S3?	2B.3
pallid bat *Antrozous pallidus*	AMACC10010	None	None	G4	S3	SSC
Raiche's manzanita *Arctostaphylos stanfordiana ssp. raichei*	PDERI041G2	None	None	G3T2	S2	1B.1
red-bellied newt *Taricha rivularis*	AAAAF02020	None	None	G2	S2	SSC
Rincon Ridge ceanothus *Ceanothus confusus*	PDRHA04220	None	None	G1	S1	1B.1
Roderick's fritillary *Fritillaria roderickii*	PMLIL0V0M0	None	Endangered	G1Q	S1	1B.1
Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0	None	None	G2	S2	1B.1
Serpentine Bunchgrass *Serpentine Bunchgrass*	CTT42130CA	None	None	G2	S2.2	
small groundcone *Kopsiopsis hookeri*	PDORO01010	None	None	G4?	S1S2	2B.3
Sonoma sunshine *Blennosperma bakeri*	PDAST1A010	Endangered	Endangered	G1	S1	1B.1
Sonoma tree vole *Arborimus pomo*	AMAFF23030	None	None	G3	S3	SSC
steelhead - northern California DPS summer-run *Oncorhynchus mykiss irideus pop. 48*	AFCHA0213P	Threatened	Endangered	G5T2Q	S2	
steelhead - northern California DPS winter-run *Oncorhynchus mykiss irideus pop. 49*	AFCHA0213Q	Threatened	None	G5T3Q	S3	
Toren's grimmia *Grimmia torenii*	NBMUS32330	None	None	G2	S2	1B.3
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
tricolored blackbird *Agelaius tricolor*	ABPBXB0020	None	Threatened	G1G2	S2	SSC

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
watershield *Brasenia schreberi*	PDCAB01010	None	None	G5	S3	2B.3
western pond turtle *Emys marmorata*	ARAAD02030	Proposed Threatened	None	G3G4	S3	SSC
white-flowered rein orchid *Piperia candida*	PMORC1X050	None	None	G3?	S3	1B.2

Record Count: 42

Selected Elements by Common Name

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Philo (3912314) OR Navarro (3912325) OR Orrs Springs (3912323) OR Bailey Ridge (3912324) OR Boonville (3912313) OR Eureka Hill (3812385) OR Zeni Ridge (3812384) OR Ornbaun Valley (3812383) OR Cold Spring (3912315))
 AND County IS (Mendocino)

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
American manna grass *Glyceria grandis*	PMPOA2Y080	None	None	G5	S3	2B.3
American peregrine falcon *Falco peregrinus anatum*	ABNKD06071	Delisted	Delisted	G4T4	S3S4	
bald eagle *Haliaeetus leucocephalus*	ABNKC10010	Delisted	Endangered	G5	S3	FP
California giant salamander *Dicamptodon ensatus*	AAAAH01020	None	None	G2G3	S2S3	SSC
California sedge *Carex californica*	PMCYP032D0	None	None	G5	S2	2B.2
coast fawn lily *Erythronium revolutum*	PMLIL0U0F0	None	None	G4G5	S3	2B.2
coast lily *Lilium maritimum*	PMLIL1A0C0	None	None	G2	S2	1B.1
coho salmon - central California coast ESU *Oncorhynchus kisutch pop. 4*	AFCHA02034	Endangered	Endangered	G5T2Q	S2	
deceiving sedge *Carex saliniformis*	PMCYP03BY0	None	None	G2	S2	1B.2
foothill yellow-legged frog - north coast DPS *Rana boylii pop. 1*	AAABH01051	None	None	G3T4	S4	SSC
Hoffman's bristly jewelflower *Streptanthus glandulosus ssp. hoffmanii*	PDBRA2G0J4	None	None	G4T2	S2	1B.3
Humboldt County milk-vetch *Astragalus agnicidus*	PDFAB0F080	None	Endangered	G2	S2	1B.1
maple-leaved checkerbloom *Sidalcea malachroides*	PDMAL110E0	None	None	G3	S3	4.2
marsh pea *Lathyrus palustris*	PDFAB250P0	None	None	G5	S2	2B.2
Methuselah's beard lichen *Usnea longissima*	NLLEC5P420	None	None	G4	S4	4.2
minute pocket moss *Fissidens pauperculus*	NBMUS2W0U0	None	None	G3?	S2	1B.2
Monterey clover *Trifolium trichocalyx*	PDFAB402J0	Endangered	Endangered	G1	S1	1B.1
North American porcupine *Erethizon dorsatum*	AMAFJ01010	None	None	G5	S3	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
North Coast semaphore grass *Pleuropogon hooverianus*	PMPOA4Y070	None	Threatened	G2	S2	1B.1
northern coastal roach *Hesperoleucus venustus navarroensis*	AFCJB19031	None	None	GNRT3	S3	SSC
northern goshawk *Accipiter gentilis*	ABNKC12060	None	None	G5	S3	SSC
northern red-legged frog *Rana aurora*	AAABH01021	None	None	G4	S3	SSC
Nuttall's ribbon-leaved pondweed *Potamogeton epihydrus*	PMPOT03080	None	None	G5	S2S3	2B.2
obscure bumble bee *Bombus caliginosus*	IIHYM24380	None	None	G2G3	S1S2	
Oregon goldthread *Coptis laciniata*	PDRAN0A020	None	None	G4?	S3?	4.2
Pacific tailed frog *Ascaphus truei*	AAABA01010	None	None	G4	S3S4	SSC
Point Arena mountain beaver *Aplodontia rufa nigra*	AMAFA01011	Endangered	None	G5T1	S1	SSC
Pomo bronze shoulderband *Helminthoglypta arrosa pomoensis*	IMGASC2033	None	None	G2G3T1	S1	
pygmy cypress *Hesperocyparis pygmaea*	PGCUP04032	None	None	G1	S1	1B.2
Raiche's manzanita *Arctostaphylos stanfordiana ssp. raichei*	PDERI041G2	None	None	G3T2	S2	1B.1
red-bellied newt *Taricha rivularis*	AAAAF02020	None	None	G2	S2	SSC
Roderick's fritillary *Fritillaria roderickii*	PMLIL0V0M0	None	Endangered	G1Q	S1	1B.1
Santa Cruz clover *Trifolium buckwestiorum*	PDFAB402W0	None	None	G2	S2	1B.1
Sonoma tree vole *Arborimus pomo*	AMAFF23030	None	None	G3	S3	SSC
southern torrent salamander *Rhyacotriton variegatus*	AAAAJ01020	None	None	G3?	S2S3	SSC
steelhead - northern California DPS winter-run *Oncorhynchus mykiss irideus pop. 49*	AFCHA0213Q	Threatened	None	G5T3Q	S3	
swamp harebell *Eastwoodiella californica*	PDCAM02060	None	None	G3	S3	1B.2
Townsend's big-eared bat *Corynorhinus townsendii*	AMACC08010	None	None	G4	S2	SSC
western bumble bee *Bombus occidentalis*	IIHYM24252	None	Candidate Endangered	G3	S1	

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
white-flowered rein orchid *Piperia candida*	PMORC1X050	None	None	G3?	S3	1B.2

Record Count: 40

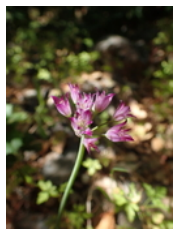
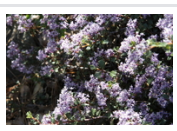
CALIFORNIA NATIVE PLANT SOCIETY

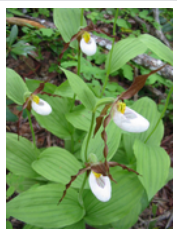
CNPS Rare Plant Inventory

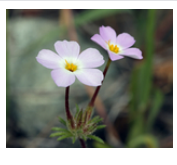
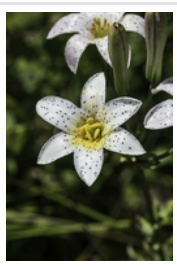
Search Results

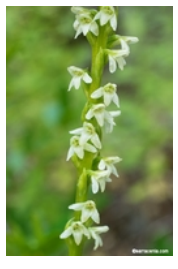
43 matches found. Click on scientific name for details

Search Criteria: County or Island is one of [**MEN**], 9-Quad include [**3912331:3912321:3912311:3912323:3912322:3912332:3912333:3912313:3912312**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium peninsulare var. *franciscanum*	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G4G5T2	S2	1B.2	Yes	2001-01-01	 © 2019 Aaron Arthur
Arctostaphylos stanfordiana ssp. *raichei*	Raiche's manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G3T2	S2	1B.1	Yes	1988-01-01	No Photo Available
Astragalus breweri	Brewer's milk-vetch	Fabaceae	annual herb	Apr-Jun	None	None	G3	S3	4.2	Yes	1974-01-01	No Photo Available
Blennosperma bakeri	Sonoma sunshine	Asteraceae	annual herb	Mar-May	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Brasenia schreberi	watershield	Cabombaceae	perennial rhizomatous herb (aquatic)	Jun-Sep	None	None	G5	S3	2B.3		2010-10-27	 ©2014 Kirsten Bovee
Carex comosa	bristly sedge	Cyperaceae	perennial rhizomatous herb	May-Sep	None	None	G5	S2	2B.1		1994-01-01	 Dean Wm. Taylor 1997
Ceanothus confusus	Rincon Ridge ceanothus	Rhamnaceae	perennial evergreen shrub	Feb-Jun	None	None	G1	S1	1B.1	Yes	1980-01-01	 © 2012 Jake Ruygt
Cypripedium californicum	California lady's-slipper	Orchidaceae	perennial rhizomatous herb	Apr-Aug(Sep)	None	None	G3	S4	4.2		1980-01-01	 © 2012 Barry Rice

Cypripedium montanum	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4G5	S4	4.2		1980-01-01	 ©2021 Scot Loring
Entosthodon kochii	Koch's cord moss	Funariaceae	moss		None	None	G1	S1	1B.3	Yes	2001-01-01	No Photo Available
Erythranthe nudata	bare monkeyflower	Phrymaceae	annual herb	May-Jun	None	None	G4	S4	4.3	Yes	1974-01-01	 John Doyen 2015
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
Fritillaria purdyi	Purdy's fritillary	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G4	S4	4.3		1974-01-01	 Aaron Schusteff, 2004
Fritillaria roderickii	Roderick's fritillary	Liliaceae	perennial bulbiferous herb	Mar-May	None	CE	G1Q	S1	1B.1	Yes	1974-01-01	No Photo Available
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	 ©2004 Carol W. Witham
Grimmia torenii	Toren's grimmia	Grimmiaceae	moss		None	None	G2	S2	1B.3	Yes	2014-05-14	 ©2021 Scot Loring
Hemizonia congesta ssp. *calyculata*	Mendocino tarplant	Asteraceae	annual herb	Jul-Nov	None	None	G5T4	S4	4.3	Yes	1974-01-01	 © 2015 John Doyen
Hemizonia congesta ssp. *tracyi*	Tracy's tarplant	Asteraceae	annual herb	(Mar-Apr)May-Oct	None	None	G5T4	S4	4.3	Yes	1974-01-01	 © 2016 Steve Matson

Hesperolinon adenophyllum	glandular western flax	Linaceae	annual herb	May-Aug	None	None	G2G3	S2S3	1B.2	Yes	1974-01-01	 © 2002 John Game
Horkelia bolanderi	Bolander's horkelia	Rosaceae	perennial herb	(May)Jun-Aug	None	None	G1	S1	1B.2	Yes	1988-01-01	 © 2012 Barry Rice
Kopsiopsis hookeri	small groundcone	Orobanchaceae	perennial rhizomatous herb (parasitic)	Apr-Aug	None	None	G4?	S1S2	2B.3		1994-01-01	 ©2016 Vernon Smith
Lasthenia burkei	Burke's goldfields	Asteraceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1974-01-01	 © 2015 Neal Kramer
Layia septentrionalis	Colusa layia	Asteraceae	annual herb	Apr-May	None	None	G2	S2	1B.2	Yes	1994-01-01	 © 2013 Jake Ruygt
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
Leptosiphon latisectus	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	2001-01-01	 © 2015 Steve Matson
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994-01-01	 © 2015 Aaron Schusteff
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	(Mar)Apr-Aug(Sep)	None	None	G3	S3	4.2	Yes	1974-01-01	 Gerald and Buff Corsi © 2022 California Academy of Sciences

Limnanthes bakeri	Baker's meadowfoam	Limnanthaceae	annual herb	Apr-May	None	CR	G1	S1	1B.1	Yes	1974-01-01	 © 2019 Zoya Akulova
Malacothamnus mendocinensis	Mendocino bush-mallow	Malvaceae	perennial deciduous shrub	Jun-Aug	None	None	G1Q	S1	1B.1	Yes	1974-01-01	 © 2021 Keir Morse
Monardella viridis	green monardella	Lamiaceae	perennial rhizomatous herb	Jun-Sep	None	None	G3	S3	4.3	Yes	1974-01-01	No Photo Available
Navarretia leucocephala ssp. *bakeri*	Baker's navarretia	Polemoniaceae	annual herb	Apr-Jul	None	None	G4T2	S2	1B.1	Yes	1994-01-01	 © 2018 Barry Rice
Perideridia gairdneri ssp. *gairdneri*	Gairdner's yampah	Apiaceae	perennial herb	Jun-Oct	None	None	G5T3T4	S3S4	4.2	Yes	1974-01-01	 ©2007 Neal Kramer
Piperia candida	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar-Apr)May-Sep	None	None	G3?	S3	1B.2		1994-01-01	 ©2016 Barry Rice
Plagiobothrys lithocaryus	Mayacamas popcornflower	Boraginaceae	annual herb	Apr-May	None	None	GX	SX	1A	Yes	1974-01-01	No Photo Available
Pleuropogon hooverianus	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	None	CT	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Ramalina thrausta	angel's hair lichen	Ramalinaceae	fruticose lichen (epiphytic)		None	None	G5?	S2S3	2B.1		2014-03-01	 © 2013 Scot Loring
Ranunculus lobbii	Lobb's aquatic buttercup	Ranunculaceae	annual herb (aquatic)	Feb-May	None	None	G4	S3	4.2		1974-01-01	No Photo Available
Silene bolanderi	Bolander's catchfly	Caryophyllaceae	perennial herb	May-Jun	None	None	G2	S2	1B.2		2021-07-30	No Photo Available
Streptanthus glandulosus ssp. *hoffmanii*	Hoffman's bristly jewelflower	Brassicaceae	annual herb	Mar-Jul	None	None	G4T2	S2	1B.3	Yes	1980-01-01	No Photo Available

Tracyina rostrata	beaked tracyina	Asteraceae	annual herb	May-Jun	None	None	G2	S2	1B.2	Yes	1974-01-01	 ©2018 John Game
Trifolium buckwestiorum	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	No Photo Available
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01	 © 2021 Scot Loring
Viburnum ellipticum	oval-leaved viburnum	Viburnaceae	perennial deciduous shrub	May-Jun	None	None	G4G5	S3?	2B.3		1974-01-01	 © 2006 Tom Engstrom

Showing 1 to 43 of 43 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 4 December 2023].

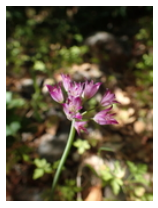
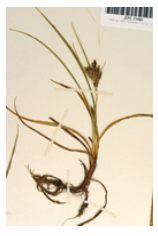
CALIFORNIA NATIVE PLANT SOCIETY

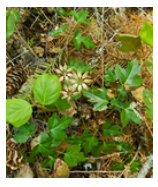
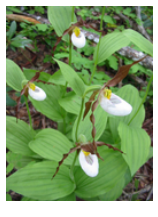
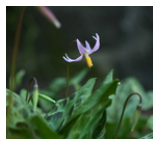
CNPS Rare Plant Inventory

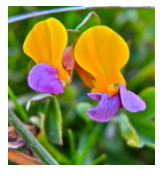
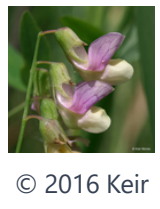
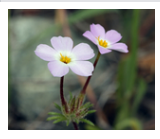
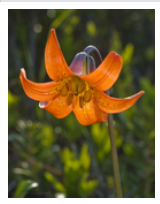
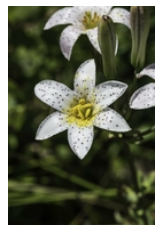
Search Results

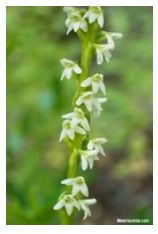
37 matches found. Click on scientific name for details

Search Criteria: County or Island is one of [**MEN**], 9-Quad include [**3912323:3912324:3912325:3912313:3912314:3812385:3812384:3812383:3912315**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Allium peninsulare var. *franciscanum*	Franciscan onion	Alliaceae	perennial bulbiferous herb	(Apr)May-Jun	None	None	G4G5T2	S2	1B.2	Yes	2001-01-01	 © 2019 Aaron Arthur
Arctostaphylos stanfordiana ssp. *raichei*	Raiche's manzanita	Ericaceae	perennial evergreen shrub	Feb-Apr	None	None	G3T2	S2	1B.1	Yes	1988-01-01	No Photo Available
Astragalus agnicidus	Humboldt County milk-vetch	Fabaceae	perennial herb	Apr-Sep	None	CE	G2	S2	1B.1	Yes	1974-01-01	 ©2004 Dean Wm. Taylor
Buxbaumia viridis	green shield-moss	Buxbaumiaceae	moss		None	None	G3G4	S2	2B.2		2011-03-23	 © 2021 Scot Loring
Calamagrostis bolanderi	Bolander's reed grass	Poaceae	perennial rhizomatous herb	May-Aug	None	None	G4	S4	4.2	Yes	1974-01-01	 ©2009 Zoya Akulova
Carex californica	California sedge	Cyperaceae	perennial rhizomatous herb	May-Aug	None	None	G5	S2	2B.2		1974-01-01	No Photo Available
Carex saliniformis	deceiving sedge	Cyperaceae	perennial rhizomatous herb	(May)Jun(Jul)	None	None	G2	S2	1B.2	Yes	2001-01-01	 ©2003 Steve Matson
Ceanothus gloriosus var. *exaltatus*	glory brush	Rhamnaceae	perennial evergreen shrub	Mar-Jun(Aug)	None	None	G4T4	S4	4.3	Yes	2001-01-01	 ©2018 John Doyen

Coptis laciniata	Oregon goldthread	Ranunculaceae	perennial rhizomatous herb	(Feb)Mar-May(Sep-Nov)	None	None	G4?	S3?	4.2		2006-10-16	 © 2021 Scot Loring
Cordylanthus tenuis ssp. *brunneus*	serpentine bird's-beak	Orobanchaceae	annual herb (hemiparasitic)	Jul-Aug	None	None	G4G5T3	S3	4.3	Yes	1988-01-01	No Photo Available
Cypripedium montanum	mountain lady's-slipper	Orchidaceae	perennial rhizomatous herb	Mar-Aug	None	None	G4G5	S4	4.2		1980-01-01	 ©2021 Scot Loring
Eastwoodiella californica	swamp harebell	Campanulaceae	perennial rhizomatous herb	Jun-Oct	None	None	G3	S3	1B.2	Yes	1974-01-01	No Photo Available
Epilobium septentrionale	Humboldt County fuchsia	Onagraceae	perennial herb	Jul-Sep	None	None	G4	S4	4.3	Yes	1974-01-01	 Image by BLM,Arcata Field Office
Erigeron biolettii	streamside daisy	Asteraceae	perennial herb	Jun-Oct	None	None	G3?	S3?	3	Yes	1994-01-01	 ©2015 Doug Wirtz
Erythronium revolutum	coast fawn lily	Liliaceae	perennial bulbiferous herb	Mar-Jul(Aug)	None	None	G4G5	S3	2B.2		2001-01-01	 ©2007 Steve Matson
Fissidens pauperculus	minute pocket moss	Fissidentaceae	moss		None	None	G3?	S2	1B.2		2001-01-01	 ©2021 Scot Loring
Fritillaria roderickii	Roderick's fritillary	Liliaceae	perennial bulbiferous herb	Mar-May	None	CE	G1Q	S1	1B.1	Yes	1974-01-01	No Photo Available
Glyceria grandis	American manna grass	Poaceae	perennial rhizomatous herb	Jun-Aug	None	None	G5	S3	2B.3		1974-01-01	 ©2004 Dean Wm. Taylor
Hemizonia congesta ssp. *calyculata*	Mendocino tarplant	Asteraceae	annual herb	Jul-Nov	None	None	G5T4	S4	4.3	Yes	1974-01-01	 © 2015 John Doyen

Hemizonia congesta ssp. *tracyi*	Tracy's tarplant	Asteraceae	annual herb	(Mar-Apr)May-Oct	None	None	G5T4	S4	4.3	Yes	1974-01-01	 © 2016 Steve Matson
Hesperocyparis pygmaea	pygmy cypress	Cupressaceae	perennial evergreen tree		None	None	G1	S1	1B.2	Yes	1974-01-01	 © 2009 Neal Kramer
Hosackia gracilis	harlequin lotus	Fabaceae	perennial rhizomatous herb	Mar-Jul	None	None	G3G4	S3	4.2		2004-01-01	 © 2015 John Doyen
Lathyrus palustris	marsh pea	Fabaceae	perennial herb	Mar-Aug	None	None	G5	S2	2B.2		1994-01-01	 © 2016 Keir Morse
Leptosiphon aureus	bristly leptosiphon	Polemoniaceae	annual herb	Apr-Jul	None	None	G4?	S4?	4.2	Yes	1994-01-01	 © 2007 Len Blumin
Leptosiphon latisectus	broad-lobed leptosiphon	Polemoniaceae	annual herb	Apr-Jun	None	None	G4	S4	4.3	Yes	2001-01-01	 © 2015 Steve Matson
Lessingia hololeuca	woolly-headed lessingia	Asteraceae	annual herb	Jun-Oct	None	None	G2G3	S2S3	3	Yes	1994-01-01	 © 2015 Aaron Schusteff
Lilium maritimum	coast lily	Liliaceae	perennial bulbiferous herb	May-Aug	None	None	G2	S2	1B.1	Yes	1974-01-01	 © 2020 Aaron Schusteff
Lilium rubescens	redwood lily	Liliaceae	perennial bulbiferous herb	(Mar)Apr-Aug(Sep)	None	None	G3	S3	4.2	Yes	1974-01-01	 Gerald and Buff Corsi © 2022 California Academy of Sciences

Piperia candida	white-flowered rein orchid	Orchidaceae	perennial herb	(Mar-Apr)May-Sep	None	None	G3?	S3	1B.2		1994-01-01	 ©2016 Barry Rice
Pleuropogon hooverianus	North Coast semaphore grass	Poaceae	perennial rhizomatous herb	Apr-Jun	None	CT	G2	S2	1B.1	Yes	1974-01-01	No Photo Available
Potamogeton epihydrus	Nuttall's ribbon-leaved pondweed	Potamogetonaceae	perennial rhizomatous herb (aquatic)	(Jun)Jul-Sep	None	None	G5	S2S3	2B.2		1994-01-01	 Louis-M. Landry, 2010
Ramalina thrausta	angel's hair lichen	Ramalinaceae	fruticose lichen (epiphytic)		None	None	G5?	S2S3	2B.1		2014-03-01	 © 2013 Scot Loring
Sidalcea malachroides	maple-leaved checkerbloom	Malvaceae	perennial herb	(Mar)Apr-Aug	None	None	G3	S3	4.2		1994-01-01	 ©2005 Dean Wm. Taylor
Streptanthus glandulosus ssp. *hoffmanii*	Hoffman's bristly jewelflower	Brassicaceae	annual herb	Mar-Jul	None	None	G4T2	S2	1B.3	Yes	1980-01-01	No Photo Available
Trifolium buckwestiorum	Santa Cruz clover	Fabaceae	annual herb	Apr-Oct	None	None	G2	S2	1B.1	Yes	1994-01-01	No Photo Available
Trifolium trichocalyx	Monterey clover	Fabaceae	annual herb	Apr-Jun	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Usnea longissima	Methuselah's beard lichen	Parmeliaceae	fruticose lichen (epiphytic)		None	None	G4	S4	4.2		2014-03-01	 © 2021 Scot Loring

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